

# **The Scottish Government's Programme for Extending Permitted Development Rights in Scotland: A Sustainability Appraisal**

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# Contents

1	Non-Technical Summary	7
2	Introduction	17
3	Methodology	24
4	Sustainability Context	37
5	Digital communications infrastructure	50
6	Town centre changes of use	84
7	Agricultural developments	90
8	Micro-renewables (domestic and non-domestic)	105
9	Non-domestic solar energy	134
10	District heating and supporting infrastructure	138
11	Energy storage (non-domestic)	143
12	Energy storage (domestic)	149
13	Development relating to active travel	153
14	Habitat pond creation	156
15	Peatland restoration	160
16	Allotments and community growing schemes	164
17	Householder developments	177
18	Electric vehicle charging infrastructure	205
19	Defibrillator cabinets	212
20	Snow sports	214
21	Secondary, cumulative and synergistic effects	221
22	Monitoring	223
23	Conclusions and next steps	224
	Appendix 1 Relevant plans, programmes and strategies	226
	Appendix 2 Baseline information	271
	Appendix 3 Meeting the requirements of the SEA Act	311
	Appendix 4 Summary of potential permitted development rights changes assessed	317
	Appendix 5 Statutory mechanisms for the protection of designated areas	347
	Appendix 6 Detailed Sustainability Appraisal matrices	352

<b>Abbreviation</b>	<b>Meaning</b>
<b>2G</b>	Second Generation
<b>3G</b>	Third Generation
<b>4G</b>	Fourth Generation
<b>5G</b>	Fifth Generation
<b>AC</b>	Alternating Current
<b>AEDs</b>	Automated External Defibrillators
<b>AQMA</b>	Air Quality Management Area
<b>ASHP</b>	Air Source Heat Pumps
<b>BEV</b>	Battery Electric Vehicles
<b>CAES</b>	Compressed Air Energy Storage
<b>CCTV</b>	Closed Circuit Television
<b>CHP</b>	Combined Heat and Power
<b>DAB</b>	Digital Audio Broadcasting
<b>DC</b>	Direct Current
<b>DSL</b>	Digital Subscriber Line
<b>DTTV</b>	Digital Terrestrial Television
<b>ECCO</b>	Electronic Communications Code Operator
<b>EEA</b>	European Economic Area
<b>EIA</b>	Environmental Impact Assessment
<b>EU</b>	European Union
<b>GDP</b>	Gross Domestic Product
<b>GPDO</b>	General Permitted Development Order
<b>HES</b>	Historic Environment Scotland
<b>HoPS</b>	Heads of Planning Scotland
<b>HRA</b>	Habitats Regulations Appraisal
<b>kW</b>	Kilowatt
<b>LCA</b>	Land Classification for Agriculture
<b>MCS</b>	Microgeneration Certification Scheme
<b>MNO</b>	Mobile Network Operator
<b>MW</b>	Megawatt
<b>NPF</b>	National Planning Framework 3
<b>PADs</b>	Publically Accessible Defibrillators
<b>PAN</b>	Planning Advice Note
<b>PDR</b>	Permitted Development Rights
<b>PHEV</b>	Plug-in Hybrid and Range-extended Electric Vehicles
<b>PV</b>	Photovoltaic

<b>RHI</b>	Renewable Heat Incentive
<b>SA</b>	Sustainability Appraisal
<b>SEA</b>	Strategic Environmental Assessment
<b>SEPA</b>	Scottish Environmental Protection Agency
<b>SMEs</b>	Small and Medium Enterprises
<b>SNH</b>	Scottish Natural Heritage
<b>SPA</b>	Special Protection Area
<b>SPP</b>	Scottish Planning Policy
<b>SPZ</b>	Simplified Planning Zone
<b>SSSI</b>	Site of Special Scientific Interest
<b>VRG</b>	Virtual Review Group



# 1 Non-Technical Summary

## 1.1 Introduction to the Work Programme

This Sustainability Appraisal (SA) Report, incorporating the requirements of Strategic Environmental Assessment (SEA)<sup>1</sup> has been prepared to inform the Scottish Government's Proposed Programme for Extending Permitted Development Rights (PDR) in Scotland (referred to as 'the Proposed Work Programme').

The independent review of the planning system<sup>2</sup> concluded that '*there is significant scope to remove uncontroversial minor developments from the system and use this to incentivise developments which support [Scottish Government] policy aspirations*'. The Scottish Government has signalled its support for greater PDR as part of wider measures intended to simplify, streamline and clarify procedures so that planners can focus on activities that add most value.

The Proposed Work Programme does not itself set out any proposals or recommendations for amending PDR legislation. This will be the subject of further more detailed work which will be progressed in phases. Rather, the Proposed Work Programme seeks to prioritise the work to be taken forward, and to consider whether certain development types might be considered together and how, and approximately when, detailed legislative proposals will be progressed. The Scottish Government will give consideration as to whether any further environmental assessment or appraisal may be required as the detailed changes to PDR are worked up.

## 1.2 Permitted Development Rights in Scotland

PDR is the term given to a Scotland wide planning permission set out in legislation<sup>3</sup> which removes the need to apply for planning permission.

The Scottish Government has identified 16 broad categories of development types for further consideration of potential changes to PDR. The development types included in the Proposed Work Programme are set out in Table .1 overleaf:

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<sup>1</sup> Incorporating the requirements for an Environmental Report under The Environmental Assessment (Scotland) Act 2005.

<sup>2</sup> In its report 'Empowering Planning to Deliver Great Places' (31 May 2016) available online at: <https://beta.gov.scot/publications/empowering-planning-to-deliver-great-places/>

<sup>3</sup> Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (Scottish Statutory Instrument 1992/223), as amended.

**Table 1.1 Types of development where changes in PDR have been considered**

Digital communications infrastructure	Non-domestic solar energy	Development relating to active travel	Householder developments
Town centre changes of use	District heating and supporting infrastructure	Habitat pond creation	Electric vehicle charging infrastructure
Agricultural development	Energy storage (non-domestic)	Peatland restoration	Defibrillator cabinets
Micro-renewables (domestic and non-domestic)	Energy storage (domestic)	Allotments and community growing schemes	Snow sports

### **1.3 What is Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA)?**

SEA is required for certain plans, programmes and strategies under the Environmental Assessment Scotland Act 2005. It is a means to judge the likely significant impacts (both positive and negative) of the plan, programme or strategy on the environment and to seek ways to minimise significant adverse effects. SA takes into account environmental, social and economic effects. In this document the term 'SA' should be taken to mean 'SA incorporating the requirements of SEA.' The findings from the assessment will help to inform decisions about prioritising future legislation for the different development types, whether and how far PDR should be extended, and any requirements for safeguards to minimise the risk of negative effects.

### **1.4 How was the Sustainability Appraisal undertaken?**

A series of SA objectives and supporting criteria were developed and these were used to appraise proposals in the Proposed Work Programme. The SA objectives were developed taking into account national environmental, social and economic objectives relevant to each of the SA topics. The Scottish Government also established a Virtual Review Group (VRG) consisting of key stakeholders with knowledge and expertise on the different development types. The VRG were involved from Scoping stage through to informing the appraisal.



The SA identifies the likely significant positive and negative environmental, social and economic effects, as well as whether effects would be temporary or permanent, and whether they would arise in the short, medium or long term.

### **1.5 Which reasonable alternatives have been considered?**

SEA requires consideration of alternative policy positions (referred to as 'reasonable alternatives'). The Scottish Government originally identified 15 broad categories of development for possible changes to PD. Options for each development type were then developed through an iterative process in discussion with Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH) and Historic Environment Scotland (HES) (the SEA consultation authorities), and the VRG. For each development type the options typically appraised are:

- no change to current PDR (where existing PDR);
- alteration of current PDR for a development type in relation to current restrictions in designated areas, and/or thresholds relevant to the scale/size of development;
- creating new PDR for a development type in designated areas, non-designated areas, and/or introducing size/scale restrictions of receptors.

An alternative approach was applied to the 13 options identified for changes of use in town centres. The SA instead focuses on the sustainability effects of changes that would result from the addition or loss of 13 typical town centre uses, as a means of more clearly drawing out the likely significant impacts which could arise.

### **1.6 What are the key environmental, social and economic challenges and opportunities relevant to the Proposed Work Programme?**

Scotland's environment is rich in natural and cultural heritage. Its network of designated sites supports many important and rare plants, birds and animals. Many biodiversity features are in good condition, but continuing efforts are needed to avoid the further decline of some species and habitats. Actions to improve biodiversity in Scotland include restoring peatlands, native woodland, and water courses. Actions also include developing the role of the natural environment in providing social and economic benefits and supporting health and wellbeing.

Scotland has set ambitious targets to reduce greenhouse gas emissions. There has been a decline in fossil fuel use, including from electricity generation and transport. Climate change could result in a number of impacts on communities. Scotland's peatlands represent a significant carbon store, and impacts on peatlands are important in relation to greenhouse gas emissions.

Scotland's peat soils cover more than 20% of the country and store around 1600 million tonnes of carbon. However, it is estimated that over 80% of our peatlands are degraded.

Some residential properties are at risk of flooding. Agriculture is a key source of diffuse pollutants, potentially impacting the quality of our rivers, lochs, coastal and transitional waters.

Transport is a major contributor to air pollution however emissions from road traffic have been gradually decreasing. While the number of total miles travelled in the country has increased steadily between 2006 and 2017 the total number of journeys made by public transport has seen an overall decrease during this period. The number of journeys undertaken by rail in Scotland has seen sustained growth since 1995/96, increasing by 96% to 96.1 million journeys in 2014/15. Car ownership has also been increasing in the country. Despite the overall increase in general usage of charging points in Scotland, 25% of charge points were still not used at all during August 2016. At present there are over 2,300 miles of National Cycle Network across Scotland and a very small percentage (0.3%) of the population owns an electric vehicle.

Scotland has high quality landscapes, with many iconic views and scenic areas. There are 40 National Scenic Areas in Scotland mainly in the more remote and mountainous areas. All five of the ski centres are situated within NSAs “of outstanding scenic value in a national context”. At present there are two national parks in Scotland: Loch Lomond and The Trossachs and the Cairngorms. The protection of these areas is central to rural economic development and recreation, sustainability, and the conservation of their diverse natural habitats.

The historic environment in Scotland is a valued asset attracting approximately 14.6 million visitors a year. A significant proportion of the historic environment in Scotland is undesignated. Heritage assets are at risk from neglect, decay or development pressures. Traffic congestion, air quality, noise pollution, climate change and other problems may also affect the historic environment. Tourism, leisure and sport can improve understanding and enjoyment of the historic environment.

Scotland’s **population** is estimated to be just over five million. The population density in the country is among the lowest in Europe. There is significant variation between the more densely populated areas in the Central Belt and areas such as the Highlands and the Western Isles. There is a recent trend for an overall increase in the proportion of people who are older in the country.

The reduction in physical activity and established obesity across Scotland is seen as a health issue. Air pollution is estimated to reduce the average life expectancy of every person in the UK by six months. The situation in Scotland is comparative to that within the UK as a whole in terms of poor quality for human health. Interest in gardening and allotments has seen a rise over recent years with more people becoming aware of the social, environmental and health benefits.

Tourism is of great importance to the Scottish economy and is one of Scotland’s largest business sectors. Adventure tourism, which includes snow sports, is a growing trend. Agricultural land is a key material asset. Agriculture is the dominant land use in Scotland, covering 6.2 million hectares, 80% of the land area. A total of 66,600 people were employed in the agricultural industry at the end of June 2018.

There has been a steady increase in the availability of next generation broadband. The snow sports sector is vital to the Scottish rural economy with the economic benefit valued at £30 million per year in 2010. Unpredictable snow cover is regarded as the most significant issue within the industry with these factors driving visitor numbers, profitability and revenue.

## **1.7 Findings of the Sustainability Appraisal**

The following paragraphs provide a high level summary of the SA findings for each main development type.

### ***Digital communications infrastructure***

Digital communications infrastructure networks provide a range of services that underpin Scotland's digital economy. Options for the expansion of PDR could include changes relating to the size, scale and location of equipment, and supporting infrastructure, such as equipment housing. The SA has identified significant positive effects in relation to the economy and population and human health. This reflects the support for network improvements which are important to Scotland's digital economy. Key areas of potential but reversible significant negative effects include cultural heritage, particularly from development affecting sites designated for their cultural heritage importance, and potential landscape impacts from new or enlarged masts.

### ***Town Centre changes of use***

Town centres across Scotland are experiencing significant change. Options for the expansion of PDR could include changes leading to the addition or loss of different typical town centre uses and the SA has considered the sustainability effects of those changes. The SA identified significant positive economic effects in relation to changes allowing town centres to respond to changing eating, shopping and working patterns. Significant positive cumulative effects are also noted in relation to climatic factors, reflecting the reduced need to travel, and population and human health through providing local services and facilities in an accessible location. There is the potential for negative effects including 'bad neighbour' effects and poor diet associated with an increased number of take-away restaurants. Mixed significant effects could occur for cultural heritage reflecting the positive role of keeping historic buildings in use, but the potential impacts from physical changes to buildings.

### ***Agricultural developments***

Agriculture and farming are important to the Scottish economy and options for the expansion of PDR could include changes relating to the size and scale of farm sheds, the development of polytunnels and the conversion of agricultural buildings to residential or commercial use. The majority of potential PDR changes are identified as having a significant positive effect on supporting the rural economy. Potential significant negative effects are identified in terms of cultural heritage and potential landscape impacts from larger scale developments, and potential impacts on flood risk from increased run-off.

### ***Micro-renewables (domestic and non-domestic)***

Micro-renewables produce heat or energy from renewable sources such as solar, wind, biomass or by exchanging heat naturally present in the air or ground. Options for the expansion of PDR could include changes relating to development within protected areas where these are currently restricted and/or the introduction of new PDR. Changes are identified as having significant minor positive long term effects on reducing greenhouse gas emissions through use of low carbon energy sources, and

supporting climate change adaptation through resilience of the energy supply network. Changes could give rise to significant positive cumulative effects by improving the efficiency of the planning system, removing the requirement to apply for planning permission for a wide range of domestic and non-domestic renewables.

### ***Non-domestic solar energy***

Solar panels generate electricity or heat water using the energy from the sun. Options for the expansion of PDR include changes relating to the removal of certain restrictions on PDR for solar panels mounted on roofs or walls. The potential for significant negative effects on the safe operation of aerodromes and technical sites was identified in circumstances where there are cumulative effects from glint and glare from several solar developments in the same area.

### ***District heating and supporting infrastructure***

Heat networks or district heating refers to a network system for distributing heat from a central location (instead of individual boilers in homes) to meet requirements for heating and hot water in residential and commercial developments. Options for the expansion of PDR include introducing PDR for works relating to district heating and supporting infrastructure. Potential significant negative effects have been identified in terms of cultural heritage.

### ***Energy storage (non-domestic)***

Energy storage, in the form of battery storage, plays an important role in supporting the flexibility of the energy system, helping to avoid peaks and troughs in supply, particularly in relation to renewable energy. Options for the expansion of PDR include introducing PDR for energy storage developments. Significant but reversible negative effects are identified in terms of cultural heritage and landscape.

### ***Energy storage (domestic)***

Battery energy storage in association with residential buildings allows users to store electricity from local generation. There are no existing specific PDR for the installation, alteration or replacement of domestic energy storage facilities, although planning permission is not required for domestic battery storage within a residential building. No significant positive or negative effects are identified for introducing PDR for this development type.

### ***Development relating to active travel***

Development relating to active travel is identified as the physical infrastructure required to support active travel. No PDR exist in relation to surface improvements to footpaths and cycle ways, new footpath and cycle routes, provision of safe road crossing points, provision of docking stations for e-bikes and other developments which might support sustainable transport in Scotland. No significant positive or negative effects are identified for introducing PDR for this development type.

### ***Habitat pond creation***

Pond creation and restoration for wildlife has been an important element of agri-environment funding in recent years. There are currently no PDR for creation of wildlife ponds on agricultural land. Introducing PDR for the creation of ponds for wildlife purposes could have significant positive permanent effects on biodiversity, flora and fauna.

### ***Peatland restoration***

Peatland can become degraded as a result of drainage, forestry, grazing, peat cutting or erosion. Actions to restore peatland focus on managing water levels, stabilising peat and managing vegetation. There are currently no specific PDR for peatland restoration activities. Potential significant permanent positive effects are identified in terms of biodiversity, the water environment, reducing greenhouse gas emissions, climate adaptation, soils and the landscape.

### ***Allotments and community gardens***

Allotments and community gardens are plots of land tended by individuals or community groups for the growing of fruit, vegetables, flowers and other plants for their own use. Developments which support activities on these sites include change of use of land, fencing, buildings, access and water. Introducing PDR to cover these development types could have significant long term positive effects in terms of social, population and human health.

### ***Householder developments***

Householder developments relate to alterations and extensions to a property and within the curtilage. Some of the existing PDR are currently restricted in relation to designated cultural heritage assets. Options for the expansion of PDR include changes relating to the type of property, the size and scale of the change, and where the change affects Conservation Areas and Listed Buildings. There are mixed minor effects across most PDR changes and minor positive effects on population and human health where PDR allow people to improve their living environment, although there could also be negative effects from impacts on the amenity of neighbouring properties. Significant positive effects are also identified in relation to the efficient operation of the planning system reflecting the potential number of planning applications avoided. Significant negative effects are identified on cultural heritage, arising from the changes across all types of development.

### ***Electric vehicle charging***

An electric vehicle charging point / station supplies electricity to electric vehicles, and is an important aspect of supporting climate change targets. Options for changes to PDR relate to changes to the size and location of the development, including in areas designated for their cultural heritage. Significant negative effects are identified on cultural heritage although these effects are reversible. Significant positive effects are identified in relation to climate change and air quality from indirect support for reducing vehicle emissions.

## **Defibrillator cabinets**

Defibrillator cabinets, Publicly Accessible Defibrillators (PADs) or Automated External Defibrillators (AEDs) are an increasingly common feature in many towns, villages and cities. At present PADs are not covered by specific PDR. No significant positive or negative effects are identified for introducing PDR for this development type.

## **Snow sports**

Climate change, and its impact on snowfall, is presenting a challenge for the snow sports industry in Scotland. Artificial snow-making is an important aspect of maintaining the viability of snow sports centres, and the development may require a number of different pieces of infrastructure to support the energy needs, water requirements and snow-making equipment. No significant positive or negative effects are identified for the options to expand PDR relevant to snow sports.

### **1.8 Secondary, cumulative and synergistic effects**

Possible cumulative and synergistic effects between all of the development types included in the Proposed Work Programme have been assessed. It is not currently known which of the options for changes to PDR will be progressed and the extent to which rights will be increased. This section therefore summarises the maximum potential synergistic and cumulative effects.

Several potential changes to PDR could have potential significant negative impacts on **biodiversity, flora and fauna**. PDR for wildlife ponds and peatland restoration could result in potential significant net positive effects for this topic.

A number of potential changes will act together to support policies to reduce greenhouse gas emissions and to support adaptation to a changing **climate**, which combine to give a significant positive effect. Similarly, several potential changes will assist in improving **air quality**. A number of potential PDR changes relate to changes in the size and scale of development types that could significantly increase **flood risk**.

Several potential changes to PDR could have potential significant negative impacts on **cultural heritage**, with several having particular potential to affect Conservation Areas and undesignated historic townscapes, although this could be mitigated by restricting PDR in these areas.

Significant positive effects are identified from options which support the rural and urban economy. Several potential changes to PDR will combine to provide benefits in terms of **population**, living environment and **health**.

Several options could combine to have potentially significant negative cumulative impacts on safety at aerodrome or technical sites, however this can be mitigated either through appropriate restrictions on PDR in the vicinity of these sites, or alternatively through a more detailed evidence base to inform any future proposals in this respect.

### **1.9 What mitigation measures could be put in place?**

Potential mitigation measures, whilst reflecting the need for balance with the objective of simplifying the consenting process, include:

- Imposing conditions or restrictions on the extension of particular PDR, for example in terms of numbers, dimensions (e.g. height or area of development) and locations of development likely to give rise to adverse effects.
- Redefining distance thresholds for particular PDR by establishing minimum distances beyond which effects from particular development types are unlikely to be significant.
- Retaining or requiring prior notification/prior approval<sup>4</sup>. It is however noted that this option may be of more limited benefit in terms of streamlining the planning system, though benefits may still arise for wider Scottish Government policy objectives by establishing the principle of development through a national grant of planning permission.
- Promoting guidance and best practice to ensure that development which is implemented under PDR achieves high standards of design and implementation.

There are also a number of existing statutory mechanisms which are relevant to the Proposed Work Programme. These include the Environmental Impact Assessment (EIA) Regulations, the Habitats Regulations, protection for European Protected Species, protection for Conservation Areas, Listed Buildings and Scheduled Monuments, and existing requirements for notification to the planning authority for certain types and scales of development.

### **1.10 What monitoring is proposed?**

The precise specification of changes to PDR for each development type in this SA is unknown, as is the relative timing of their introduction and the endpoint at which all of the changes associated with this SA will be implemented. It is therefore not possible to specify monitoring and review arrangements at this stage. We recognise that we will need to consider appropriate monitoring of the impacts, including those on the environment, for changes for each development type, as well as looking at the wider cumulative effects of changes across development types. This could involve various approaches and combinations of approach, such as liaison with planning authorities, developers and statutory bodies, as well as commissioning research. As part of the Business and Regulatory Impact Assessment (<https://www.gov.scot/publications/business-regulatory-impact-assessments-toolkit/>) associated with developing changes to legislation we would set out commitments to appropriate monitoring and review, including how the previously mentioned cumulative effects will be captured.

### **1.11 How can I comment on this Sustainability Appraisal?**

The consultation on the Proposed Work Programme and SA runs for a 12 week period from 5 November 2019 until 28 January 2020.

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<sup>4</sup> Prior notification/prior approval is a procedure whereby a developer must, as a condition of the planning permission granted by PDR, notify the planning authority of proposals before exercising PDR. This procedure will not result in planning permission and instead will determine whether prior approval is or is not required and is or is not given.

*Details of how people can comment*

### **1.12 How will responses be considered?**

Following the consultation period, the consultation responses on the Proposed Work Programme and the SA will be analysed. Responses to the consultation will be taken into account in the identification of the PDR changes to be taken forward.



## 2 Introduction

This SA Report<sup>5</sup> has been prepared to inform the Scottish Government's proposed Programme for Extending PDR in Scotland (referred to as 'the Proposed Work Programme').

The aim of this report is to undertake a frontloaded, strategic level SA. The SA will, assess the social and economic impacts of extending Permitted Development (PD) and will meet the statutory requirements for SEA. As part of this work, a more detailed SA of proposals to further extend PDR for digital communications infrastructure has also been undertaken, reflecting the work which has already taken place to extend PDR in this area.

This SA Report should be read in conjunction with the Proposed Work Programme.

### 2.1 Background to the Scottish Government's Programme for Extending Permitted Development Rights in Scotland

#### Permitted development rights

PDR is the term given to a Scotland wide planning permission set out in legislation which removes the need to apply for planning permission.

Existing PDR are currently set out in *The Town and Country Planning (General Permitted Development) (Scotland) Order 1992*<sup>6</sup>. The definition of development is contained within *The Town and Country Planning (Scotland) Act 1997*<sup>7</sup> and is extremely wide-ranging. It includes two main categories:

- (a) the carrying out of building, engineering, mining or other operations in, on, over or under land; or,
- (b) the making of any material change in the use of any building or other land.

PDR usually relate to minor or uncontroversial developments or changes associated with an existing development. They are designed to cover situations where it would be very unlikely for an application for planning permission to be refused, where standardised conditions can be used, and therefore where case by case consideration by a planning authority is unlikely to add value. PDR can therefore help to remove unnecessary applications for planning permission from the planning system, reducing burdens on developers and planning authorities.

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<sup>5</sup> Incorporating the requirements for an Environmental Report under The Environmental Assessment (Scotland) Act 2005.

<sup>6</sup> Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (Scottish Statutory Instrument 1992/223), as amended.

<sup>7</sup> The Town and Country Planning (Scotland) Act 1997 (1997 c.8), as amended.

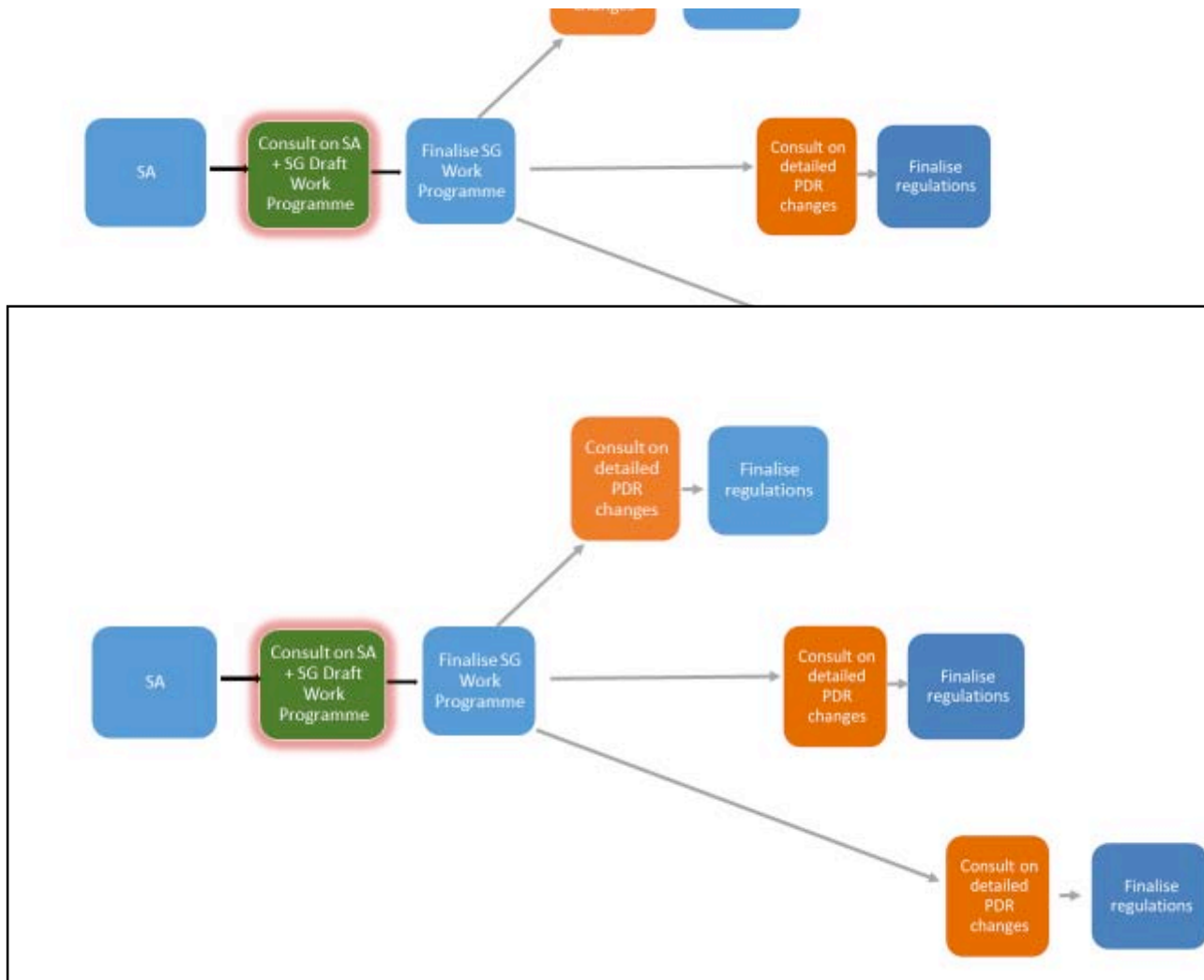
## **Outline of the contents of the Proposed Work Programme**

The independent review of the planning system<sup>8</sup> concluded that *'there is significant scope to remove uncontroversial minor developments from the system and use this to incentivise developments which support [Scottish Government] policy aspirations'*. Since then, the Scottish Government has signalled its support for greater PDR as part of wider measures intended to simplify, streamline and clarify procedures so that planners can focus on activities that add most value.

The Proposed Work Programme does not itself set out any proposals or recommendations for amending PDR legislation, as this will be the subject of further more detailed work which will be progressed in phases. Rather, it seeks to prioritise the work to be taken forward, and to consider whether certain development types might be considered together and how, and approximately when detailed legislative proposals will be progressed. The Scottish Government will give consideration as to whether any further assessment or appraisal may be required under the SEA Act as the detailed changes to are worked up. Figure 1.1 shows the Proposed Work Programme in its wider context.

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<sup>8</sup> In its report 'Empowering Planning to Deliver Great Places' (31 May 2016) available online at: <https://beta.gov.scot/publications/empowering-planning-to-deliver-great-places/>



## Potential changes to permitted development rights

A number of areas where PDR could be extended were identified in *Places, people and planning*,<sup>9</sup> in the analysis of the consultation responses received to this document<sup>10</sup>; in Heads of Planning Scotland’s (HoPS) Scoping Paper on the relaxation of planning controls;<sup>11</sup> and, in The Government’s Programme for Scotland 2017-2018<sup>12</sup>. From these, the Scottish Government identified 16 broad categories of development, for further consideration. These are set out in Table below:

<sup>9</sup> The Scottish Government, 2017. *Places, people and planning: A consultation on the future of the Scottish planning system* [pdf]. Edinburgh: The Scottish Government. Available at: <https://beta.gov.scot/publications/places-people-planning-consultation-future-scottish-planning-system/>

<sup>10</sup> The Scottish Government, 2017. *Planning Review: Analysis of Consultation Responses* [pdf]. Edinburgh: The Scottish Government. Available at: <https://beta.gov.scot/publications/planning-review-analysis-of-consultation-responses-june-2017/Planning%20Review%20analysis%20of%20consultation%20responses.pdf?inline=true>

<sup>11</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland’s Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

<sup>12</sup> The Scottish Government, 2017. *A National With Ambition: the Government’s Programme for Scotland 2017-2018* [pdf]. Edinburgh: The Scottish Government. Available at: <http://www.gov.scot/Resource/0052/00524214.pdf>

**Table 2.1 Types of development where changes in permitted development rights have been proposed**

Digital communications infrastructure	Non-domestic solar energy	Development relating to active travel	Householder developments
Town centre changes of use	District heating and supporting infrastructure	Habitat pond creation	Electric vehicle charging infrastructure
Agricultural development	Energy storage (non-domestic)	Peatland restoration	Defibrillator cabinets
Micro-renewables (domestic and non-domestic)	Energy storage (domestic)	Allotments and community growing schemes	Snow sports

The Scottish Government wants to ensure that PDR are as extensive as is appropriate – helping to make sure the planning system is efficient and proportionate and supports national policy aims. At the same time, it needs to ensure that any changes in the extent of PDR in Scotland do not have unacceptable impacts on our communities, economy or environment. The SA is therefore being used to inform the development of the Proposed Work Programme: it will also provide an evidence base from which to develop the more detailed draft legislative proposals which will follow at a later stage. In this way, the SA process can help to ensure an appropriate balance is struck between the potential benefits and costs of changes in PDR.

## **2.2 Strategic Environmental Assessment (SEA) incorporating Sustainability Appraisal (SA)**

The SEA Directive<sup>13</sup> is implemented by the Environmental Assessment (Scotland) Act 2005 ('the SEA Act')<sup>14</sup>, and is a means to judge the likely significant impacts (both positive and negative) of the plan, programme or strategy on the environment and to seek ways to minimise adverse effects, if likely to be significant. The purpose of the SA is to inform the prioritisation and development of legislative proposals taking account of environmental, social, and economic effects to help inform decisions about whether and how far PDR should be extended and any requirements for safeguards to minimise the risk of negative effects. From here on, the term 'SA' should therefore be taken to mean 'SA incorporating the requirements of SEA'.

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<sup>13</sup> [Directive 2001/42/EC](#)

<sup>14</sup> The Environmental Assessment (Scotland) Act 2005

The SA process comprises a number of stages which take place alongside the development of the Proposed Work Programme, as identified in Table3.

**Table 2.2 Main stages of Sustainability Appraisal and development of the Proposed Work Programme**

<b>Sustainability Appraisal Process and preparing the Work Programme</b>
<b>Stage A:</b> Setting the context and objectives, establishing the baseline and deciding on the scope.
<b>Stage B:</b> Developing and refining options and assessing effects.
<b>Stage C:</b> Preparing the SA Report.
<b>Stage D:</b> Consulting on the Proposed Work Programme and the SA Report.
<b>Stage E:</b> Taking into account consultation responses in finalising the Work Programme
<b>Stage F:</b> Preparing further SA work on the finalised Work Programme (if required)
<b>Stage G:</b> Implementing the Work Programme and monitoring the significant effects of implementing the Work Programme
<b>Stage H:</b> Monitoring the significant effects of implementing the Work Programme.

An overview of how the SA Report meets the requirements of the SEA Act is included in **Appendix 3**.

The Scottish Government has also involved a wide range of stakeholders in the assessment and has established a VRG to engage with the project at key stages. The VRG includes contacts from industry; the SEA consultation authorities (SEPA, SNH and HES); planning authority representatives; representatives from the Scottish Government policy leads for the sectors involved; and, from bodies with interests in the built, historic and natural environments.

### **2.3 Key dates and milestones**

Table2.3 summarises the key dates and milestones relevant to the stages of SA and the development of the Proposed Work Programme.

**Table 2.3 Key dates and milestones**

<b>SA stage</b>	<b>Process of development of the Proposed Work Programme and SA stages which inform this</b>	<b>Timeline</b>
Scoping	Initial contact with VRG	November 2017 – February 2018
	Definition of development types	

	and changes to PDR	
	Consultation with VRG	
	Workshop with consultation authorities	
	Submission of Scoping Report to SEA Gateway and consultation with the VRG	
SA	Analysis of Scoping Report responses	Spring 2018
	Draft SA Report prepared	Spring – summer 2018
	Presentation to VRG	July 2018
	SA Report finalised.	Spring 2019

## 2.4 Structure of the SA Report

The SA Report is fully compliant with the reporting requirements of the SEA Act. The SA Report includes a non-technical summary and is structured as set out below:

- **Chapter 2 Introduction** – describes the background to the Scottish Government’s Programme for Extending PDR; the Proposed Work Programme and an outline of its contents; the purpose of SA and the SA Report; key dates and milestones; and, the structure of the SA Report.
- **Chapter 3 Methodology** – presents the SA framework used for the appraisal; the method for carrying out the SA; an overview of other statutory mechanisms affording protection to designated areas; and, describes any difficulties encountered and data limitations.
- **Chapter 4 Sustainability Context** - describes links to other plans, programmes and strategies and how these have been taken into account in the SA process; the social, environmental and economic baseline characteristics and the predicted future baseline; and, the key sustainability issues and the likely evolution of the environment without implementing the Scottish Government’s Programme for Extending PDR in Scotland.
- **Chapters 5-20** – present the findings from the assessment of reasonable alternatives; outlines potential mitigation measures; and, describe the likely secondary, cumulative and synergistic effects for each development topic.
- **Chapter 21 Secondary, cumulative and synergistic effects** – presents an overview of the secondary, cumulative and synergistic effects between all of the developments for which the potential to extend PDR have been assessed.
- **Chapter 22 covers monitoring requirements and Chapter 23 presents conclusions and next steps.**

A range of supporting information is provided in the Appendices.

## 3 Methodology

### 3.1 Introduction

The SEA Act requires the Environmental Report to consider the likely significant effects of the plan or programme on the environment. This chapter of the SA Report describes the method and approach to undertaking the SA, and documents the approach to the main stages of the SA (see Table).

### 3.2 SA Stage A: Scoping

The scoping stage of the SA involves understanding the social, economic and environmental baseline as well as the sustainability policy context and key sustainability issues. It also presents an opportunity to set out how the potential impacts of the proposals and reasonable alternatives would be assessed. Given the breadth of the proposed changes to PDR, which would apply at national level, there is potential for significant impacts for each of the SA topics and therefore all the SA topics have been scoped into the assessment. The SA topics include the SEA topics of biodiversity, flora and fauna, climatic factors, air, water, soil, cultural heritage, landscape and geodiversity, and material assets, as well as considering economic and social effects (social includes the SEA topic of population and human health).

**Table 3.1 SA topics**

Biodiversity, flora and fauna	Water	Landscape and geodiversity
Climatic factors	Soil	Material assets
Air	Cultural heritage	Economy
		Social, population and human health

A Round Table discussion on PDR and the Historic Environment was convened by the Minister for Local Government & Communities on 25 January 2018 with historic environment stakeholders. This identified key issues for the historic environment which could result from changes in PDR, and has been used to inform the approach to the assessment of impacts on the historic environment. This included issues such as direct impacts on buildings and structures, alongside impacts on setting, cumulative effects and reversibility of effects.

A Scoping Report was prepared in February 2018 and circulated to the SEA consultation authorities, the VRG and other stakeholders to assess if the proposed assessment methodology allows for an effective and proportionate evaluation of proposals and alternatives prior to the production of the SA Report. The responses received were taken into account in developing the scope of the PDR changes, and in



preparing the SA report. Key issues identified by the consultation authorities resulted in the following:

- Revised wording of sustainability objectives to reflect comments.
- A revised approach to assessing reasonable alternatives/mitigation.
- Identification of potential effects of existing legislation on minimising environmental effects.
- A revised approach to the assessment of changes of use in town centres based on a high level assessment of 13 typical town centre uses which appraised the effects of the loss or gain of this type of development.

An SA framework was developed comprising a series of SA objectives and supporting criteria to be used to appraise the policies and proposals within the Proposed Work Programme. The finalised SA framework takes into account comments from received from the consultation authorities, the VRG and other stakeholders at scoping stage.

The SA topic ‘Climate change’ has been revised to ‘Climatic factors’ in order to make a clear distinction between the impact the Programme could have on factors that could mitigate for greenhouse gas emissions and the broader impact that the Programme could have on matters such as climate change adaptation. The wording of SA sub-objective 4.1 has been expanded to also seek to improve the water environment. SA sub-objective 5.1 has been rephrased to include the protection of soils as well as avoiding adverse effects on the soil environment. SA sub-objective 8.1 was revised to include reference to particular types of material assets ‘*To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste*’. A number of revisions were made to SA objective 10: Social, population and human health. SA sub-objective 10.1 was revised to refer to reducing risks to health and quality of life ‘*To avoid adverse effects on health and quality of life and reduce risks to health and quality of life*’. SA sub-objective 10.2 was also revised to include support for access, recreation and physical activity ‘*To improve the health and living environment of people and communities including support for access, recreation and physical activity*’.

The SA framework that has been used throughout the appraisal is presented in Table 3.2.

**Table 3.2 SA Assessment Framework**

SA Topic	SA Objectives
<b>1. Biodiversity, flora and fauna</b>	1.1. To avoid adverse effects on all habitats and species
	1.2. To enhance biodiversity
<b>2. Climatic factors</b>	2.1. To avoid increasing greenhouse gas emissions
	2.2. To support actions which contribute to targets for reducing greenhouse gas emissions

	2.3. To support climate change adaptation
<b>3. Air</b>	3.1. To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA
	3.2. To improve air quality
<b>4. Water</b>	4.1. To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies
	4.2. To avoid and reduce flood risk
<b>5. Soil</b>	5.1. To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land
	5.2. To reduce vacant and derelict land/buildings and contaminated land
<b>6. Cultural heritage</b>	6.1. To avoid adverse effects on designated and undesignated heritage assets and their settings
	6.2. To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment
<b>7. Landscape and geodiversity</b>	7.1. To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes
	7.2. To enhance landscape quality
<b>8. Material assets</b>	8.1. To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste
	8.2. To enhance material assets
<b>9. Economy</b>	9.1. To support and enhance opportunities for sustainable economic growth
	9.2. To support rural development
	9.3. To support smarter resourcing of the planning system
<b>10. Social, population and</b>	10.1. To avoid adverse effects on health and quality of life and reduce risks to health and quality of life

<b>human health</b>	10.2. To improve the health and living environment of people and communities including support for access, recreation and physical activity
	10.3. To support community cohesion and vitality
	10.4. To support access to education and training

### **3.3 SA Stage B: Developing and refining options and assessing effects**

The Scottish Government originally identified 15 broad categories of development for which changes to PDR could be identified. Developing options for each development type has been undertaken through an iterative process in discussion with the Scottish Government, the consultation authorities and the VRG.

#### **Involvement of the VRG**

In December/January 2017, members of the VRG were invited to participate in an online survey to gather information on the scope of potential changes to PDR in relation to the 15 development types. A total of 60 responses were received and the potential options for each development type refined. The responses were used to inform the issues identified in the assessment, and the issues identified reflect the views of the individuals who responded.

Workshops with the SEA consultation authorities and, separately, with historic environment stakeholders were held in January 2018 and helped to further refine the options for each development type, taking into account the objectives and geographical scope of the Proposed Work Programme. These were incorporated into the SA Scoping Report.

The members of the VRG were also invited to comment on the content of the Scoping Report in February 2018, which further refined the final options included for assessment.

The VRG were consulted again in May 2018 when they were invited to make final comments on the PDR options to be included in the SA for their topic areas of interest, and additional comments on the likely scale of change which would occur under a change in PDR for each topic area. This included requesting the likely scale of individual developments (where applicable to the development type), and the general locations where this type of development would be most likely to occur.

The VRG were also invited to an event in July 2018 where the draft findings of the SA were presented and opportunity provided to discuss the sustainability issues for extending PDR for each topic, and to explore how these findings may influence the work programme being taken forward by the Scottish Government.

Development associated with snow sports was added to the list of development categories in autumn 2018, in response to an action raised at the strategic snow sports meeting as an addition to the main SA. Instead of engagement with a VRG, the

identification of the potential changes to PDR for snow sports was carried out by a teleconference with the snow sports operators in Scotland in November 2018.

## **Reasonable Alternatives**

The SEA Act requires that the SA identify, describe and evaluate the likely significant effects on the environment of any reasonable alternatives to the Proposed Work Programme, taking into account its objectives and geographical scope. As the Proposed Work Programme does not itself make any recommendations for amending PDR legislation, all of the options identified and refined through the engagement have been assessed. Initially it was proposed that the SA would assess options under 'no change' and 'maximum change' scenarios whilst identifying potential mitigation such as restrictions in designated areas or on the size and scale of the receptor. The rationale for this approach was to identify the range of potential effects, and to provide a menu of mitigation options to address the effects identified.

This approach was revised following comments received on the Scoping Report which suggested that some of the mitigation measures constituted reasonable alternatives ('options') which should be appraised in the SA. Therefore, the approach to assessment was revised to one that appraises all options in the same level of detail (except where otherwise noted). For each development type the options appraised are:

- no change to current PDR (where existing PDR)
- alteration of current PDR for a development type in relation to current restrictions in designated areas, and/or thresholds relevant to the scale/size of development;
- creating new PDR for a development type in designated areas, non-designated areas, and/or introducing size/scale restrictions of receptors.

The above approach was not applied to the 13 options identified in the Scoping Report for changes of use in town centres. The appraisal instead focuses on the sustainability effects of changes that would result from the addition or loss of 13 typical town centre uses, as a means of more clearly drawing out the likely significant impacts which could arise.

The approach to the assessment involved assessment of each potential PDR change for each topic area. Appendix 4 provides a summary of the potential PDR changes for each topic area. Appendix 5 includes the assessment tables which set out individual scores for each identified potential PDR change. Following the scoring table a second table provides text justifying the scores provided.

The text set out in this report summarises the main findings from the assessment.

For most of the development topic chapters a high level summary of secondary, cumulative and synergistic effects is included. One of the key areas of uncertainty in the assessment is cumulative effects. This is because there is uncertainty over which, if any, of the potential PDR changes will be identified for each topic area through the Proposed Work Programme. Within each topic area, potential PDR changes may also be mutually exclusive e.g. where the assessment has considered potential changes in

PDR to all areas, or where it has excluded certain designated areas. Due to the range of potential combinations, the assessment of secondary, cumulative and synergistic effects is based on the 'maximum development' scenario of all of the potential PDR changes for each development type, where multiple changes are identified. For the development types where only a single change to PDR is identified, there is not assessment of cumulative effects. There is considerable uncertainty over cumulative effects across the different development types due to the level of uncertainty over which individual PDR changes will be identified in the Proposed Work Programme.

The SA findings for the reasonable alternatives are summarised in **Chapters 5-20** and the detailed SA matrices are presented in **Appendix 6**. A summary of all of the options assessed for each topic is presented in Appendix 4.

Secondary (or indirect) effects are effects that are not a direct result of a proposal, but occur away from the original effect or as a result of a complex pathway. Secondary effects occur as a result of effects on one issue, resulting in effects on another, e.g. impacts on soil can affect flooding.

Cumulative effects occur where two or more impacts combine to form a significant impact. It is important to note that seemingly small-scale, localised effects can be significant if they occur in particularly sensitive areas or have the potential for wide-ranging effects. For example, options relating to town centre changes of use, telecoms infrastructure, the development of allotments and community gardens and active travel infrastructure could combine to provide significant positive effects in terms of population, living environment and health.

Synergistic effects combine to produce an effect that is different in nature from the components that come together. For example, options relating to the development of allotments and community gardens could have significant positive synergistic effects in relation to the provision of fresh locally sourced food, reducing food miles and associated greenhouse gas emissions, community cohesion and vitality and the creation of opportunities for training and education.

The SA Report considers secondary, cumulative and synergistic effects of the options presented for each development type (at the end of each chapter) as well as between all of the options for which the potential to extend PDR has been assessed (Chapter 21). However, as explained earlier, it is not currently known which changes in PDR will be progressed and the extent to which PDR will change. Therefore, the maximum potential secondary, cumulative and synergistic effects are assessed.

### **3.4 Mitigation**

Where significant negative effects are identified through the SA, recommendations are made for mitigation for each option considered under the 16 development types.

Mitigation, whilst reflecting the need for balance with the objective of simplifying the consenting process, includes:

- Defining conditions or restrictions on the extension of particular PDR, for example in terms of numbers, dimensions (e.g. height or area of development) and locations of development types likely to give rise to adverse effects.

- Redefining distance thresholds for particular PDR by establishing minimum distances beyond which effects from particular development types are unlikely to be significant.
- Retaining or requiring prior notification/prior approval<sup>15</sup>. It is however noted that this option may be of more limited benefit in terms of streamlining the planning system, though benefits may still arise for wider Scottish Government policy objectives by establishing the principle of development through a national grant of planning permission.
- Promoting guidance and best practice to ensure that development which is implemented under PDR achieves high standards of design and implementation.

### 3.5 Statutory mechanisms relevant to PD

Where a development is listed in Schedule 1 to the **EIA Regulations**<sup>16</sup>, then PDR do not apply. Where a development is listed in Schedule 2 to the EIA Regulations and meets or exceeds the related threshold or is in a sensitive area (as defined in the EIA Regulations<sup>17</sup>) then PDR do not apply unless a screening opinion or screening direction indicating an EIA is not required has been obtained from either the planning authority or Scottish Ministers.

Regulations 60- 63 of the **Habitats Regulations**<sup>18</sup> ; provide that it is a condition of any planning permission granted by the General Permitted Development Order (GPDO) that development which is likely to have a significant effect on a European Site (i.e. Natura sites<sup>19</sup>), either alone or in combination with other plans or projects, and which is not directly connected with or necessary to the management of the site, shall not be begun until the developer has received written notification of the approval of the planning authority. Where an authority receives an application for their approval, they should send a copy of the application to [SNH] and shall take account of any representations

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<sup>15</sup> Prior notification/prior approval is a procedure whereby a developer must, as a condition of the planning permission granted by PDR, notify the planning authority of proposals before exercising PDR. This procedure will not result in planning permission and instead will determine whether prior approval is or is not required and is or is not given.

<sup>16</sup> The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 [http://www.legislation.gov.uk/ssi/2017/102/pdfs/ssi\\_20170102\\_en.pdf](http://www.legislation.gov.uk/ssi/2017/102/pdfs/ssi_20170102_en.pdf)

<sup>17</sup> "Sensitive area" means any of the following:— (a) a site of special scientific interest; (b) land in respect of which an order has been made under section 23 (nature conservation orders) of the Nature Conservation (Scotland) Act 2004(a); (c) a European site within the meaning of regulation 10 of the Conservation (Natural Habitats, &c.) Regulations 1994(b); (d) a property appearing in the World Heritage List kept under article 11(2) of the 1972 UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage(c); (e) a scheduled monument within the meaning of the Ancient Monuments and Archaeological Areas Act 1979(d); (f) a National Scenic Area as designated by a direction made by the Scottish Ministers under section 263A(e) (national scenic areas); (g) an area designated as a National Park by a designation order made by the Scottish Ministers under section 6(1) (making of designation orders) of the National Parks (Scotland) Act 2000(a); and (h) a marine protected area.

<sup>18</sup> Conservation (Natural Habitats &c.) Regulations 1994

<sup>19</sup> Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)

made. In cases where an ‘appropriate assessment’ is subsequently required, the authority may approve the development only after having ascertained that it will not adversely affect the integrity of the site.

**European Protected Species** - certain species are given strict protection (i.e. European protected species) under the Habitats Regulations. There is however a licensing process which makes it possible to permit certain activities that would otherwise be illegal. The relevant licensing authority will be SNH in most instances.

In **Conservation Areas**, a number of PDR are withdrawn or severely restricted to prevent changes that would affect the character and appearance of the area – which the relevant legislation<sup>20</sup> requires planning authorities to preserve and enhance. For example, householder rights to extend or alter properties, install certain microgeneration equipment or erect ancillary structures are withdrawn. Planning authorities are empowered by **Article 4 of the General Permitted Development Order (Scotland) 1992, as amended**, to withdraw the majority of<sup>21</sup>, or specific, PDR within an area of their choosing, subject to approval by Ministers.

**Listed Buildings** and **Scheduled Monuments**, by virtue of the separate consent regimes required for physical works to these designated assets, are protected from any adverse effects which might otherwise arise from PDR for such works. Indeed, Category A-Listed buildings and Scheduled Monuments were recently removed from the list of sensitive areas for certain types of communications infrastructure PDR— although their settings, along with Conservation Areas, Inventory-listed Historic Gardens and Designed Landscapes and Inventory-listed Historic Battlefields remained within the definition<sup>22</sup>. The curtilage of Listed Buildings is also excluded from certain PDR, including certain types of micro-generation.

Most types of PDR can be implemented without recourse to the planning authority. Some PDR, however, are subject to the requirement for **prior notification/prior approval** of the planning authority. Examples include the construction or alteration of farm and forestry buildings; the construction of private ways for agriculture and forestry; the installation of domestic micro-scale wind turbines (<50kW capacity over 100m from the nearest property boundary; and the demolition of a domestic building. Upon receipt of notification, accompanied by standard information, a planning authority can indicate that prior approval is either not required – enabling development to proceed under PDR – or that the circumstances of development warrant prior approval of relevant design and construction details. Other variations of this procedure exist.

**Appendix 5** presents a table of statutory mechanisms affording protection to designated areas and sites. The control afforded by these mechanisms has been taken into account throughout the assessment of options and in the formation of mitigation measures.

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<sup>20</sup> The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997

<sup>21</sup> Some exceptions for some mining and minerals development (covered by Article 7) and in relation to functions of statutory undertakers, airports operators and local authorities in some circumstances

<sup>22</sup> *Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017*

### 3.6 Appraisal methodology

#### Assessing likely significant effects

The assessment of significance of the environmental, social and economic effects for each development type is an important aspect of the SA. Significance can be difficult to define and depends on the character, quality and sensitivity of the environment which will be affected by the proposal as well as the scale, magnitude, frequency and certainty of the effects occurring. Notably, significance relates to the context of a change, and may vary in different locations.

Schedule 2 of the 2005 Act identifies criteria for determining the likely significance of effects on the environment (see Table 3.3).

**Table 3.3 Criteria for assessing likely significant effects**

SEA Assessment Criteria	Breakdown and Description
(a) the probability, duration, frequency and reversibility of the effects	<p><u>Probability</u></p> <p>Low – Not likely to have an effect</p> <p>Medium</p> <p>High – Highly likely to have an effect</p> <p><u>Duration</u></p> <p>Short-term – 0-5 years</p> <p>Medium-term – 5-10 years</p> <p>Long-term – 10+ years</p> <p><u>Frequency</u></p> <p>Continual; defined by number of occurrences; or intermittent</p> <p><u>Reversibility</u></p> <p>Whether the effect can be reversed (i.e. can the receptor return to baseline condition) without significant intervention</p>
(b) the cumulative nature of the effects	Where several options each have insignificant effects but together have a significant or combined effect. This includes synergistic effects, which is when effects interact to produce a total effect greater than the sum of the individual effects.



(c) the transboundary nature of the effects	Effects beyond Scotland's boundary.
(d) the risks to human health or the environment	Whether the impact of the effect would present a risk for people and the environment.
(e) the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)	<p><u>Magnitude</u></p> <p>High – High proportion of the receptor affected</p> <p>Medium</p> <p>Low – Low proportion of the receptor affected</p> <p><u>Spatial extent</u></p> <p>National/Transboundary – Effects on Scotland or England</p> <p>International – Effects extending to the UK or beyond</p>
(f) the value and vulnerability of the area likely to be affected due to:	Impact of the effect on the value or condition of the existing area.
<p>(i) special natural characteristics or cultural heritage</p> <p>(ii) exceeded environmental quality standards or limit values</p> <p>(iii) intensive land-use</p>	
(g) the effects on areas or landscapes which have a recognised national, Community or international protection status	Impacts on areas with national, community or international protection.

### Use of the SA framework

The options have been appraised against the SA objectives in the SA framework (see Table 3.23.4). Scores are attributed to each proposal to indicate their likely significant effects on each SA objective as shown in the key below.

**Table 3.4 Key to SA scores**

++	Proposal is likely to have a <b>significant positive</b> effect on the SA objective(s).
++/-	Proposal is likely to have a mixed effect ( <b>significant positive</b> and <b>minor negative</b> ) on the SA objective(s).
+	Proposal is likely to have a <b>positive</b> effect on the SA objective(s).
0	Proposal is likely to have a <b>negligible</b> or no effect on the SA objective(s).
-	Proposal is likely to have a <b>minor negative</b> effect on the SA objective(s).
-/+	Proposal is likely to have a mixed effect ( <b>significant negative</b> and <b>minor positive</b> ) on the SA objective(s).
--	Proposal is likely to have a <b>significant negative</b> effect on the SA objective(s).
?	It is <b>uncertain</b> what effect the proposal will have on the SA objective(s), due to a lack of data.
+/- or +/-	The proposal is likely to have a <b>mixture of minor positive and minor negative</b> effects or a <b>mixture of significant positive and significant negative</b> effects on the SA objective(s).

Where a potential positive or negative effect is uncertain, a question mark has been added to the relevant score (e.g. +? or -?) and the score is colour coded as per the potential positive, negligible or negative effect (e.g. green, yellow, orange, etc.).

Scoring is relative to the scale of proposals under consideration and is determined by the significance of the effect. In order to determine significance it is important to identify and differentiate between the levels of impact and to consider the following factors:

- The **magnitude** or scale of effects.
- The **sensitivity** of the receiving environment, including the value and vulnerability of the area, exceeded environmental quality standards, and effects on designated areas or landscapes.
- The **effect characteristics**, including probability, duration, frequency, reversibility, cumulative effects, transboundary effects, risks to human health or the environment, and the magnitude and spatial extent of the effects.

The likely effects of the options for extending PDR need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. The dividing line in making a decision about the significance of an effect is often quite small.

Where either (++) or (--) is used to distinguish significant effects from more minor effects (+ or -) this is because the effect on the SEA objective in question is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective.

The assessment tables provide scores for each of the potential changes to PDR, and the justification table provides the narrative for the individual scores given. The justification text in each table does not seek to identify cumulative, secondary or synergistic effects between the potential PDR changes. This is because:

- there are a large number of potential permutations of combinations; and
- the potential combinations would be influenced by the detail of each potential PDR change.

The assessment of cumulative, secondary and synergistic effects for each topic area is based on a high level assessment of the effects from all of the main areas of change for each topic area. Where only a single change to PDR is proposed, no assessment of cumulative effects is made.

### **3.7 Difficulties encountered and data limitations**

Although LUC obtained planning statistics from the Scottish Government on planning applications across Scotland, the groupings of developments did not correlate for the majority of the development topics, with the exception of householder developments. This data would have indicated the volume of existing planning applications for different topic areas, which would have provided a baseline to indicate the areas of potential reduction in planning applications from changes in PDR for the different development types, and the areas of greatest benefit to the planning system. Therefore conclusions on the impact of individual PDR changes on the smarter resourcing of the planning system are difficult to quantify based on the available information.

There is limited research on the social, economic or environmental effects experienced from previously introducing or amending PDR. Research carried out in England<sup>23</sup> into the impacts of PDR changes identified that on the basis of 30 stakeholder interviews that the PDR led to quicker implementation, but there were concerns over quality of development being delivered.

The limited availability of research means that there is a lack of evidence to support conclusions on the likely effects arising from PDR changes

The assessment approach has therefore been based on a number of assumptions about the effect of changes to PDR:

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<sup>23</sup> RICS (2018) Extending permitted development rights in England: the implications for public authorities and communities. Insight Report Available at: <https://www.rics.org/globalassets/rics-website/media/knowledge/research/insights/extended-permitted-development-rights-in-england-the-implications-for-public-authorities-and-communities-rics.pdf>

- The current requirement for planning permission has a positive effect on topics such as biodiversity, flora and fauna, air, water, soil, cultural heritage, landscape and geodiversity as it ensures consideration of effects on these topics.
- All PDR changes will increase the speed at which the development type may be delivered, due to the removal of the time element of the planning application process.
- PDR changes for small scale developments will result in an increase in development, following the removal of the cost disincentive. The cost element is not viewed as significant for larger developments where the planning fee would form a small percentage of the overall project cost. The extent to which individual changes to PDR would affect the quantity or rate of development coming forward is however an area of remaining uncertainty.

PDR changes may impact on the quality of development coming forward, and result in development in inappropriate locations, where adverse effects could arise.

Brexit is a key area of uncertainty which affects the assessment, particularly those topic areas which relate to food production, reliance on workers from the EU and ease of movement in EU countries. Based on these areas potential implications of Brexit in affecting future development trends have been identified for the topic areas of:

- Agricultural developments;
- Snow sports.

## 4 Sustainability Context

### 4.1 Introduction

The information presented in this chapter was originally prepared for the Scoping Report and has since been updated to take account of comments received from the consultation authorities, the VRG and other stakeholders.

### 4.2 Review of relevant plans, programmes and strategies and environmental protection objectives

In order to establish a clear scope for the SA it is necessary to review and develop an understanding of the environmental as well as the social and economic objectives contained within international and national plans, programmes and strategies relevant to the Proposed Work Programme. The review is not, and cannot be exhaustive.

**Appendix 1** identifies the relationship that relevant plans, programmes and strategies have with the Proposed Work Programme, and shows how the environmental, social and economic objectives have been taken into account during the preparation of the SA framework.

A summary of the implications of the relevant environmental, social and economic objectives of the existing legislation, policies, strategies, plans and programmes is set out below.

### 4.3 Summary of relevant environmental, social and economic objectives by SA topic

#### General

Key environmental objectives within policy and legislation which cut across the SA topic areas include support for the principles of sustainable development, which is embedded in National Planning Framework (NPF) 3, Scottish Planning Policy (SPP), and the legislative framework for PDR.

#### Biodiversity, flora and fauna

Biodiversity, flora and fauna objectives include the protection of biodiversity and the sustainable use of its components. This is achieved through the creation of protected areas which support the species and habitats, and extends through to improving people's knowledge and understanding of biodiversity.

#### Climate change

Policy and legislation on climate change relates to reducing emissions and climate change adaptation. Meeting targets for reducing emissions from greenhouse gases is achieved through a range of measures including improved energy efficiency, increased renewable energy production and local energy generation, sustainable travel and the transition to a low carbon economy. Climate change adaptation supports the adjustment of economic, social or natural processes in response to actual or expected climate change.

## **Air**

Air quality objectives include the protection and enhancement of air quality, and reduction in emissions both in relation to long range air quality and impacts on the environment, and also to avoid the direct harmful effects of air pollution on human health. This includes impacts from sources such as industrial emissions, biomass and transport, and links to actions to reduce climate change emissions.

## **Water**

Policy objectives relevant to water cover the protection of inland surface waters, transitional waters, coastal waters and ground water. Objectives relate to protecting and enhancing water quality, and actions to support flood management and reduction of flood risk. Climate change is a key consideration in relation to flood risk in Scotland.

## **Soil**

Soil is a non-renewable resource, and also functions as a carbon sink and a carbon source. The objectives for the protection of soil relates to the protection of the resource and protection and enhancement of quality.

## **Cultural heritage**

Objectives for cultural heritage include the protection and conservation of archaeological heritage, including areas and features designated for their international, national and local significance, non-designated assets and their setting.

## **Landscape and geodiversity**

Landscape and geodiversity objectives support the protection and enhancement of landscapes and the natural environment. They support the sustainable use of landscapes and geological features, the safeguarding and protection of all landscapes and the recognition of Scotland's geodiversity.

## **Material assets**

The SA topic of material assets is broad ranging and has key links to areas important to the economy and is particularly relevant to the topics covered by potential changes to PDR including minerals, waste, infrastructure, tourism, telecommunications / digital and energy. Key objectives include the sustainable use of natural resources, support for renewable energy development, energy efficiency, development of electronic communications infrastructure and support for broadband technology, waste minimisation and promotion of recycling. In relation to agriculture and the rural economy key objectives include supporting sustainable rural development, improving the natural environment and supporting rural communities. In relation to travel, the policy framework supports sustainable and active travel including recharging points for electric vehicles and infrastructure to support active travel. Tourism is also a key policy area, relating to the quality of the environment, heritage and associated activities, with links to other areas such as physical and digital connectivity.

## **Economy**

Economy objectives support sustainable economic growth and regeneration. They promote business and commercial development that increases economic activity, healthy and vibrant town centres that accommodate a mix of uses and businesses, and the diversification of the rural economy.

## Social, population and human health

Objectives for population and health and wider social issues cut across many other SA topics, including air and water quality, management of flood risk and climate change. Health related objectives include the protection of public health from health hazards, the protection of environmental quality including in relation to noise and nuisance. Physical activity and access to open space is also a key area which supports health, particularly in relation to physical activity and active travel. Health and wellbeing are also dependent on actions to increase access to employment and education and reduce inequality.

### 4.4 Baseline information

The Act requires the SA Report to include a description of “*the environmental characteristics of areas likely to be significantly affected*”. This information provides the context within which the Proposed Work Programme will operate. The environmental, social and economic baseline data is presented in **Appendix 2**. Where appropriate, specific information has been drawn out as relevant to the topic areas where an extension of PDR is being considered.

Due to the geographical scope of the changes to PDR, baseline information has been collated at a national level to reflect the strategic nature of the appraisal. Although it is accepted that many of the changes to PDR could have localised effects, local baseline information has not been collated as the spatial distribution of effects is dependent on the extent to which PDR changes are utilised, and the changes to PDR in different geographical areas.

The exception is the baseline information included in relation to the PDR changes for development in relation to snow sports. The effects of these changes are specific to the locations of the five snow sports centres, although the extent to which different options may be taken up at each location is unknown.

### 4.5 Key sustainability issues and likely evolution without the Scottish Government’s Programme for Extending Permitted Development Rights in Scotland

Analysis of the baseline information has enabled a number of key sustainability issues to be identified.

This analysis is presented in Table 4.1 **4.1** below which sets out the key sustainability issues and the likely evolution of the environment without the Proposed Work Programme, based on key trends.

**Table 4.1 Key sustainability issues and likely evolution of the environment without the Proposed Work Programme**

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<b>Biodiversity</b>	
Although the proportion of natural features on protected nature sites in Scotland found to be in favourable	Many biodiversity sites are protected by international or national legislation and there is a trend for improvement in the overall

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<p>condition has decreased by 0.1% to 80.3% in the 12 months previous to March 2017, this is nevertheless an increase from 71.4% in March 2005. Furthermore, 'natural capital stocks' have largely stabilised or improved slightly to 2015 following decades of decline up until the 1990s.</p> <p>A large proportion of designated peatlands in Scotland have been found to be in unfavourable condition. It has also been found that approximately 70% of Scottish blanket bog and 90% of Scottish raised bog area have been damaged to some degree. General effects of construction as well as activities such as horticulture, fuel production, and the whisky industry have had varying degrees of impact on these areas of habitat. To address the potential further decline of peatlands in Scotland, the draft Climate Change Plan proposes the restoration of 250,000 hectares of peatlands by 2032.</p>	<p>condition of monitored natural features in Scotland.</p> <p>In the absence of extending PDR, the rate of transition to a low carbon economy in terms of energy production could be slower where renewable energy production forms a smaller proportion of the energy mix. Any dependency upon energy production from fossil fuels would likely result in adverse impacts on air and water pollution, and climate change effects which would affect both people and biodiversity. Actions to improve and restore habitats such as peatland and to create allotments and community growing schemes may also come forward in fewer areas and at a slower rate.</p>
<b>Climate change, energy consumption and energy efficiency</b>	
<p>Scotland, like the rest of the UK, is likely to experience more extreme weather as a result of climate change. Predictions include wetter winters with greater incidences of flooding as well as warmer, drier summers leading to low flow conditions in rivers. However, climate change could also present opportunities. For example, milder winters should reduce the costs of heating homes and other buildings, helping to alleviate fuel poverty and reducing the number of winter deaths from cold.</p> <p>There is a trend of decreasing energy sales within the domestic energy market in Scotland, although the rate of energy consumption is still higher than elsewhere in the UK. The consumption of energy produced from fossil fuels has decreased in Scotland</p>	<p>The Scottish Government has set ambitious targets for increasing energy generation from renewable resources in Scotland, however climate change is likely to have ongoing impacts. In the absence of extending PDR in the areas of development which would support reductions in greenhouse gas emissions: renewable energy production, energy storage, electric car charging, active travel, peatland restoration (which can act as a carbon sink), allotments and community growing schemes (which can provide a source of locally grown food) there may be more barriers and a slower rate of change on actions which would help to limit climate change through carbon release.</p>



Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
in recent years, falling from 47.6% in 2005 to 22.0% by 2015.	
<b>Water resources and flooding</b>	
<p>Scotland is affected to varying degrees by flooding from a number of sources including rivers, tidal waters, groundwater, surface water and sewers. Over 4% of residential properties in Scotland (just over 108,000 properties) are estimated to be located in flood risk areas from all sources of flooding. Coastal flooding and river flooding affect more properties in Scotland than surface water flooding.</p>	<p>Flooding events have become more prevalent and can be expected to be more regularly experienced with greater levels of severity with the advancement of climate change.</p> <p>The development topics which may increase flood risk, or the level of development in areas of flood risk include:</p> <ul style="list-style-type: none"> <li>increasing the area of farm sheds,</li> <li>the conversion of redundant farm buildings to dwellings, and</li> <li>the conversion of other town centre uses to residential.</li> </ul> <p>Actions to create wildlife ponds and restore habitats such as peatland which can help reduce flood risk by intercepting and storing flood flows.</p> <p>Changes to PDR could affect the rate of some development types coming forward, which was indicated by research carried out in England. Therefore in the absence of PDR the development types may come forward in fewer areas and at a slower rate, reducing any levels of potential increased risk but also reducing any types of development which reduce flood risk. However the extent to which this effect would apply to the development types within the scope of this study is unknown.</p>
<b>Soil</b>	
<p>Scotland's peat soils cover more than 20% of the country and store around 1600 million tonnes of carbon. However, it is estimated that over 80% of our peatlands are degraded and may become a net source of greenhouse gases, meaning they may eventually emit more CO<sub>2</sub> than they remove.</p> <p>Approximately 625,800ha or 8% of Scotland's land area is land suitable for</p>	<p>In the absence of extending PDR which support peatland restoration, actions may come forward in fewer areas and at a slower rate.</p>

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
arable agriculture (land classification for agriculture (LCA) classes 1-3.1) – which should be preserved.	
<b>Air quality</b>	
There are currently 38 AQMAs declared across 15 local authorities in Scotland. A large proportion of air pollutants in Scotland are attributed to road travel. The total number of vehicle kilometres has increased overall between 2006 and 2014 while at the same time, the total number of journeys made by public transport saw an overall decrease.	Air quality emissions from industry and road transport are likely to continue to increase. Changes in travel habits and choice of transport modes may be restricted where there is a lack of infrastructure coming forward to support these, and changes in PDR relating to these development types, such as active travel and electric vehicle charging infrastructure, could help to support modal shift and associated impacts on air quality.
<b>Landscape and geodiversity</b>	
The character and condition of Scotland’s natural landscape is important in terms of contributing to the economy, providing recreation opportunities, and serving as a habitat for wildlife. The national landscape character assessment grouped landscapes in the country into natural heritage settings, which allows areas with similar characteristics to be identified. Further, special protection has been given to landscapes recognised for their particular value. These include the two National Parks, three Geoparks, 40 NS As and 42 Wild Land Areas. Landscapes are under threat from development, changes in land management practices, and climate change.	Extending PDR, particularly for digital communications infrastructure and agricultural developments, would allow development to progress with reduced consideration for adverse impacts on landscape character and quality. Conversely, extending PDR for peatland restoration may provide increased opportunities for the improvement of landscapes which might otherwise suffer from decline. Without extending PDR, these proposals may come forward in fewer areas and at a slower rate.
<b>Historic environment</b>	
There are areas of historic importance in Scotland that have been identified as being in need of preservation and enhancement. . The historic environment is particularly important in terms of attracting and sustaining tourism. However, it faces numerous pressures from an ever changing surrounding environment  In some areas, the Buildings at Risk	Scottish Government policy provides a range of protection for historic environment assets, and there are a number of other control regimes which operate separately from the planning system. However these resources are under pressure from development. In the absence of extending PDR there is no likely change in potential for adverse impacts occurring in relation to the respective settings of the historic environment.

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<p>Register shows that listed buildings are in danger of falling into disrepair. Further threats may arise from climate change, such as loss of features due to sea level rise and the decay of building materials due to wetter conditions.</p>	
<b>Waste</b>	
<p>Scottish Government has set a target of 70% recycling and composting for all waste by 2025 through the Zero Waste Plan for Scotland. A target of reducing waste going to landfill to 5% has also been set. Landfill currently remains a principal means of disposing of waste. However, in 2016, the household recycling rate for Scotland was 45.2%, representing an increase of 1.0% from the previous year. The total waste generated in Scotland from all sources in 2015 was 11.63 million tonnes, an increase of 13.8% from 2014.</p>	<p>Trends in waste are likely to continue and are more likely to be addressed through the relevant waste plans.</p>
<b>Population</b>	
<p>Scotland's population has seen a growth in recent years. The number of people in the country grew by 4.6% from 2001 to the 2011 census. A further estimated increase of 0.6% from 2015 to mid-2017 was reported.</p> <p>The densely populated areas in the Central Belt have experienced higher levels of growth than areas such as the Highlands and the Western Isles. The cities of Edinburgh and Glasgow have seen the highest yearly levels of population growth at 1.68% and 1.44% up to June 2016, respectively.</p> <p>Conversely, Scotland's Sparsely Populated Areas are experiencing population decline and could lose more</p>	<p>Development of digital communications would improve the conditions for economic growth in Scotland thereby helping to provide new jobs for the growing population in the country. The rate of expansion of digital development may be influenced by the current controls on development, and extending PDR may affect the rate of change.</p> <p>There are concerns that Brexit will lead to rural communities becoming unviable with a resulting depopulation of rural Scotland<sup>25</sup>.</p>

<sup>24</sup> James Hutton Institute (2018) Demographic change in the Sparsely Populated Areas of Scotland (1991 – 2046). Available at: <http://www.hutton.ac.uk/sites/default/files/files/research/srp2016-21/RD3.4.1%20Note%20WP1-3%20web%20-%20published.pdf>

<sup>25</sup> Scottish Rural Action: 21<sup>st</sup> Century Clearances, What does Brexit mean for rural Scotland. <https://www.sra.scot/wp-content/uploads/2019/03/FINAL-21st-Century-Clearances.pdf>

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<p>than a quarter of their population by 2046 if current demographic trends are left unchanged, with adverse implications for the workforce, the economy and the capacity for demographic regeneration in SPAs. SPAs cover almost half (48.7%) of the area of Scotland, but contain only 2.6% of its population<sup>24</sup>.</p> <p>On a national level, net inward migration was recorded at 31,700 in 2015.</p> <p>The population in Scotland has shown a recent growth in line with the overall trend across the UK as a whole. From 1996 to 2016, the age group which experienced the highest percentage of growth was the 75 and over category (31%). Over the same period of time, the number of people in Scotland aged 45 to 64 grew by 26%.</p>	
<b>Housing</b>	
<p>House prices in Scotland have seen a quarterly increase in average price of 4.1% and a yearly increase in average price of 4.5% in the 12 months up to September 2017.</p> <p>The total number of new homes completed for all sectors for the 12 months to end March 2017 was 17,078 which represents a 1% increase from the previous year. However, growth was not experienced by all sectors. The number of new homes completed by the private sector has saw a decrease of 1%, while new homes built within the social housing sector (Housing Association and Local Authority combined) increased by 13% over the same period.</p> <p>The previous extension of PDR in</p>	<p>Rates of new housing development and house prices in Scotland are restrictive to house buyers in some areas.</p> <p>Housing alterations allow people to modify their homes to meet changing needs. The rate of housing alterations may be influenced by the existing requirements for planning permission, however there is a lack of clear evidence to support this<sup>26</sup>.</p> <p>The conversion of agricultural buildings and change of use of town centre development for residential purposes may increase the availability of residential property.</p>

<sup>26</sup>House of Commons Library (2017) Briefing Paper: Permitted Development Rights. Available at: <http://researchbriefings.files.parliament.uk/documents/SN00485/SN00485.pdf>

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<p>February 2012 saw lower volumes of householder applications being submitted in Scotland, allowing a higher proportion of those applications received to be decided upon in less than two months.</p>	
<p><b>Social inclusion and deprivation</b></p>	
<p>There are areas in Scotland in which issues of deep-rooted deprivation have been identified, as evidenced by their consistently ranking among the 5% most deprived data zones in Scotland since the Scottish Index of Multiple Deprivation was introduced in 2004. These areas are Greenock (Inverclyde); Paisley Ferguslie (Renfrewshire); Inverness Merkinch (Highland); Whitfield (Dundee City); Raploch (Stirling); Cragneuk Wishaw (North Lanarkshire); Altonhill (East Ayrshire); and Parkhead West and Barrowfield, Barlanark, Central Easterhouse, Dalmarnock, Govan and Linthouse, Keppochill and Wyndford (all Glasgow City). Many of the most deprived areas display deprivation in terms of both income and health indicators.</p> <p>Addressing fuel poverty is seen by Scottish Government as being crucial to making Scotland fairer. Almost 100,000 fewer households were in fuel poverty in 2015 as compared to the previous year.</p>	<p>Digital connectivity supports access to employment and education, and for economic growth. The most up to date communication infrastructure will be important to future proof the economy. The rate of delivery of digital and electronic communications infrastructure is important in achieving this aim, and current planning controls may impact on the rate of delivery.</p> <p>District heating and supporting infrastructure would help to address issues relating to fuel poverty which contributes to the effects of deprivation in the country, and current planning requirements may restrict the rate of delivery and development of these heating sources.</p> <p>Actions to create allotments and community growing schemes which promote community cohesion may come forward in fewer areas and at a slower rate.</p>
<p><b>Health</b></p>	
<p>Life expectancy has risen in recent years in Scotland while mortality rates have fallen. However, Scotland has a lower life expectancy at birth than the rest of the UK, with males on average living 2.1 years less and females 1.8 years less</p> <p>Scotland faces certain public health issues such as low proportions of adults meeting the required levels of physical activity, rising obesity levels</p>	<p>Improved access to opportunities for physical activity and opportunities for activities which support wider aspects of physical and mental health are supported through a range of policy initiatives. However the rate of change in supporting actions which improve air quality, such as electric vehicle charging or renewable energy, or which support active travel or access to allotments and community gardens may come forward more slowly under the current extent of PDR</p>

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
and air pollution affecting the health of the population.	
<b>Crime</b>	
Scotland's crime rate has decreased markedly in recent years. Property crime was reported as being the most prevalent type of crime (73% of all crime reported) during the reporting period 2014-15.	Extending PDR is not likely to affect levels of crime directly.
<b>Education, skills and training</b>	
<p>The proportion of the Scottish population who achieved qualifications of NVQ Level 4 or higher as of the end of the reporting period from January 2016 to December 2016 was higher than the proportion for the entire UK. In contrast, a higher percentage of people in Scotland have no qualifications than the percentage of people in the whole UK who have no qualifications.</p> <p>The percentage of Scottish graduates who consider themselves to be in a positive destination six months after completing their course grew in 2015 – 2016 after falling year on year up to 2010-11.</p>	Digital and electronic communications are important in contributing to access to education, skills and training, particularly in rural areas of Scotland. The lack of digital connectivity in some areas is currently a barrier to accessing these resources, and the rate of improvements to digital infrastructure is important in securing access to this resource.
<b>Culture, tourism, leisure and recreation</b>	
<p>Tourism is of great importance to the Scottish economy. Figures from 2015 indicate spending by tourists totalled just under 5% of total Scottish GDP that year. Figures indicate tourism-related businesses accounted for 196,000 jobs or approximately 9% Scotland's total employment in 2015.</p> <p>The total number of tourists visiting Scotland in 2016 decreased by 9% as compared to 2005 levels. Over this period, there were increased numbers of visitors from outside of the UK but domestic visits made by residents of the UK fell by 11%.</p> <p>Tourism in Scotland is a sector that</p>	<p>Scotland's landscape is important in terms of the role it plays in attracting tourists to the country. Planning controls in relation to agricultural development, renewable energy and digital communications ensure that potential adverse impacts on the landscape and 'wildness' of Scotland are considered and assessed.</p> <p>There are also areas of degraded landscape, and opportunities for enhancement for example in relation to peatland restoration, and existing planning controls for certain works may mean improvement projects come forward more slowly, which could further support the landscape qualities which make Scotland a destination for tourists.</p>



Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<p>relies on labour from the European Economic Area. Brexit could lead to a labour shortage and a recruitment challenge for the sector.</p>	
<p><b>Economy and employment</b></p>	
<p>While the percentage of unemployed people in Scotland (4.0%) is lower than the figure for the UK as a whole (4.3%), median weekly earnings for residents of Scotland in full time employment are slightly lower than those for the UK. During the 2017 period, the employment rate increased by 0.5% in Scotland and by 0.6% for the entirety of the UK.</p> <p>Scotland's rural areas are more reliant on European Economic Area (EEA) workers than non-rural areas. Many rural businesses may be unviable without EEA workers, in particular those Small and Medium Enterprises (SMEs) operating from within the agricultural, food &amp; drink, hospitality and tourism sectors.<sup>27</sup></p> <p>Brexit is anticipated to impact on food and drink producers as a result of tariffs on exports. With the EU being Scotland's most important market for food and drink exports, the extent of the impacts and tariffs will be dependent on any trade agreements reached.</p> <p>Scottish Government has committed to developing world-class, future proofed infrastructure that will deliver digital connectivity across the whole of Scotland by 2020. Becoming a world leader in digitalisation could contribute £13 billion to the Scottish GDP by 2030.</p>	<p>Digital communications will potentially benefit the economy through facilitating jobs which require access to such infrastructure, and will also help to support 'future-proofed' jobs in digital technologies industries.</p> <p>The agricultural sector needs to be able to respond to the changing economic climate and environmental issues, including modernising farming techniques and novel crops. Current planning controls may mean the rate of change and responsiveness within the agricultural sector is less rapid.</p> <p>Current requirements for planning permission may slow the rate of delivery of improved digital infrastructure, and reduce the flexibility of the farming industry to respond quickly to changing needs.</p> <p>Town centres need to be able to respond to their changing role and local economic conditions. The current framework for planning permission for changes of use in these locations seeks to ensure that town centres retain their vitality and viability, however planning controls could impact on the flexibility of use of town centres to respond quickly to changing economic circumstances.</p>

<sup>27</sup> Scottish Government (2017) Potential Implications for Rural Scotland of the United Kingdom Leaving the European Union. Interim Report by the National Council of Rural Advisors. Available at: <https://www.gov.scot/publications/potential-implications-rural-scotland-uk-leaving-eu/pages/6/>

Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<p>Farming plays an important role in contributing to the national economy with 68,500 people employed by the agricultural industry at the end of 2012. However, average recorded Farm Business Income reached a six-year low in 2015-16.</p> <p>The Town Centre Action Plan was launched by the Scottish Government in November 2013 to improve the successful functioning of town centre locations in Scotland, given their importance to economic and social fabric.</p>	
<b>Transport and accessibility</b>	
<p>In recent years, the number of residents making use of bus services has fallen in Scotland, while those making use of train journeys has grown. Despite this, bus services remain the most widely used method of public transport. While 25.3% of railway track in Scotland is currently electrified, this is a significantly lower proportion than is electrified across Great Britain which has been recorded as 34.0%.</p> <p>In 2015, two thirds of commuters in Scotland said that they travelled to work by car or van. Car registration has also been increasing in recent years. The large urban areas of Scotland experience the highest levels of congestion in the country where 15.2% of journeys are reported to be affected by this issue. The Infrastructure Investment Plan for Scotland identifies that there is currently a backlog of structural maintenance schemes in the country.</p> <p>While only 0.3% of the population owns an electric vehicle, the use of electric charging points for cars has increased rapidly, doubling between 2014 and 2016. The Scottish Government aims to support the</p>	<p>Barriers still exist to the achievement of the levels of active travel and sustainable travel set out in policy in Scotland. This results in congestion and associated air quality and other issues continuing to have prevalence alongside the trends for increasing numbers of vehicles on Scotland's roads. Under the current range of PDR active travel related developments and the provision of electric vehicle charging infrastructure may be brought forward at a slower rate than could be achieved if PDR are extended.</p>



Key sustainability issue	Likely evolution of the issue without the Proposed Work Programme
<p>proportion of trips made by cycle and active transport through the National Transport Strategy and has increased the budget for active travel since 2010 by just over 116%. There have also been recent large scale investments in the National Cycle Network, with the volume of trips made using this route increasing by 13% from 2013 to 2014.</p>	

## 5 Digital communications infrastructure

### 5.1 Characteristics

Digital communications infrastructure can be defined as a set of fixed and mobile communication networks – including the interactions between them – for the purposes of mobile telephony, electronic communications and (wireless) computer networking. The total UK revenue generated by telecoms in 2017 was £35.6bn<sup>28</sup>.

The term digital communications infrastructure is often used interchangeably with the term electronic communications networks. According to the *Communications Act 2003*<sup>29</sup> (Section 32), electronic communications networks are defined as “a transmission system for the conveyance, by the use of electrical, magnetic or electronic-magnetic energy, of signals of any description (..) and in association with it, for the conveyance of the signals –

- apparatus comprised in the system;
- apparatus used for the switching or routing of the signals;
- software and stored data; and
- other resources, including network elements which are not active”.

Digital communications infrastructure networks provide a range of services that underpin Scotland’s digital economy. These are highlighted below.

**Digital terrestrial television (DTTV)** – terrestrial television is a technology for broadcast television. DTTV provides a clearer picture and superior sound quality when compared to analogue TV, all provided with less interference. In 2012, the switchover from analogue TV to DTTV was completed in the UK.

**Analogue and digital radio** – Digital Audio Broadcasting (DAB) is a new form of radio that is replacing analogue radio broadcasting frequencies. There has been significant investment in the deployment of DAB across Scotland and the rest of the UK. It is expected that certain coverage and listening criteria may now be met within the UK, to allow switchover of analogue to DAB broadcasting as part of the UK Government’s Digital Radio Action Plan.

**Smart metering (machine to machine)** – a smart meter is commonly used as a utility meter which collects data on consumer usage of utilities such as electricity or water. As such, smart metering is comprised of a fixed wireless communications network that essentially entails (inter)connected equipment.

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<sup>28</sup> Ofcom, 2018. Communications Market Report. Available at:

[https://www.ofcom.org.uk/data/assets/pdf\\_file/0022/117256/CMR-2018-narrative-report.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0022/117256/CMR-2018-narrative-report.pdf)

<sup>29</sup> Communications Act 2003

**Internet of Things** – the Internet of Things broadly encompasses every physical object connected to the internet. Examples include smartphones and simple sensors. The Internet of Things is essentially a network of (inter)connected devices, things and objects that not only operate within close silos, but also across different networking types. As such, the Internet of Things provides whole host of benefits to a modern Scottish economy, from healthcare to manufacturing.

**Satellite broadcasting** – satellite broadcasting refers to the distribution of multimedia content or broadcast signals over or through a satellite network. A satellite broadcasting network uses fixed wireless and mobile radio communications to support a range of services including television, military and aviation.

**Low latency** – low latency describes a computer network that is optimised to process a very high volume of data messages with minimal delay. In this context, the term ‘latency’ refers to the time interval between the stimulation and response. As such, minimising latency is of particular interest in capital markets, including Scotland’s financial services sector and trading.

The services above use different scales of apparatus, siting requirements and radio technologies. Mobile radio telecommunication systems are a good example of this. Mobile radio telecommunication systems use and re-use the same radio frequencies which are allocated to geographical cell areas. Mobile operators divide the country in thousands of individual cells (assigned to a particular area), each containing a base station. A typical base station comprises antenna systems, a mast or supporting structure, equipment housing and cabinets, underground cables and power supply, fencing, landscaping and access tracks. The area covered by each geographical cell and base station is governed by the anticipated volume of calls, the height of the antenna, the nature of the local terrain, the power output and the radio frequency. The greater the radio frequency, the shorter the distance the signal travels. For instance, low frequency radio waves have a relatively large wavelength, ranging from ten kilometres to one kilometre, making them suitable for long-distance communications. This is why the largest cells (with a low frequency) are usually located in sparsely populated rural areas and the smallest (i.e. with high frequency) in densely populated urban areas. There are three sizes of base station within a typical mobile radio telecommunications system<sup>30</sup>:

- *Macrocell based stations* provide main radio coverage infrastructure for a mobile network.
- *Microcell based stations* are usually deployed to infill the main radio coverage network provided by macrocell base stations. Microcell based stations are used to add radio capacity where the volume of calls is high such as in cities and towns.
- *Picocell base stations* contain even smaller antennas than a microcell based station. Picocell antennas have a range in the order of 200 metres and therefore provide more localised coverage than microcells. This makes them particularly

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<sup>30</sup> Scottish Government, 2001. *Planning Advice Note (PAN) 62: Radio Telecommunications Introduction*. Available at: <http://www.gov.scot/Publications/2001/09/pan62/pan62->

suitable for indoor use, where coverage is often poor and the number of users high. Therefore, picocell antennas are generally sited inside airports, railway stations and shopping centres.

## **5.2 Existing permitted development rights**

Class 67 of the Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (as amended) contains PDR for the installation, alteration or replacement of digital communications infrastructure provided it meets a number of criteria. Class 67 has been substantially amended in recent years, the most recent being the Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017.

Class 67 contains PDR for works carried out by or on behalf of an Electronic Communications Code Operator (ECCO).

Class 67 PDR exclusively apply to developments which are carried out for the purpose of the operator's electronic communications network in, on, over or under land which is controlled by the operator or in accordance with the electronic communications code, and consist of:

- the construction, installation, alteration or replacement of any apparatus or structure;
- use of land in an emergency for a period not exceeding 18 months for purpose of replacing unserviceable apparatus, including the provision of moveable structures on the land for the purposes of that use; or
- the construction, installation, alteration or replacement of structures, equipment or means of access which are ancillary to and reasonably required for the construction, installation, alteration, replacement or use of equipment housing.

A number of general conditions apply to Class 67 PDR with regard to notification arrangements and the appearance of developments. Under the terms of their licences ECCOs are required to give 28 days' notice to the planning authority of the installation of the digital communications infrastructure and emergency developments must be notified as soon as possible. Additionally, under Class 67 PDR, a prior notification/prior approval regime applies to the siting and appearance of new ground based masts which are PD. In case of equipment located on buildings, the development must minimise the effect on the external appearance of the building as far as practicable. This does not apply to the use of land and buildings for moveable structures installed in an emergency.

There are limitations on Class 67 PDR within a Conservation Area, National Scenic Area, National Park, Historic Gardens and Designed Landscapes, Site of Special Scientific Interest (SSSI), Historic Battlefield, European Site or World Heritage Sites within the setting of a category A Listed Building or a Scheduled Monument. However, there are a number of exceptions as development is permitted, for example, if it would be carried out in an emergency or if the development would be the same, or smaller than, the apparatus/structure being altered or replaced.

Additional limitations apply to PDR for specific types of digital communications infrastructure. These are described in subsequent sections.

### 5.3 Rationale for extending permitted development rights

Comments from the VRG highlighted that the use of Class 67 rights remains limited, mainly due to the considerable level of protection of land in Scotland through national and international land designations. In very remote areas, the delivery of digital communications is already very marginal due to the costs of building new sites, there are major topographical and operational challenges and population densities are often so small as to make commercial viability very balanced. Respondents from the telecoms industry indicated that the necessity to acquire planning permission and the costs and timescales of doing so, also hinders the delivery of new digital communications infrastructure within these areas.

This also reflects the finding of research commissioned by the Scottish Government<sup>31</sup>, where industry stakeholders highlighted that PDR even with prior notification/ prior approval, can reduce uncertainty in terms of outcome or the timing of decisions in planning, where an application for planning permission would otherwise be required. This helps promote the rollout of electronic communications infrastructure.

Consistent with this view, Mobile Network Operators (MNOs) have emphasised the need for an extension of PDR s to allow for greater height increases to existing masts and for the construction and installation of new ground based masts, particularly in rural areas with poor coverage. In 2014/2015, an application was submitted for an existing mast of 14.6 metres in height requiring a 5.4 metre extension from O2/Vodafone to provide new 4G services. This type of scenario was commonly used by MNO's as a means to demonstrate that a further few metres of extension of height beyond the then PDR of 5 metres was needed to provide sufficient mobile coverage<sup>32</sup>. Despite extensions to PDR for such smaller masts, a similar argument is made regarding the limits on PDR for extending taller masts (still limited to 5m in some instances). That is, replacing applications for planning permission with PDR, even with prior notification/ prior approval, can improve certainty of outcome or of the timing of decisions, helping promote rollout.

In addition to the points made above, the provision of new digital communications infrastructure within Scotland is a key aspect of the *NPF3*<sup>33</sup>. One of the key Planning Outcomes within NPF3 states that '*planning makes Scotland a connected place* –

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<sup>31</sup> Bidwells LLP and Farrpoint Ltd, 2016. *Research on Permitted Development Rights and Planning Guidance for Electronic Communications Infrastructure* [pdf]. Available at: <https://beta.gov.scot/publications/permitted-development-rights-and-electronic-communications-infrastructure/Permitted%20development%20rights,%20research%20report,%2025%20May%202016.pdf>

<sup>32</sup> Bidwells LLP and Farrpoint Ltd, 2016. *Research on Permitted Development Rights and Planning Guidance for Electronic Communications Infrastructure* [pdf]. Available at: <https://beta.gov.scot/publications/permitted-development-rights-and-electronic-communications-infrastructure/Permitted%20development%20rights,%20research%20report,%2025%20May%202016.pdf>

<sup>33</sup> The Scottish Government, 2014. *Scotland's Third National Planning Framework*. Available at: <http://www.gov.scot/Resource/0045/00453683.pdf>

supporting better transport and digital connectivity'. Furthermore, the *Independent Review of Planning: Empowering Planning to Deliver Great Places*<sup>34</sup> states that there is significant scope to introduce PDR for uncontroversial minor developments which support policy aspirations such as digital communications infrastructure.

In August 2016, a *Consultation on the Relaxation of Planning Controls for Digital Communications Infrastructure*<sup>35</sup> was undertaken involving respondents from industry, planning authorities, government agencies, heritage bodies, individuals and other organisations. One of the key topic areas of the consultation concerned reducing the list of designated areas in which additional restrictions on PDR apply. Most comments were critical of the relaxation of planning controls in designated areas based on the grounds that regimes might not have the ability to adequately protect sensitive areas from development, considering the fact that even minor developments could potentially have adverse impacts if located in the wrong place. Additionally, there were concerns that an absence of planning control in designated areas could be misinterpreted as meaning there would be no control on development.

Another key concern related to the removal of Category A Listed Buildings and Scheduled Monuments from the list of designated areas and that changes would not apply to the settings of such buildings and monuments, which could also be sensitive to development. HES commented that they were content for the removal of Category A Listed Buildings and Scheduled Monuments from the list of designated areas provided that the settings of such buildings and monuments remained on it.

Additional consultation questions were posed in relation to:

- the extension of current PDR (emergency works, small antennas on buildings and the alteration and replacement of existing ground based masts); and
- new PDR for new ground based masts, ground based equipment housing in designated areas and apparatus on buildings in designated areas.

The analysis of the consultation responses published in May 2017 directly informed the *Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017*<sup>36</sup>. However, it needs to be noted that the actual changes were limited to those not requiring SEA.

Taking the information above into account, the types of digital communications infrastructure considered by this SA are as follows:

- New ground based masts.
- Changes to existing ground based masts.

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<sup>34</sup> The Scottish Government, 2016. *Empowering Planning to Deliver Great Places – An independent review of the Scottish Planning System*. Available at: <http://www.gov.scot/Resource/0050/00500946.pdf>

<sup>35</sup> Scottish Government, 2016. *Consultation on the Relaxation of Planning Controls for Digital Communications Infrastructure*. Available at: <http://www.gov.scot/Publications/2016/08/5901>

<sup>36</sup> The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017 (Scottish Statutory Instrument 2017/189)

- Antenna systems and dish antenna.
- Small cell systems on buildings.
- Equipment housing cabinets (ground based).
- Equipment housing on buildings.
- Other apparatus on buildings.
- Underground development.
- Access tracks for new ground based masts.

Subsequent sections of the report describe:

- Characteristics of each development type.
- Existing PDR
- Potential changes to PDR.
- The findings of the SA of these potential changes.
- Ways in which potential negative sustainability effects could be addressed through mitigation.

## 5.4 New ground based masts

### Characteristics

Ground based masts are used to provide mobile coverage for mobile radio telecommunication systems. Such masts support antennas at a height where they can satisfactorily send and receive radio waves – meaning that they provide a clear view over the surrounding buildings and terrain. They typically comprise a steel lattice or tubular steel monopole, though sometimes use disguised structures. Therefore, a ground based mast is often defined as a mast constructed or installed on the ground directly or on a plinth or other structure for the purpose of supporting the mast<sup>37</sup>. A ground based mast is typically 15 metres high, although this could vary depending on the type of digital mobile technology used<sup>3839</sup>:

- *Second Generation (2G)* – ground based masts are generally between 12.5m and 22.5m in height.

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<sup>37</sup> Ofcom, 2017. *Mobile phones – Jargon Explained*. Available at:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0016/51622/jargon.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0016/51622/jargon.pdf)

<sup>38</sup> Scottish Government, 2001. *Planning Advice Note (PAN) 62: Radio Telecommunications Introduction*.

Available at: <http://www.gov.scot/Publications/2001/09/pan62/pan62->

<sup>39</sup> Bidwells LLP and Farrpoint Ltd, 2016. *Research on Permitted Development Rights and Planning Guidance for Electronic Communications Infrastructure* [pdf]. Available at:

<https://beta.gov.scot/publications/permitted-development-rights-and-electronic-communications-infrastructure/Permitted%20development%20rights,%20research%20report,%2025%20May%202016.pdf>



- *Third Generation (3G)* – can generally be sited lower than a 2G. In some instances where 3G antennas are sharing 2G sites and structures, a 2G antenna can be replaced with a ‘dual band’ or ‘tri band’ so that the antenna can provide both 2G and 3G functionality.
- *Fourth Generation (4G)* – generally needs to be sited higher than 2G and 3G antennas in order to elevate the 4G antennas above obstacles such as trees, buildings or valley sides that could block signals.

### **Existing permitted development rights**

Class 67(3) contains PDR that apply to the installation of new ground based masts outside designated areas.

New ground based masts require an application for planning permission if they would exceed 25 metres in height<sup>40</sup> or are in designated areas.

### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No change in PDR
- Introduce new lower height restriction in designated areas
- Introduce existing PDR in designated areas
- Extend permitted height outside designated areas

### **Sustainability appraisal findings**

#### **Key issues**

Potential significant long term economic benefits associated with increased rate of improvements in digital connectivity;

Potential significant but reversible cultural heritage and landscape impacts associated with permitting new masts in designated areas;

Minor long term social benefits in terms of the effects of connectivity on quality of life;

Minor long term benefits in terms of carbon reduction and improved air quality;

Potential for minor impacts in terms of the safe operation of aerodrome or technical sites;

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<sup>40</sup> According to the *Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017*<sup>40</sup>, the height of the mast is “calculated by adding together the height of the mast, any apparatus attached to the mast and any plinth or other structure required for the purpose of supporting the mast minus the height of any antenna attached to the mast to the extent that it protrudes above the highest part of the mast”.



Minor local impacts, both temporary and long term in terms of biodiversity, water and soils from construction and development.

Options to extend existing PDR to designated areas and the alternative of extending PDR but with a new, lower height restriction in designated areas could result in potential **significant adverse** effects on **cultural heritage** as a result of impacts on Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Sites and the setting of Scheduled Monuments. On the other hand, if the maximum permitted height of masts outside designated areas was increased, this could reduce the need for masts within such areas, helping to avoid or reduce potential adverse effects on designated areas (a **minor positive** effect). Impacts on cultural heritage of undesignated areas could increase however (a **minor negative** effect). The scale and significance of these effects will reflect the location of the mast in question and sensitivity of surrounding cultural heritage assets.

Similar effects are likely in terms of the **landscape**. Options to extend existing PDR to designated areas and the alternative of extending PDR with a new, lower height restriction in designated areas could result in potential **significant adverse** effects on the landscape as a result of impacts on National Scenic Areas and National Parks, because of potential direct impacts on the landscape qualities of these areas and their national significance. On the other hand, if the maximum permitted height of masts outside designated areas was increased, this could reduce the need for masts within such areas, helping to avoid or reduce potential adverse effects on designated areas (a **minor positive** effect). Impacts on undesignated landscapes could increase however (a **minor negative** effect). The scale and significance of these effects will reflect the location of the mast in question and sensitivity of the surrounding landscape.

Extending existing PDR to designated areas and increasing the maximum permitted mast height in other areas could have a potential **significant positive** effect on the objective of supporting **sustainable economic growth**. Such changes could support development of Scotland's digital economy through the rollout of 5G networks and other network improvements. This could improve efficiency, attracting inward investment and supporting business, shopping, entertainment and related services. The option of introducing PDR for lower masts within designated areas is unlikely to deliver significant benefit in terms of plugging strategic gaps in coverage since the terrain of most designated areas means taller masts are likely to be required. As a result, negligible effects have been identified in relation to this alternative.

It is likely that each of the options for extending PDR for ground based masts would help reduce the need to travel and the use of paper-based communication. This would contribute to efforts to **reduce carbon emissions** and **improve air quality**. The extent to which these positive effects would be realised is not yet clear so **uncertain minor positive** effects have recorded.

It is likely that extending PDR to designated areas and increasing permitted mast height in other areas would have mixed effects on population and human health. Negative effects can result from the effects of an increase in visual clutter on local amenity and the risk that masts could affect protected obstacle limitation surfaces, interfere with communications, navigation and surveillance equipment or instrument flight procedures at aerodrome or technical sites. Positive effects will flow from improvements in digital

connectivity which plays an increasingly important role in people's lives. The significance of these effects described above is uncertain so mixed **minor negative** and **minor positive** effects have been recorded.

As noted above, the option of extending PDR for lower masts in designated areas is unlikely to meet the needs of telecoms operators. It is therefore unlikely to deliver significant **economic benefits**, whilst continuing to pose potential impacts on the safe operation of aerodrome or technical sites (depending on location), resulting in **minor negative** effects.

A range of **minor negative** environmental impacts are likely to result from the construction of new ground based masts. These reflect possible effects on biodiversity, soils and increases in surface water runoff associated with slight increases in permeable surfaces. It is possible that restrictions within designated areas but allowing larger masts in undesignated areas will help ensure that more sensitive environmental resources are protected. It could increase impacts on undesignated resources, however.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Mitigating potential impacts on the safe and efficient operation of aerodrome or technical sites could be achieved by imposing exclusion zones, size restrictions or consultation arrangements around aerodrome or technical sites. Alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed.

Some impacts on landscape and cultural heritage assets could be reduced by extending PDR for smaller ground based masts in designated areas, reducing the need for larger masts. However, as noted previously, the benefits are likely to be limited since the terrain of most designated areas means taller masts, or a larger number of smaller masts are likely to be required.

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

Consider restricting PDR in sensitive areas (cultural heritage and landscape), or requiring prior notification/prior approval subject to the condition that before beginning development an assessment of visual impacts is undertaken. This process would however, limit or reduce the economic benefits of the change to PDR.

## **5.5 Changes to existing ground based masts**

### **Characteristics**

An operator may want to improve mobile coverage or carry out maintenance requiring alterations to or replacement of the original mast. According to the *Town and Country*

*Planning (General Permitted Development) (Scotland) Order 1992<sup>41</sup> (as amended), an 'original mast' is defined as "the mast as it is first constructed or installed and includes any apparatus attached to the mast at that time (other than an antenna) and any plinth or other structure to which it was attached at that time".*

### **Existing permitted development rights**

PDR applying to changes to ground based masts are included in Class 67(4). The alteration or replacement of ground based masts is classified as a permitted development provided it meets the following criteria:

- If the ground based mast being altered is up to 20 metres in height, then the altered or replacement mast must not exceed the height of the original mast by 7 metres to a maximum of 25 metres.
- For existing ground based masts above 20 metres, up to 50 metres in height, then the altered or replacement mast can only be up to 5 metres greater in height than the original mast.
- In case the height of the mast is greater than 50 metres, the replacement or alteration of the mast must not add more than 15% to the height of the original mast.
- The increase in width of the mast must not exceed one metre or, if greater, one third of the width of the original mast.
- According to the *Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017*, these height and width measurements include apparatus on the masts except antennas.
- In case of replacement, the mast must not be situated more than 6 metres from the location of the original mast.

### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No change in PDR
- Increase permitted height in designated and non-designated areas
- Increase permitted width in designated and non-designated areas
- Allow further distances for replacement masts in designated and non-designated areas

### **Sustainability appraisal findings**

<b>Key issues</b>
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<sup>41</sup> The Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (Scottish Statutory Instrument 1992/223)

Potential significant long term economic benefits associated with improvements in digital connectivity;

Mixed effects on population and human health;

Minor long term benefits in terms of carbon reduction and improved air quality;

Potential for minor impacts in terms of the safe operation of aerodrome or technical sites;

Minor but reversible impacts in terms of cultural heritage and landscape;

Increasing the maximum permitted mast height in designated and undesignated areas could help support delivery of the next generation of digital communication services, and could therefore have a potential **significant positive** effect on the objective of supporting **sustainable economic growth**. Other changes, including permitting wider masts and increasing the distance between existing and replacement masts will also support this objective, but benefits are likely to be more **minor** in nature.

There could be mixed effects on population and human health. **Increasing the permitted height in designated areas and non-designated areas** could result in negative effects on local amenity. Taller masts could also infringe protected obstacle limitation surfaces, interfere with communications, navigation and surveillance equipment or instrument flight procedures at aerodrome or technical sites, representing a potential risk to human health and safety. Positive effects associated with these alternatives include the delivery of next generation of digital communication services that underpin crucial public services and health services, particularly to more remote and peripheral locations. **Mixed minor negative and potential significant positive** effects have been therefore been recorded. Other changes, including permitting wider masts and increasing the distance between existing and replacement masts are also likely to result in **mixed minor negative** and **positive** effects.

There are also likely to be **minor negative** effects on **cultural heritage** as a consequence of increased visual impacts on the setting of cultural heritage resources and possible impacts on buried archaeology. The effect relates particularly to the option of extending PDR to Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site and the setting of Scheduled Monuments. Allowing replacement masts to be at greater distance from the original structure could have **adverse** effects on designated **cultural heritage** assets but the significance of these effects is judged to be **minor** assuming the mast footprint is similar to that of the original.

Similar effects are likely in terms of the **landscape**. Taller and wider masts are likely to increase slightly the extent and severity of landscape and visual impacts, particularly for National Scenic Areas and National Parks, but also within the wider landscape. This is considered to be a **minor negative** impact. It is also possible that minor negative impacts on water and soils will result from any increases in the extent of permeable surfaces.

Each of the proposed changes to PDR could help to reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** effects have therefore been identified in relation to **air, climate** and **material assets**.

**Neutral** effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing listed building consent regime.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Mitigating potential impacts on the safe and efficient operation of aerodrome or technical sites could be achieved by imposing exclusion zones, size restrictions or consultation arrangements around aerodrome or technical sites. Alternatively further dialogue with airport operators will be required as detailed legislative proposals are developed.

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

Consider restricting PDR in sensitive areas (cultural heritage and landscape), or requiring prior notification/prior approval subject to the condition that before beginning development an assessment of visual impacts is undertaken.

## **5.6 Antenna systems and dish antenna**

### **Characteristics**

This type of development comprises the basic antennas that provide wireless, mobile coverage. This category includes two types of antenna:

- An *antenna system* which is composed of the array of antennas which make up a macrocell base station on a building.
- *Dish antennas* which transmit and receive highly focussed radio waves in one direction and are used for point to point communication links. Dish antennas and aerial antennas are most commonly used to receive television broadcasting signals.

### **Existing permitted development rights**

Antenna systems and dish antennas are classified as a permitted development provided that they meet a number of criteria. Different restrictions apply to antenna systems and dish antennas depending on their relative location on the building on which they are installed (below or above a height of 15 metres above ground level). These limitations do not apply to small antennas and small cell systems. The table below summarises the conditions and restrictions in relation to the installation, replacement and alteration of dish antennas.

**Table 5.1 Antenna systems and dish antennas on buildings**

Location of dish antenna on building	Existing permitted development rights
<b>Below</b> a height of 15 metres above ground level	Class 67 PDR do <b>not</b> apply if: <ul style="list-style-type: none"> <li>• it would exceed 0.9 metres ;</li> <li>• the aggregate size of all dishes would exceed 4.5 metres; and</li> <li>• for alteration or replacement the size of the dish and/or the aggregate size of all dishes, if greater than the above limits, would be larger than the dish and/or the aggregate size of all dishes present before the change was made.</li> </ul>
<b>Above</b> a height of 15 metres above ground level	Class 67 rights do <b>not</b> apply if: <ul style="list-style-type: none"> <li>• it would exceed 1.3 metres;</li> <li>• the aggregate size of all dishes would exceed 10 metres; and</li> <li>• for alteration or replacement the size of the dish and/or the aggregate size of all dishes, if greater than the above limits, would be larger than the dish and/or the aggregate size of all dishes present before the change was made.</li> </ul>

The table below summarises the conditions and restrictions in relation to the other antenna systems.

**Table 5.2 Other antennas on buildings**

Location of other antenna on building	Existing permitted development rights
<b>Below</b> a height of 15 metres above ground level	Class 67 PDR do <b>not</b> apply if: <ul style="list-style-type: none"> <li>• the number of antenna systems would exceed four; and</li> <li>• with alteration or replacement, the number of antenna systems, if greater than four, would be greater than the number of existing antenna systems on the building.</li> </ul>
<b>Above</b> a height of 15 metres above ground level	Class 67 PDR do <b>not</b> apply if: <ul style="list-style-type: none"> <li>• the number of antenna systems would exceed five; and</li> <li>• with alteration or replacement, the number of antenna systems, if greater than five, would be greater than the number of antenna systems on the building before the change was made.</li> </ul>

Additionally, dish antennas and antenna systems are not permitted in designated areas unless it is the alteration or replacement of the existing dish antennas and antenna systems and the resulting apparatus would be no larger, the number of items no greater and the location substantially the same as what was there already.

### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- No change in PDR
- Extend existing PDR in designated areas
- Increase in number of antennas in designated and non-designated areas
- Increase the size of antennas in designated and non-designated areas

### Sustainability appraisal findings – dish antenna

#### Key issues

Potential significant long term economic benefits associated with improvements in digital connectivity;

Potential significant benefits associated with supporting a more efficient planning system;

Potential significant long term social benefits in terms of the effects of connectivity on quality of life;

Minor long term benefits in terms of carbon reduction and improved air quality;

Potential significant negative but reversible impacts in terms of cultural heritage;

Minor negative but reversible impacts in terms of landscape.

Changes in PDR that support the deployment of dish antenna systems are likely to have potential **significant positive** effects on the objective of promoting **sustainable economic growth** by enhancing digital connectivity in urban areas and supporting the rollout of 5G networks. While the impacts of individual antenna installations are likely to be limited, they will make an important contribution to wider communications infrastructure.

Extending PDR to designated areas – particularly Conservation Areas – is likely to reduce the number of telecommunications related planning applications, potentially reducing the burden on the **planning system**. A significant number of installations are likely to be in city, town and village centres, many of which are designated as Conservation Areas and where planning applications are currently required. This is also judged to be a potential **significant positive** effect.

Potential **significant positive** effects have also been identified in relation to **population and human health**. This is because antenna systems could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local

communities. Telecommunication services play an increasingly important role in people's lives as essential household utilities, facilitating business and underpinning public services. Again, many of the benefits would be focused in city, town and village centres where the demand for digital connectivity is greatest.

However, extending PDR for dish antenna to designated areas could have potential **significant adverse** effects on **cultural heritage** as a consequence of visual clutter, the impact on historic assets' setting and physical damage associated with equipment mounting. These adverse effects could affect Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site, and the setting of Scheduled Monuments. The setting of A listed buildings is protected through listed building consent. It is also likely that proposed changes could affect undesignated historic buildings and their settings. This effect is considered to be **minor negative**.

Extending PDR for dish antenna could also result in minor negative effects on **Landscape** particularly in relation to potential effects on National Parks and National Scenic Areas, because of potential direct impacts on the landscape qualities of these areas and their national importance. **Negligible** effects have been identified in relation to undesignated areas given the small scale of dish antenna and these areas' lower landscape sensitivity.

Each of the proposed changes to PDR could help to reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** effects have therefore been identified in relation to **air, climate** and **material assets**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Sustainability appraisal findings – other antenna systems**

#### **Key issues**

Potential significant long term economic benefits associated with improvements in digital connectivity;

Potential significant benefits associated with supporting a more efficient planning system;

Potential significant long term social benefits in terms of the effects of connectivity on quality of life;

Minor long term benefits in terms of carbon reduction and improved air quality;

Potential significant but reversible negative effects in terms of cultural heritage;

Minor and small scale but reversible negative impacts in terms of landscape.

Changes in PDR that support the deployment of antenna systems are likely to have potential **significant positive** effects on the objective of promoting **sustainable economic growth** by enhancing digital connectivity in urban areas and supporting the rollout of 5G networks. While the impacts of individual antenna installations are likely to be limited, they will make an important contribution to wider communications infrastructure.



Extending PDR to designated areas – particularly Conservation Areas – is likely to reduce the number of telecommunications related planning applications, potentially reducing the burden on the **planning system**. A significant number of installations are likely to be in city, town and village centres, many of which are designated as Conservation Areas and where planning applications are currently required. This is also judged to be a potential **significant positive** effect.

The deployment of antenna systems is expected to have significant effects on enhancing digital connectivity in urban areas and supporting the rollout of 5G networks, with associated economic effects. Although the scale of individual antenna systems is limited, they could have considerable economic benefits due to the opportunities they provide for expanding digital coverage. For example, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre. In relation to resourcing in the planning system it is expected that the proposed changes would help to reduce the overall number of applications which are required to be dealt with considering the high number of development proposals which come forward for antenna systems in Scotland. This is because large parts of city, town and village centres – where demand is high – are likely to be designated as Conservation Areas. Therefore, extending PDR is judged to have potential **significant positive** effects in relation to **Economy**.

Potential **significant positive** effects have also been identified in relation to **population and human health**. This is because antenna systems could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities. Telecommunication services play an increasingly important role in people's lives as essential household utilities, facilitating business and underpinning public services. Again, many of the benefits would be focused in city, town and village centres where the demand for digital connectivity is greatest.

However, extending PDR for other antenna systems to designated areas could have potential **significant adverse** effects on **cultural heritage** as a consequence of visual clutter, the impact on historic assets' setting and physical damage associated with equipment mounting. These adverse effects could affect Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site, and the setting of Scheduled Monuments. The setting of A listed buildings is protected through listed building consent. It is also likely that proposed changes could affect undesignated historic buildings and their settings. This effect is considered to be **minor negative**.

Extending PDR for other antenna systems could also result in minor negative effects on **Landscape** particularly in relation potential effects on National Parks and National Scenic Areas, because of potential direct impacts on the landscape qualities of these areas and their national importance. **Negligible** effects have been identified in relation to undesignated areas given the small scale of other antenna systems and these areas lower landscape sensitivity.

Each of the proposed changes to PDR is likely to help to reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** effects have therefore been identified in relation to **air, climate** and **material assets**.

Other sustainability impacts are considered to be negligible or unlikely.

## Mitigation of negative effects

- Consider restrictions on potential changes to PDR in Conservation Areas.
- Introduce the requirement for prior notification/prior approval within Conservation Areas where PDR are introduced so that of visual impacts. Prior notification/prior approval may, however, require detailed assessment, providing little benefits in terms of relaxing restrictions compared to the existing PDR regime.
- Focus on utilising existing sites to limit visual intrusion of apparatus.
- Limiting visual intrusion of apparatus through guidance and best practice on the design and location of small cell systems to minimise visual effects.

### 5.7 Small cell systems on buildings

#### Characteristics

Small cell systems are generally deployed to add local capacity to the main radio coverage infrastructure<sup>42</sup>. The PDR define a small cell system on a building as consisting of a small antenna and any apparatus which is ancillary to that antenna which is typically for use in connection with a telephone system operating on a point to fixed multi point basis which does not exceed, in two-dimensional measurement, a surface area of 5,000 square centimetres and a volume area of 50,000 cubic centimetres<sup>43</sup>. There are several types of small cell systems, including the following<sup>44</sup>:

- *Microcell antennas* – are traditionally deployed to infill the main radio coverage provided by macrocells. Microcell antennas add capacity in areas where the volume of calls is high. Microcell antennas are small boxes that are typically mounted at the street level typically on the external walls of existing structures, lamp-posts and other street furniture. Despite their small size, microcell antennas provide coverage over relatively large distances (between 300m and 2 kilometres) dependent upon frequency capacity and obstacles in the wider landscape.
- *Metrocell antennas* – are medium range outdoor cellular antennas with a range between 150m - 300m. As such, metrocell antennas are usually deployed to add capacity to a network in high-demand areas or provide coverage in localised not-spot areas.
- *Picocell antennas* – have a range in the order of 200 metres and therefore provide more localised coverage than microcells. This makes them particularly

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<sup>42</sup> Ofcom, 2017. *Mobile phones – Jargon Explained*. Available at:

[https://www.ofcom.org.uk/data/assets/pdf\\_file/0016/51622/jargon.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0016/51622/jargon.pdf)

<sup>43</sup> The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017 (Scottish Statutory Instrument 2017 /189)

<sup>44</sup> Ofcom, 2014. *Study on the future UK spectrum demand for terrestrial mobile broadband applications by Realwireless* [pdf]. Available at:

[https://www.ofcom.org.uk/data/assets/pdf\\_file/0016/51235/rw\\_report.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0016/51235/rw_report.pdf)

suitable for indoor use, where coverage is often poor and the number of users high. Therefore, picocell antennas are generally sited inside airports, railway stations and shopping centres.

- *Femtocell antennas* – are small cellular networks. Femtocell antennas have a range in the order of 10 metres, making them more suitable for use in a home or a small business.

**Existing permitted development rights**

The permitted number, sizing, scaling and siting of small antennas and small cell systems on buildings are defined in Class 67(2)(b) and (11). However, different conditions and restrictions apply depending on the type of building on which the antennas are installed. PDR currently only apply to small antennas (not small cell systems) on a dwellinghouse. These are classed as a permitted development if the number of small antennas installed does not exceed four and if the antennas do not exceed the height of the roof. There are no restrictions on the number of small antennas or small cell systems permitted on buildings other than a dwelling. Additional restrictions apply to the installation, alteration or replacement of small cell systems in Conservation Areas. Again, a distinction is made between small antennas installed on dwellinghouses and buildings other than dwellinghouses. These are included in the table below.

**Table 5.3 Small cell systems on buildings**

Type of building	Existing permitted development rights
Dwellinghouse (in a Conservation Area)	<ul style="list-style-type: none"> <li>• There would be more than 2 small antennas on the dwellinghouse and its curtilage. The replacement or alteration of small antennas is allowed provided that the number of small antennas does not exceed the number of existing small antennas.</li> <li>• The small antenna must not be installed on a part of the dwellinghouse or its curtilage which fronts a road.</li> <li>• The highest part of the antenna must not be higher than the highest part of the roof.</li> </ul>
Building (in a Conservation Area) other than a dwellinghouse	<ul style="list-style-type: none"> <li>• The maximum number of antennas permitted is two.</li> <li>• The replacement or alteration of small cell systems is allowed provided that the number of small antennas does not exceed the number of existing antennas.</li> </ul>

**Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No change in PDR;
- Extending existing PDR to Conservation Areas for dwellinghouses;
- Extending existing PDR to Conservation Areas for buildings (other than dwellinghouses) in Conservation Areas.

## Sustainability appraisal findings – small cell systems on dwellinghouses

### Key issues

Minor long term economic benefits associated with improvements in digital connectivity;

Minor long term benefits associated with supporting a more efficient planning system;

Minor long term social benefits in terms of the effects of connectivity on quality of life;

Minor negative but reversible impacts in terms of cultural heritage.

Most small cell systems are likely to be deployed in areas of high demand, such as town and city centres where there is a need to increase the capacity of existing communications equipment. Most installations are therefore likely to be on commercial rather than residential buildings. It is anticipated that deployment on dwellings will therefore be relatively infrequent.

Changes in PDR that support the deployment of small cell systems are likely to have **minor positive** effects on the objective of promoting **sustainable economic growth** by helping to enhance digital connectivity in urban areas and supporting the rollout of 5G networks. While the impacts of individual antenna installations are likely to be limited, they will make a contribution to wider communications infrastructure.

Extending PDR to Conservation Areas – is likely to reduce the number of telecommunications related planning applications, potentially reducing the burden on the **planning system**. A significant number of installations are likely to be in city, town and village centres, many of which are designated as Conservation Areas and where planning applications are currently required. This is also judged to be a **minor positive** effect of potential changes.

The deployment of small cell systems is expected to have significant effects on enhancing digital connectivity in urban areas and supporting the rollout of 5G networks, with associated economic effects. Although the scale of individual antenna systems is limited, they could have considerable economic benefits due to the opportunities they provide for expanding digital coverage. Extending PDR is judged to have **minor positive** effects in relation to **economy**.

**Minor positive** effects have also been identified in relation to **population and human health**. This is because small cell systems could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities.

Telecommunication services play an increasingly important role in people's lives as essential household utilities, facilitating business and underpinning public services. Again, many of the benefits would be focused in city, town and village centres where the demand for digital connectivity is greatest.

It is possible that the extension of PDR for small cell systems to Conservation Areas could result in an increase in visual and townscape effects of small cell systems and the potential for physical damage to historic buildings and structures. Taking account of the likely low deployment on residential property, this is considered to be a **minor negative** effect on **cultural heritage**.

Other sustainability impacts are considered to be negligible or unlikely.

## Sustainability appraisal findings – small cell systems on buildings (other than dwellinghouses) in conservation areas

### Key issues

Potential significant negative but reversible, impacts in terms of cultural heritage

Potential significant long term positive economic benefits associated with improvements in digital connectivity

Potential significant long term benefits associated with supporting a more efficient planning system

Minor long term social benefits in terms of the effects of connectivity on quality of life

It is possible that the extension of PDR for small cell systems to buildings other than dwellinghouses in Conservation Areas could result in an increase in visual and townscape effects of small cell systems and the potential for physical damage to historic buildings and structures. Taking account of the potentially high demand for this equipment in town and city centre Conservation Areas, potential **significant negative** potential effects on **cultural heritage** have been identified, although these effects are reversible.

The deployment of small cell systems is expected to have significant effects on enhancing digital connectivity in urban areas and supporting the rollout of 5G networks, with associated economic effects over the longer term. Although the scale of individual antenna systems is limited, they could have considerable economic benefits due to the opportunities they provide for expanding digital coverage. Extending PDR is judged to have potential **significant positive** effects in relation to **economy**.

Extending PDR to Conservation Areas is likely to reduce the number of telecommunications related planning applications, potentially reducing the burden on the **planning system**. A significant number of installations are likely to be in city, town and village centres, many of which are designated as Conservation Areas and where planning applications are currently required. This is also judged to be a potential **significant positive** effect.

**Minor positive** effects have also been identified in relation to **population and human health**. This is because small cell systems could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities over the long term. Telecommunication services play an increasingly important role in people's lives as essential household utilities, facilitating business and underpinning public services. Again, many of the benefits would be focused in city, town and village centres where the demand for digital connectivity is greatest.

Other sustainability impacts are considered to be negligible or unlikely.

### Mitigation of negative effects

- Consider restricting PDR in Conservation Areas.
- Introduce the requirement for prior notification/prior approval within Conservation Areas so that an assessment of visual impacts is undertaken. Prior

notification/prior approval would, however, require detailed assessment, providing more limited benefits in terms of relaxing restrictions compared to the existing PDR regime. It would also reduce the benefits for a more efficient planning system.

- Focus on utilising existing sites to limit visual intrusion of apparatus
- Limiting visual intrusion of apparatus through guidance and best practice on the design and location of small cell systems to minimise visual effects.

## **5.8 Equipment housing cabinets (ground based)**

### **Characteristics**

Equipment housing cabinets accommodate electronic equipment associated with antenna systems. Housing cabinets help to prevent electrical shock and protect the contents from the varying weather conditions and wider environmental impacts. Equipment housing is typically connected to the antennas through feeder cables. The size of equipment housing for a macrocell station can vary considerably, ranging in size from a small cabinet to a purpose built hut for several operators. Equipment housing can be located within a building, on the ground or on a rooftop<sup>45</sup>.

### **Existing permitted development rights**

PDR that apply to the installation or alteration/replacement ground based equipment housing cabinets are included in Class 67(5) and (6), respectively. The installation, alteration or replacement of equipment housing cabinets (ground based) requires planning permission if:

- it would be more than 3 metres in height; or
- it would be more than 90 cubic metres in volume; or
- alteration or replacement; it would exceed the height of the height and/or volume of the equipment housing before alteration or replacement.

PDR are restricted in designated areas, and are considered to constitute permitted development only:

- (i) if it is ancillary development to changes to ground based masts, telegraph poles or overhead lines under PDR;
- (ii) other than i) where the alteration or replacement of ground-based equipment housing is permitted in designated areas if the equipment housing would not be larger than what exists, is in substantially the same location and does not increase the number of items of apparatus.

### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

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<sup>45</sup> Department of the Environment (Northern Ireland), 2008. *Development Control Advice Note (DCAN) 14 – Siting and Design of Radio Telecommunication Equipment, Equipment Housing* [pdf]. Available at: [https://www.planningni.gov.uk/index/news/news\\_policy/dcan14-4.pdf](https://www.planningni.gov.uk/index/news/news_policy/dcan14-4.pdf)

- Extend existing PDR to designated areas (for ground based equipment housing which is not ancillary to existing ground based masts, telegraph poles and overhead lines).
- Allow greater size/volume in designated and non-designated areas.

## Sustainability appraisal findings

### Key issues

Potential significant but reversible negative impacts in terms of cultural heritage;

Potential significant but reversible negative impacts in terms of designated landscapes;

Potential significant impacts in terms of biodiversity;

Potential significant long term economic benefits associated with improvements in digital connectivity;

Minor long term social benefits in terms of the effects of connectivity on quality of life;

Minor long term benefits in terms of carbon reduction and improved air quality.

Extending PDR for ground based equipment housing cabinets could result in potential **significant negative** effects on **cultural heritage** assets and their setting as a result of visual, townscape and possible physical impacts. These effects have been identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site and the setting of Scheduled Monuments due to the archaeological and historic importance of these areas. These effects are however reversible, should the equipment be removed or replaced in the future. It is also likely that extending PDR would result in **minor negative** impacts on undesignated historic buildings and their settings, with increased potential for schemes that prominently impact on townscapes.

There could also be localised landscape impacts, which could be a particular concern in areas designated for their scenic value. There is the potential for **significant negative** effects, reflecting the considerable size of equipment housing in relation to sensitive areas, although these effects are again reversible should the equipment be removed or replaced in the future.

Changes in PDR that support the deployment of equipment housing cabinets are likely to have potential **significant positive** effects over the long term on the objective of promoting **sustainable economic growth** by helping to enhance digital connectivity in urban areas and supporting the rollout of 5G networks. While the impacts of individual housing cabinet installations are likely to be limited, they will make an important contribution to wider communications infrastructure.

Potential **minor positive** long term effects have also been identified in relation to **population and human health**. This is because communications equipment, including housing cabinets, could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities. Telecommunication services play an increasingly important role in people's lives as essential household utilities, facilitating business and underpinning public services. Again, many of the benefits would be

focused in city, town and village centres where the demand for digital connectivity is greatest.

Each of the proposed changes to PDR is likely to help reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** long term effects have therefore been identified in relation to **air, climate** and **material assets**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Limit the size / volume for permitted housing cabinet within designated areas. The consultation comments suggested that a 1.5-2.5 cubic metres volume limit to PDR would properly balance the environmental sensitivities within designated areas, but at the same time would significantly support small cell system deployment within designated areas.
- Focus on utilising existing sites to limit visual intrusion of apparatus.
- Promote guidance and best practice on the design and location of equipment housing to minimise visual, townscape and cultural heritage effects.

## **5.9 Equipment housing on buildings**

### **Characteristics**

Equipment cabinets for macrocell / microcell stations are sometimes situated on or within buildings or incorporated into existing structures such as lampposts. There may also be structures or equipment or means of access associated with equipment housing (ground based or on buildings)

### **Existing permitted development rights**

Class 67(8) sets out the PDR for the construction, installation, replacement or alteration of equipment housing on a building. Equipment housing on buildings is classified as a permitted development provided it meets the following criteria:

- the equipment housing must not exceed 3 metres in height or 30 cubic metres in volume; and
- the equipment housing must not exceed the height and/or the volume of the original equipment housing.

The alteration or replacement of equipment housing (on buildings or ground based) is permitted in designated areas provided the equipment housing would not be larger than existing, is in substantially the same location and does not increase the number of items of apparatus.

### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No change in PDR.



- Extend existing PDR to designated areas.
- Allow greater size/volume in designated and non-designated areas.

## Sustainability appraisal findings

### Key issues

Potential significant negative impacts in terms of cultural heritage, effects may be reversible where they affect setting but permanent where structures impact on the building fabric;

Potential significant but reversible impacts in terms of designated landscapes;

Potential significant long term economic benefits associated with improvements in digital connectivity;

Potential minor long term social benefits in terms of the effects of connectivity on quality of life;

Minor long term benefits in terms of carbon reduction and improved air quality.

Extending PDR for equipment housing on buildings could result in potential **significant negative** effects on **cultural heritage** assets and their setting as a result of reversible visual and townscape impacts arising from development on nearby buildings and possible permanent physical impacts where development is directly on a building. These effects have been identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site and the setting of Scheduled Monuments due to the archaeological and historic importance of these areas. It is also likely that extending PDR would result in **minor negative** impacts on undesignated historic buildings and their settings, with increased potential for schemes that prominently impact on townscapes.

There could also be localised landscape impacts, which could be a particular concern in areas designated for their scenic value. There is the potential for **significant negative** effects, reflecting the considerable size of equipment housing in relation to sensitive areas, although these effects are reversible.

Changes in PDR that support the deployment of equipment housing cabinets on buildings are likely to have potential **significant positive** effects on the objective of promoting **sustainable economic growth** by helping to enhance digital connectivity in urban areas and supporting the rollout of 5G networks in the long term. While the impacts of individual housing cabinet installations are likely to be limited, they will make an important contribution to wider communications infrastructure.

Potential **minor positive** long term effects have also been identified in relation to **population and human health**. This is because communications equipment, including housing cabinets, could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities. Telecommunication services play an increasingly important role in people's lives as essential household utilities, facilitating business and underpinning public services. Again, many of the benefits would be focused in city, town and village centres where the demand for digital connectivity is greatest.

Each of the proposed changes to PDR is likely to reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** effects have therefore been identified in relation to **air, climate** and **material assets**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Limit the size / volume for permitted housing cabinet within designated areas. The consultation comments suggested that a 1.5-2.5 cubic metres volume limit to PDR would properly balance the environmental sensitivities within designated areas, but at the same time would significantly support small cell system deployment within designated areas.
- Focus on utilising existing sites to limit visual intrusion of apparatus.
- Promote guidance and best practice on the design and location of equipment housing to minimise visual, townscape and cultural heritage effects.

## 5.10 Other apparatus on buildings

### Characteristics

'Other apparatus' is defined as any structure or apparatus which is ancillary or reasonably required for the construction, installation, alteration or replacement of digital communications infrastructure network. Examples of these include backup power generators, a maintenance ladder or fencing. A maintenance ladder is an optional structure associated with lattice masts and is typically incorporated into the centre of the mast. A maintenance ladder is often required for health and safety reasons where it is impossible for a moveable access platform to gain sufficient access to the antennas. Fencing is normally required around mast structures, equipment housing and on ladders<sup>46</sup>.

### Existing permitted development rights

Class 67(10) contains a general restriction on PDR for any apparatus on a building (though some development, e.g. equipment housing, has lower limits). Development requires planning permission if:

- it would exceed 10 metres in height;
- it would protrude above the highest part of the building by 8 metres (if the building is more than 15 metres in height) or 6 metres (if the building is less than 15 metres in height); or
- with alteration or replacement, where the resulting apparatus is above these limits and above what was there already as regards height and protruding above the highest part of the building.

Additional conditions apply in designated areas. The alteration or replacement of apparatus is permitted if it would be the same, or smaller than, the existing apparatus – in terms of size, dimensions and condition.

### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- No change in PDR.
- Extend existing PDR to designated areas.

### Sustainability appraisal findings

<b>Key issues</b>
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<sup>46</sup> SNH, 2001. *Siting and Design Guidelines for Mobile Telecommunications in the Highlands and Islands*. Available at: <https://www.snh.scot/sites/default/files/2017-07/Publication%202002%20-%20SNH%20Commissioned%20Report%20F00AA508%20-%20%20Siting%20and%20Design%20Guidelines%20for%20Mobile%20Telecommunications%20Developments%20in%20the%20Highlands%20and%20Islands.pdf>

Minor impacts in terms of cultural heritage, with reversible effects in terms of setting and permanent physical effects;

Minor negative but reversible impacts in terms of designated landscapes;

Minor long term economic benefits associated with improvements in digital connectivity;

Mixed minor long term social benefits in terms of the effects of connectivity on quality of life and the risk of visual impacts;

Minor long term benefits in terms of carbon reduction and improved air quality.

Extending PDR for other apparatus could result in minor negative effects on **cultural heritage** assets and their setting as a result of reversible visual, townscape and possible permanent physical impacts. These effects have been identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site and the setting of Scheduled Monuments due to the archaeological and historic importance of these areas. It is also likely that extending PDR would result in **minor negative** impacts on undesignated historic buildings and their settings, with increased potential for schemes that prominently impact on townscapes.

There could also be localised landscape impacts, which could be a particular concern in areas designated for their scenic value. There is the potential for **minor negative** effects, reflecting the considerable size of other apparatus, in relation to sensitive areas.

Extending PDR is expected to have mixed impacts on human health and the living environment of people. Principal adverse effects associated with other apparatus include the risk of visual clutter. Positive effects include the delivery of next generation of digital communication services that underpin crucial public services and health services, particularly to more remote and peripheral locations. As such, **mixed minor negative and minor positive** effects are identified in relation to **Population and Human Health**, reflecting the indirect benefits other apparatus provides in relation to supporting the rollout of 5G networks.

Changes in PDR that support the deployment of other apparatus are likely to have **minor positive** effects on the objective of promoting **sustainable economic growth** by enhancing digital connectivity in urban areas and supporting the rollout of 5G networks over the longer term.

Each of the proposed changes to PDR is likely to reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** effects have therefore been identified in relation to **air, climate and material assets**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Limit the amount of apparatus allowed under PDR.
- Limit the size of other apparatus to ensure any environmental impact is contained.

- Focus on utilising existing sites to limit visual intrusion of apparatus.
- Limiting visual intrusion of apparatus through guidance and best practice on the design and location of other apparatus to minimise visual effects.

## 5.11 Underground development

### Characteristics

'Underground development' typically refers to underground cables which support digital telecommunication networks. The two main types considered in this report include power cables and telecommunications cables which are used for the purposes of broadband networks and mobile radio telecommunication networks.

- *Power cables* – are used to transmit electricity between points of generation and places where the electricity is consumed. Power cables are often buried underground for aesthetic purposes and more practical reasons i.e. making the cable less susceptible to extreme weather events such as thunderstorms or heavy snowfall. Burying cables underground is also used as a precautionary measure in relation to health and safety concerns, as power cables can produce electric and magnetic fields which could have the potential to adversely impact upon public health<sup>47</sup>.
- *Telecommunications cables* – are used to transmit electronic information from a source to a destination. Generally speaking, telecommunications cables are used for the purpose of providing telephone services and providing broadband access. In a few instances, even base stations are connected through buried cables instead of microwave links.

In the UK, broadband is delivered through two main types of infrastructure: fixed line infrastructure and wireless infrastructure. Wireless infrastructure transmits radio waves using broadband signals through satellite or mobile technology. Fixed line infrastructure, on the other hand, relies on cables to provide static connections to the Internet. There are two broad types of telecommunications cabling used to provide telephone services and broadband access in the UK<sup>48</sup>:

- *Copper cables* are traditionally used as telephone lines. However, these copper telephone lines can be altered so that they can be deployed to support broadband connections. This is known as Digital Subscriber Line (DSL) technology – a wider group of telephone lines which are used to transmit digital data. Copper cables can either be installed above ground on poles, or buried underground.
- *Optical fibres* use fibre optic technology to convert electrical signals carrying data to light, subsequently sending the light through transparent glass fibres made from drawing glass (silica).

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<sup>47</sup> UK Parliament, 2012. *Research briefing: underground powerlines and health*. Available at: <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN06453#fullreport>

<sup>48</sup> UK Parliament, 2017. *POSTbrief – Telecommunications Infrastructure: Cabling, Ducts and Poles*. Available at: <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/POST-PB-0024>

## Existing permitted development rights

Class 67 of the GPDO Amendment 2017 allows underground apparatus associated with adding apparatus to an existing mast. PDR in relation to underground development in designated areas, including National Scenic Areas, National Parks, Conservation Areas, Historic Gardens and Designed Landscapes, SSSI, Historic Battlefields, European Sites, World Heritage Site or within the setting of category A listed buildings or Scheduled Monuments, are limited to ancillary development associated with changes to existing telegraph poles, overhead lines and ground based masts.

## Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- No change in PDR.
- Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines and ground based masts).

## Sustainability appraisal findings

### Key issues

Potential significant permanent impacts in terms of cultural heritage;

Minor long term economic benefits associated with improvements in digital connectivity;

Minor benefits in terms of efficient use of the planning system

Minor long term social benefits in terms of the effects of connectivity on quality of life;

Minor long term benefits in terms of carbon reduction and improved air quality;

Minor temporary and permanent impacts on soils, water and biodiversity.

Extending PDR for underground development to designated areas will increase the risk of potential permanent physical damage to below ground archaeology. Potential **significant negative** effects have therefore been identified in relation to underground archaeology in Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site and the setting of Scheduled Monuments due to the potential archaeological and historic importance of these areas. **Minor negative** effects are identified in relation to non-designated areas and areas that are not designated for their heritage assets.

Changes in PDR that support the deployment of underground telecommunications equipment are likely to have **minor positive** long term effects on the objective of promoting **sustainable economic growth** by helping to enhance digital connectivity in urban areas and supporting the rollout of 5G networks. While the impacts of individual developments are likely to be limited, they will make an important contribution to wider communications infrastructure.

Each of the proposed changes to PDR is likely to reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** long term effects have therefore been identified in relation to **air, climate and material assets**.

Allowing an increase in underground development could result in changes in drainage patterns to the detriment of water quality. Excavation could also result in changes to soil quality and composition. **Minor negative** effects have therefore been recorded for the extension of PDR in relation to **water and soil**, as well as the indirect impact on **biodiversity**. The significance of these effects is uncertain given that they will be dependent on the scale of development which comes forward and will also depend on the conditions at the relevant development sites, some of these effects will be temporary during construction and other will be permanent.

**Minor positive** long term effects have also been identified in relation to **population and human health**. This is because communications equipment, underground development, could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities. Telecommunication services play an increasingly important role in people's lives as essential household utilities, facilitating business and underpinning public services. Many of the benefits would be focused in city, town and village centres where the demand for digital connectivity is greatest.

The deployment of underground development is expected to have positive effects on human health and the living environment of people, as the delivery of digital communication services underpins crucial public services and health services, particularly to more remote and peripheral locations. As such, **minor positive** effects have been identified in relation to **Population and Human Health**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Include requirement for an archaeological assessment or overseeing clerk of works in designated areas where there is judged to be a higher probability of damage or loss of underground archaeology.
- Consider requiring prior notification/prior approval for Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site and the setting of Scheduled Monuments so that potentially damaging developments can be identified and avoided. However this would reduce or limit any potential benefits for the more efficient use of the planning system.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

## 5.12 Access tracks for new ground based masts

### Characteristics

Access tracks provide access for construction and maintenance vehicles. They can also be used for forestry, agriculture or recreational purposes.<sup>49</sup>

### Existing permitted development rights

Access tracks are classified as a permitted development provided that they do not exceed 50 metres in length. However, the construction of access tracks is not permitted development in designated areas.

### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- No change in PDR
- Extend existing PDR to designated areas.
- Allow increased length of track allowed under PDR in designated and non-designated areas.

### Sustainability appraisal findings

#### Key issues

Potential significant permanent impacts in terms of cultural heritage;

Potential significant but reversible impacts in terms of designated landscapes;

Minor long term economic benefits associated with improvements in digital connectivity;

Minor long term social benefits in terms of the effects of connectivity on quality of life;

Minor long term benefits in terms of carbon reduction and improved air quality;

Minor impacts in terms of biodiversity, water and soil which may be both temporary and permanent.

Extending existing PDR for new access tracks to designated areas, and extending the length of track that is permitted in designated and undesignated areas will increase the risk of potential physical damage to below ground archaeology. Potential permanent **significant negative** effects have therefore been identified in relation to underground archaeology in Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Site and the setting of Scheduled Monuments due to the potential archaeological and historic importance of these areas. **Minor negative** effects are identified in relation to areas that are not designated for their heritage

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<sup>49</sup> Scottish Government, 2001. *Planning Advice Note (PAN) 62: Radio Telecommunications Introduction*. Available at: <http://www.gov.scot/Publications/2001/09/pan62/pan62->



assets. The scale of impacts will depend on the extent to which the length of permitted tracks is increased.

Granting PDR to new access tracks in designated areas and increasing the length of permitted track could also result in potential **significant negative** effects on **landscape and geodiversity**. This would be a consequence of the reversible landscape and visual impact of new tracks together with potential permanent impacts on landforms and rocks. Potential **significant negative** effects have been identified in relation to National Parks and National Scenic Areas, because of potential direct impacts on the landscape qualities of these areas and their national importance. Potential **significant negative** but reversible effects have also been identified for areas not designated for their landscape value, reflecting the potential impact of large increases in the length of track granted PDR.

Extending PDR to designated areas, and increasing the maximum length of permitted track could result in potential permanent **significant negative** effects on **biodiversity** depending on the nature of the area in question and length of track that is permitted. This could result from loss and fragmentation of habitats and changes in water flows the habitats that depend on them. Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site.

Changes in PDR for tracks are likely to have long term **minor positive** effects on the objective of promoting **sustainable economic growth** by enhancing digital connectivity in urban areas and supporting the rollout of 5G networks. This could be particularly important where there are gaps in current coverage. In remote locations adverse weather conditions are more common, meaning that sites in these kinds of locations need more maintenance to fix wind damage or deliver a power generator – without access tracks, many peripheral locations would be unbuildable or unserviceable.

Each of the proposed changes to PDR is likely to reduce the need to travel and the use of paper-based communication, thereby contributing to the prudent use of resources. **Minor positive** long term effects have therefore been identified in relation to **air, climate** and **material assets**.

Each proposed change to PDR is expected to have mixed effects on human health and the living environment of people, due to positive and negative effects that may arise during/after the construction of new access tracks. On one hand, new access tracks could lead to visual intrusion, with associated negative impacts on the living environment of people. On the other hand, new access tracks help to support the delivery of digital communication services which underpins crucial public services and health services, particularly to more remote and peripheral locations. **Mixed minor positive and minor negative** long term effects have therefore been identified in relation to **Population and Human Health**.

Negative environmental impacts may arise resulting from the construction of access tracks. These relate to impacts associated with soil sealing, an increase in impermeable surfaces and the indirect loss or damage to habitats and species. **Minor negative** effects have been identified for **Water, Soil and Biodiversity, Flora and Fauna** (primarily in relation to areas designated for their biodiversity).

Other sustainability impacts are considered to be negligible or unlikely.

## Mitigation of negative effects

- Consider restricting PDR in sensitive areas (particularly in relation to **Cultural Heritage** and **Landscape**), or requiring prior notification/prior approval subject to the condition that before beginning development an assessment of cultural and visual impacts is undertaken.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.
- Focus on utilising existing sites to limit visual intrusion of new access tracks. Where an existing radio mast exists and there may be a need to modify or widen an existing access track within a designated area, impacts will be comparatively low.
- Limiting visual intrusion of apparatus through guidance and best practice on the design and location of other apparatus to minimise visual effects using SNH guidance for hill tracks.

### 5.13 Secondary, cumulative and synergistic effects

Future development of telecoms infrastructure in Scotland is likely to require a combination of all the development types assessed in this section. Any change in PDR is therefore likely to result in cumulative effects. The precise nature of these effects will depend on the options selected and the extent to which PDR are extended, as well as the locations in which development takes place.

Changes to PDR for digital communication infrastructure could result in potential **significant positive cumulative** effects on **economy** and **population and human health**. Taken together, the changes help to support the rollout of 5G networks and other network improvements, which are likely to drive new economies, opportunities and support the Scottish digital economy. Simplifying the consenting regime by extending PDR for telecoms equipment would help to avoid pressure on the planning system which might otherwise arise were planning applications for the implementation of 5G networks brought forward in the usual way.

It is, however, likely that the changes could result in potential **significant negative cumulative effects** on **cultural heritage**, particularly if PDR are extended to Conservation Areas and other areas or sites designated for their historic importance. Small cell systems, equipment housing, other apparatus, antenna systems and new or enlarged ground based masts could combine to affect historic townscapes, historic landscapes and affect the setting of historic buildings and sites.

There could also be potential **significant negative cumulative** effects on the wider **landscape** as a result of the combined impacts of existing, new and enlarged masts, access tracks and equipment housing, particularly where they affect nationally designated landscapes. However, it is anticipated that the scale of development is likely to be limited given existing coverage and the growing focus on high speed connectivity within settlements.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for telecoms in combination with other development categories are discussed in Chapter 21.

However a range of mitigation measures have been identified in relation to each potential PDR change which would help to avoid, reduce and offset these effects.

## 6 Town centre changes of use

### 6.1 Characteristics

Town centres across Scotland are experiencing significant change. Traditional shopping patterns have been changing as out of centre shopping malls and retail parks have developed. These trends have been compounded by the shift towards on-line shopping. The result is evident in the loss of a number of major retailers and growing numbers of vacant shops particularly in smaller town centres and away from prime shopping areas. Other sectors have experienced similar trends with a significant number of pub closures reflecting changing drinking patterns and associated with measures such as the ban on smoking in public places and stricter drink driving rules. There has been a shift towards family friendly eating and drinking establishments. Offices have also seen a shift out of centre, with the growing use of remote working allowing companies to maintain a smaller presence in expensive town centre locations. Taken together these trends threaten the viability of many town centres. A more flexible approach to changes of use has been identified as one response to these pressures and avoiding patterns of decline associated with vacancies and a decline in economic activity.

### 6.2 Existing permitted development rights

PDR for changes of use are set out in Part 3 of *The Town and Country Planning (General Permitted Development) (Scotland) Order 1992* (as amended). They include:

- Change in use from financial, professional and other services, food and drink or for the sale of motor vehicles to shops - development is not permitted if the change of use is of a building where the total floor area exceeds 235 square metres.
- Change in use from food and drink to financial, professional and other services - there are no restrictions set out in the legislation associated with this change of use.
- Change in use from general industrial or storage and distribution to business - there are no restrictions set out in the legislation associated with this change of use.
- Change in use from business or general industrial to storage and distribution - development is not permitted if the change of use relates to more than 235 square metres of the floor area in the building.
- PDR for physical development associated with change of use - the current legislation does not specify any PDR for physical development associated with changes of use.
- Change in use from pay day lending or betting shops to financial, professional or other services or to shops.

## Renfrew Town Centre Simplified Planning Zone

A Simplified Planning Zone (SPZ) is an area where the need to apply for planning permission is removed for certain types of development, so long as it complies with the details, conditions and guidance set out in the SPZ scheme<sup>50</sup>.

Renfrew Town Centre SPZ allows for certain changes of use, external alterations, and other minor works without the need for a planning application (subject to necessary compliance). While *The Town and Country Planning (Use Classes) (Scotland) Order 1997* allows some changes of use (within a use class) without the need for planning permission, under the SPZ scheme there is increased flexibility to change the use of properties.<sup>51</sup>

The SPZ approves changes of use (subject to the development parameters) to<sup>52</sup>:

- Use Class 1, shops – Acceptable at ground floor level. All change of uses are subject to the number of ground floor class 1 units not falling below 40% of the total number of ground floor commercial units within the town centre.
- Use Class 2, financial, professional and other services – Acceptable at ground floor and first floor level.
- Use Class 3, food and drink – Acceptable at ground floor level. (Does not include Public Houses or Hot Food Takeaways.) No more than three adjoining class 3 units are permitted by the SPZ scheme.
- Use Class 4, offices – Acceptable at ground floor and first floor level. (Does not include light industry).
- Use Class 7, hotels and hostels – Acceptable at ground floor and first floor level.
- Flats, residential – Acceptable but limited to upper floors. Excludes Houses in Multiple Occupation. The scheme does not permit the change of use from Class 9 (residential) to any other use.
- Use Class 10, non-residential institutions – Acceptable at ground floor level.

Development approved by the SPZ is subject to planning conditions and informatives, which are set out in the SPZ scheme. Informatives include references to the other statutory requirements that may apply, such as Listed Building consent<sup>53</sup>.

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<sup>50</sup> Renfrewshire Council, 2015. Renfrew Town Centre Simplified Planning Zone Scheme [pdf]. Available at: [http://www.renfrewshire.gov.uk/media/1438/Renfrew-Town-Centre-SPZ-Scheme-October-2015/pdf/Renfrew-TC-SPZ-Scheme\\_October\\_2015.pdf](http://www.renfrewshire.gov.uk/media/1438/Renfrew-Town-Centre-SPZ-Scheme-October-2015/pdf/Renfrew-TC-SPZ-Scheme_October_2015.pdf)

<sup>51</sup> *Ibid.*

<sup>52</sup> *Ibid.*

<sup>53</sup> Renfrewshire Council, 2015. Renfrew Town Centre Simplified Planning Zone Scheme [pdf]. Available at: [http://www.renfrewshire.gov.uk/media/1438/Renfrew-Town-Centre-SPZ-Scheme-October-2015/pdf/Renfrew-TC-SPZ-Scheme\\_October\\_2015.pdf](http://www.renfrewshire.gov.uk/media/1438/Renfrew-Town-Centre-SPZ-Scheme-October-2015/pdf/Renfrew-TC-SPZ-Scheme_October_2015.pdf)

### **6.3 Options for extending permitted development rights**

Due to the large number of options and potential permutations of changes of uses an alternative approach to the assessment of options has been adopted for town centres. The Assessment tables in Appendix 6 have focused on the sustainability effects of changes that would result in the addition or loss of thirteen typical town centres uses, as a means of informing the drafting of detailed draft legislative proposals which have not yet been developed and which would be brought forward by the Scottish Government for consultation.

- Shops
- Financial, professional and other services
- Food and drink ( including pubs)
- Business
- General industrial
- Storage or distribution
- Hotels and hostels
- Residential institutions
- Residential – houses and flats
- Non-residential institutions
- Assembly and leisure (Including theatres)
- Betting shops and pay day lending
- Hot food takeaways

This section therefore draws together the common sustainability issues that should be taken into account by the Scottish Government when considering potential changes in PDR for town centre uses.

### **6.4 Sustainability appraisal findings**

#### **Biodiversity, flora and fauna**

Changes in town centre uses will generally have negligible effects on biodiversity. The principal exceptions are where physical works to accommodate changes in use disturb bird nesting or bat roosting sites (covered by other legislation) or where uses such as hot-food take-aways result in an increase in littering, with minor negative effects impacting on urban wildlife.

#### **Climate factors**

Town centres are generally more accessible by low carbon modes of transport than alternative non-central locations. The loss of town centre retail, employment, service or entertainment uses are likely to result in an increase in the need to travel by private car,

though in some cases this is mitigated to some extent by a shift to activity on-line. Changes in use that maintain town centres as a focus of economic and cultural activity will, all other things being equal, help avoid increases in greenhouse gas emissions.

## **Air**

Some town centres currently experience poor air quality, often due to high traffic volumes. Changes to town centre uses which generate fewer vehicular movements (including goods vehicles) are likely to contribute to local improvements in air quality. However, displacement of activity to non-central locations (e.g. retail or office parks) will result in an overall increase in vehicular pollution and could result in potential significant impacts elsewhere.

## **Water**

Most changes in town centre use are unlikely to result in significant impacts on water and flooding. The principal exceptions are where change of use to industrial and distribution facilities could require physical works resulting in significant additional areas of hard surfaces (roofs and hard standing) which could increase surface water run-off. Physical works to accommodate changes in use could provide opportunities to implement sustainable drainage measures, though opportunities to secure this could be lost if these changes are subject to PDR. This could be important in urban areas with high levels of pluvial and fluvial flood risk. Change of use which increases the population within an area of flood risk, such as hotels, hostels, residential institutions and residential houses and flats could also increase vulnerability within these areas.

## **Soil**

Town centre changes of use are unlikely to result in significant impacts on soils. Redevelopment of former industrial sites could provide an opportunity to remediate past areas of contamination. Redevelopment or occupation of vacant premises will also support the re-use of previously developed land which may allow development to respond to local demand.

## **Cultural heritage**

Town centre changes of use could have a number of impacts on cultural heritage, particularly in Conservation Areas and undesignated but historic centres. Impacts could result from the visual impact of changes in use on historic townscapes or the physical works required to convert historic buildings from one use to another. However, maintaining buildings in positive use will, in most cases, be preferable to increasing levels of vacant buildings with associated risks of declining maintenance, dereliction or damage through anti-social behaviour or fire.

## **Landscape and geodiversity**

There are unlikely to be significant landscape and geodiversity impacts associated with town centre changes in use.

## **Material assets**

Losses of a mix of town centre uses which support the vibrancy of the town centre potentially represent a negative impact on material assets. Changes in use which support diversity in town centres and which encourage investment represent positive effects on material assets.

## **Economy**

A number of traditional town centre uses, particularly retailing and professional and financial services, are under considerable pressure as shopping patterns change in response to the development of out of centre facilities and the growth of online activity. Loss of retail and service business can have a cumulative and disproportionate impact as vacancies impact on a town centre's attractiveness to shoppers, resulting in lower footfall and impacting on neighbouring businesses. Changes to other uses can represent a pragmatic response to such trends, helping to reduce the number of vacant properties and introducing new activities and sources of demand. A planned approach may be needed to maintain a retail core and to prevent a mix of incompatible uses. Conversion to restaurant uses can help diversify the town centre and stimulate a night time economy, while the development of new houses and flats can help create a new, local source of demand for services and retailing.

## **Social, population and human health**

Losses of most town centre uses are likely to have negative social impacts, particularly for those who are dependent on public transport, are less mobile, live in town centres or, like many elderly people, are less likely to make use of online services.<sup>54</sup> Impacts may be particularly significant in relation to losses of retailing, financial services and non-residential institutions. Measures to allow more flexible changes of use may help protect the viability of wider town centres, in turn reducing these impacts.

Conversion of non-residential town centre properties such as offices and shops to houses and flats can help address housing need in accessible locations. Experience from elsewhere in the UK suggests that without regulation such conversions may be aimed at the middle or upper parts of the market at the expense of affordable housing, so some form of obligation on developers may be appropriate if the social benefits of this change in use are to be realised.

Changes in use which include activities such as betting and the provision of payday loans are likely to have mixed effects, affecting access to these services for lower income and more vulnerable parts of the population. Losses of these uses from town centres could be accompanied by a shift on-line where possible social impacts may be less visible.

A number of town centre uses can result in 'bad neighbour' effects and these could be affected by changes in use. Hot food take-aways, for example, can lead to higher levels of littering with impacts on town centre residents and the wider community. A proliferation of take-aways can also have impacts on diet and health. The conversion of properties to accommodate restaurants, cafes and take-aways can have impacts in terms of kitchen ventilation, deliveries and the management of food waste. Uses such as pubs and entertainment can create sources of noise pollution and can be associated with late night disturbance and anti-social behaviour.

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<sup>54</sup> In 2018, 8.4% of adults had never used the internet. Of the 4.5 million adults who had never used the internet in 2018, more than half (2.6 million) were aged 75 years and over. Office for National Statistics (2018) Internet users, UK, 2018

<https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/internetusers/2018>



Many town centres provide an important focus for the community, supporting vitality and cohesion. Measures designed to support town centre viability are likely to have a positive effect on this role.

### **6.5 Cumulative, secondary and synergistic effects**

The sustainability assessment has considered the likely effects of a wide range of changes of town centre use. Together these could result in potential significant cumulative effects, though the nature of these will depend on the types of changes that come forward and the locations in which they take place. It is however possible to draw a number of broader conclusions about the potential cumulative effects of changes in PDR for changes of town centre use.

There could be potential **significant positive cumulative economic** effects, reflecting the objective of helping town centres respond to changing shopping, eating and working patterns. Without a more flexible approach to changes of use there is a risk that town centres would experience more severe economic impacts, with implications for employment and risks of a cycle of decline.

There could be potential **significant mixed cumulative** effects on **cultural heritage**. On the one hand, a more flexible approach to changes of use should help minimise the risk of premises falling vacant or becoming derelict, with direct impacts on historic buildings and the character and quality of historic townscapes. At the same time, it is possible that physical works would be needed to allow many of the changes in use being considered. This could have a physical impact on individual buildings as well as impacting on the wider townscape.

By helping to maintain viable town centres, a more flexible approach to changes in use would help limit increases in **greenhouse gas emissions** associated with out of centre retail and employment locations. Taken together, the changes represent a potential **significant positive cumulative** effect **on climatic factors**.

Measures to retain retail, financial service and institutional uses in town centres will help avoid impacts on those who do not have easy access to private transport or to on-line services. There could be a potential **significant positive cumulative** effect **on social, population and human health**.

Cumulative and synergistic effects resulting from potential changes to PDR for town centre changes in use in combination with other development categories are discussed in Chapter 21.

# 7 Agricultural developments

## 7.1 Characteristics

Agriculture and farming are important to the Scottish Economy and therefore, the Scottish Government is committed to providing support to the sector in terms of supportive planning policies and strategies<sup>55</sup>. The Scottish Government's Programme for Scotland 2017/18 sets out a commitment to consult on permitting the conversion of existing farm buildings to form new homes<sup>56</sup>.

For the purposes of agricultural permitted development, an agricultural unit means agricultural land which is occupied as a unit for the purposes of agriculture other than fish farming, but includes (a) any dwelling or other building on that land occupied for the purpose of farming the land by the person who occupies the unit; or (b) any dwelling on that land occupied by a farm worker. Agricultural land is that which is in use for agriculture and is so used for the purposes of a trade or business and excludes any dwellinghouse or garden or land used for fish farming<sup>57</sup>.

## 7.2 Rationale for extending permitted development rights

The Scottish Government convened a Planning & Agriculture summit in January 2017, following which it set out a series of actions including in relation to agricultural PD. This included an action to consider options specifically for the conversion of agricultural buildings, increasing permitted development for farm sheds to accommodate modern agricultural equipment, and on permitted development for polytunnels.

The HoPS *Scoping Report on the Extension of Permitted Development Rights*<sup>58</sup> considered that there is a range of planning controls which can be relaxed to lessen particular burdens on the farming sector in Scotland. These include proposals to relax prior notification/prior approval processes, and to permit polytunnels and enable farmers to erect agricultural buildings within the curtilage of a farm without the need for a planning application. HoPS identify that appropriate and standard planning conditions could be put in place in order to address potential risks and issues.

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<sup>55</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

<sup>56</sup> Page 68: A Nation with ambition: The Government's Programme for Scotland 2017-18 <http://www.gov.scot/Resource/0052/00524214.pdf>

<sup>57</sup> Town and Country Planning (General Permitted Development) (Scotland) Order 1992.

<sup>58</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

The Programme for Government<sup>59</sup> includes a specific commitment to consult on permitting the conversion of existing farm buildings to form new homes to increase rural housing stock.

### 7.3 Farm sheds

#### Characteristics

Farm sheds can be used for a variety of purposes including grain storage and drying, crop, fodder and equipment storage. They are also used to house livestock including poultry, pigs, cattle and sheep. Their location is therefore associated with every farm type and all types of land capability for agriculture<sup>60</sup>. It is assumed that larger farm sheds are most likely to be associated with areas of more productive land, which can sustain higher levels of fodder and crop production, with a requirement for larger machinery, and a greater proportion of developments will be in these areas. It is also recognised that larger sheds may be developed for any agricultural activity in any agricultural area.

#### Existing permitted development rights

Prior notification and approval procedures apply to certain agricultural permitted developments. This means a developer must notify the planning authority of proposals before exercising their PDR - the notification should be accompanied by a written description of the proposed development, the materials to be used and a plan indicating the site. The planning authority will then determine whether prior approval is or is not required. If prior approval is not required, development can be carried out in accordance with the submitted details. If prior approval is required and is granted, then it must be carried out in accordance with the approved details.

Prior notification procedures were introduced to balance concerns between requiring planning permission where the application process adds little value, unnecessary costs and delays to development, and concerns about landscape, visual impacts, environmental impacts, flooding and drainage and erosion. PDR for agricultural buildings and operations are set out in Part 6 of Schedule 1 to *The Town and County Planning (General Permitted Development) (Scotland) Order 1992* (as amended).

Development is currently permitted for the carrying out on agricultural land comprised in an agricultural unit of works for the erection, extension or alteration of a building.

PDR do not apply if:

- the development would be carried out on agricultural land less than 0.4 hectares in area;
- it would consist of, or include the erection, extension or alteration of a dwelling;
- a building, structure or works that are not designed for the purposes of agriculture would be provided on the land;

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<sup>59</sup> Scottish Government (2017) A Nation with Ambition The Government's Programme for Scotland 2017 - 2018

<sup>60</sup> <http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/agritopics/farmstruc>

- the ground area to be covered by; any works or structure for the purposes of accommodating livestock or any plant or machinery arising from engineering operations or, any building erected or extended or altered, would exceed 465 square metres;
- the height of any part of the building or structure with 3 km of an aerodrome would exceed 3 metres, or 12 metres otherwise;
- any part of the development would be within 25 metres of the metalled portion of a trunk or classified road; or,
- it would consist of the erection of, or works to, a building or structure used for housing pigs, poultry, rabbits or animals bred for their skin or fur<sup>61</sup> or the storage of slurry or sewage sludge, and the building or structure would be within 400 metres of the curtilage of any protected building<sup>62</sup>.

As stated at the beginning of this section, this permitted development right is subject to an application to the planning authority who will determine whether prior approval is required in regards to the siting, design and external appearance of the building.

### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No change in PDR
- An increase in area beyond 465m<sup>2</sup> in all areas
- An increase in area beyond 465m<sup>2</sup> in all areas excluding flood risk areas
- Increase height beyond 12m in areas more than 3km from an aerodrome or technical site
- Increase in height beyond 3m in areas less than 3km from an aerodrome or technical site
- No requirement for prior notification/prior approval for farm sheds of any size
- No requirement for prior notification/prior approval for farm sheds below 465m<sup>2</sup>
- Relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur or the storage of slurry or sewage sludge
- PDR extended to development within 25m of the metalled portion of a trunk or classified road

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<sup>61</sup> Fur farming is banned in Scotland Fur Farming (Prohibition) (Scotland) Act 2002 <https://www.legislation.gov.uk/asp/2002/10/contents>

<sup>62</sup> This means any permanent building which is, or would be, normally occupied by people.

## **Sustainability appraisal findings**

### **Key issues**

#### **An increase in the permitted area of farm sheds**

##### ***In all areas***

Potential permanent significant negative impacts in terms of cultural heritage, landscape, flooding and possible impacts on safety; Minor long term negative impacts on biodiversity, soils, greenhouse gas emissions, water quality, material assets (as a result of loss of soil resources and waste generation);

Minor long term benefits in terms of climate change adaptation;

Significant positive long term impacts for sustainable economic growth and rural development.

##### ***Excluding areas of flood risk***

Effects are the same as above with the exception of minor and not significant negative effects being identified in relation to flood risk.

#### **An increase in the permitted height of farm sheds**

##### ***More than 3km from an aerodrome or technical site***

Potential permanent significant negative impacts in terms of cultural heritage, landscape, and safety;

Minor negative impacts on water quality

Minor long term benefits in terms of climate change adaptation;

Significant positive effects for rural development;

Mixed long term impacts on sustainable economic growth due to the positive effects for individual farm businesses, but potential negative effects on the wider economy from landscape impacts.

##### ***Less than 3km from an aerodrome or technical site***

Effects are the same as above with the exception of mixed minor effects for sustainable economic growth and minor positive effects for rural development.

#### **Changes to requirement for prior notification/prior approval**

##### ***Farm sheds of any size***

As for changes to size but with mixed significant positive and minor negative effects for enhancing economic growth.

### ***Farm sheds below 465m***

As for changes to size but with mixed minor positive and minor negative effects for enhancing economic growth.

#### **Change in the permitted distance to receptors**

##### ***Distance to protected buildings***

Negative impacts on amenity for residents;

Minor benefits in terms of sustainable economic growth and rural development.

##### ***Distance to metalled trunk or classified road***

As above, but with mixed impacts on rural development due to benefits from the individual farm business, but potential negative effects on the wider economy.

#### **Changes to requirements for prior notification / prior approval**

##### ***Farm sheds of any size***

Permanent significant negative effects on cultural heritage, landscape, and quality of life

Mixed significant positive and minor negative long term effects for enhancing economic growth, significant positive long term effects for supporting rural development.

Minor positive long term effects for supporting climate change adaptation and enhancing material assets

##### ***Farm sheds below 465m***

As for changes to size but with minor negative effects identified for material assets and mixed minor positive and minor negative effects for enhancing economic growth, and minor positive effects for supporting rural development.

### **Increase in area**

PDR which would allow the development of farm sheds larger than 465m<sup>2</sup> in all areas or excluding areas of flood risk could have a number of potential **significant negative** effects on **cultural heritage** and **landscape and geodiversity**. This reflects the potential scale and visual prominence of these developments within the landscape and their potential proximity to cultural heritage assets with associated impacts on setting. Potential **significant negative** effects are also identified in relation to **flooding**, these effects will be more significant if PDR include areas of known flood risk. This could also result in **negative impacts** resulting from the loss of larger areas of the **best and most versatile agricultural land** or **high carbon soils**.

Associated with the above issues, removing the requirement for prior notification for farm sheds of any size has similar potential **significant negative** effects, as a result of the removal of consideration of these issues by the planning authority.

**Minor negative** effects are also identified for PDR which would allow the development of farm sheds larger than 465m<sup>2</sup> in all areas or excluding areas of flood risk, in relation to the loss and severance of **habitat** and valuable **soils**. Increased use of larger farm sheds to support livestock production could result in increased associated **greenhouse gas emissions**, and impacts on **water quality** as a result of increased production of slurries and manures and potential run-off. Introducing PDR for increasing the area of farm sheds beyond 465m<sup>2</sup> excluding areas of flood risk would have also result in **minor negative** effects on flood risk.

Again, removing the requirement for prior notification for farm sheds of any size has similar **minor negative** effects to those described above.

PDR which would allow the development of farm sheds larger than 465m<sup>2</sup> in all areas or excluding areas of flood risk would have a number of **minor positive** effects in relation to supporting **climate change adaptation** by offering increased flexibility to farmers to respond to climate change.

The UK's withdrawal from the EU could affect existing trading relationships with other European nations, open the UK up to competition from other global producers, impact on the availability of labour and change the system of agricultural support and funding. Measures which increase flexibility and allow the sector to respond to these challenges will result in significant positive effects for the agricultural sector. The change in PDR would support the value and operation of the farm, and increase opportunities for **economic development** through farm diversification, potentially resulting in significant positive effects. However, balanced against these benefits are the potential negative effects of development on other rural businesses, as it is possible that the change in PDR could have an adverse impact on Scotland's landscapes which play an important role in supporting the visitor economy – particularly in areas designated for their landscape importance (e.g. National Parks and National Scenic Areas). As such, **mixed effects** are identified in relation to the economy.

### **Increase in height**

PDR which would allow farm sheds higher than 12m in areas more than 3km from an aerodrome or higher than 3m in areas less than 3km from an aerodrome could have potential permanent **significant negative** effects on **cultural heritage** and **landscape**, due to increased size and prominence of the buildings within the rural landscape. This could also result in possible **negative impacts** on the **safe operation of aerodromes** and technical sites and the permanent loss of larger areas of the **best and most versatile agricultural land** or **high carbon soils**.

**Minor negative** long term effects could arise on **water pollution** as a result of the sheds being used to house livestock with associated issues of run off.

**Minor positive** long term effects include supporting **climate change adaptation**, through increased versatility in use of the buildings. Effects on greenhouse gas emissions may be mixed as a result of the use of the sheds e.g. for intensive livestock production.

As outlined for the effects identified from an increase in area, supporting opportunities for economic development, potential negative effects from an increase in farm sheds

could have negative impacts on other rural businesses. As such, **mixed effects** are identified in relation to the economy.

Associated with the above issues, removing the requirement for prior notification for an increase in height of farm sheds has similar **potential negative effects**, as a result of the removal of consideration of these issues by the planning authority.

### **Changes to distances to receptors**

Relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur or the storage of slurry or sewage sludge could result in permanent **negative effects** on **amenity** for local residents. Minor positive effects are identified in relation to the economic advantages of greater flexibility for agricultural businesses.

**Minor negative** local effects are identified for removing the restriction on development of farm sheds within 25m of a road as a result of likely **increased run off** and potential impacts on **sight lines** and **road safety**. Similar to the other PDR changes, long term **positive effects** are identified in relation to **economic development**, although mixed effects are identified for rural development in terms of **disease control** and **management of run off to the road**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Changes to requirement for prior notification / prior approval**

As outlined in relation to the potential changes in size, changes to the requirement for prior notification / prior approval for farm sheds of any size could result in permanent significant negative effects on cultural heritage, landscape, and quality of life as a result as a result of physical scale and impact of these developments.

Potential permanent minor negative effects are identified for biodiversity, flora and fauna, greenhouse gas emissions, quality of the water environment

Mixed significant positive and minor negative long term effects are identified for enhancing economic growth, significant positive long term effects for supporting rural development.

Minor positive long term effects are identified for supporting climate change adaptation and enhancing material assets.

For farm sheds below 465m<sup>2</sup> potential effects are the same as above but with minor negative effects identified for material assets and mixed minor positive and minor negative effects for enhancing economic growth, and minor positive effects for supporting rural development, reflecting the smaller scale of development.

Section 7.5 of the report concerns farm steading conversions. It is important to note that introducing PDR for converting sheds into dwellings could increase the risk of PDR being applied on top of PDR where the construction of a shed is undertaken through PDR and subsequently converted. This could result in the uncontrolled development of converted sheds.



## **Mitigation of negative effects**

Potential impacts could be reduced by measures to:

- Retain prior notification to ensure consideration of flood risk, impacts on landscape, cultural heritage and the wider economy.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.
- Include size/scale thresholds and/or exclusions zones in the vicinity of aerodromes and technical sites where PDR would not apply.
- Define the characteristics of shed conversions that are classified as permitted development (e.g. construction material, age of the building) in order to minimise the potential scale of new PDR for the conversion of sheds to dwellinghouses being applied on top of existing PDR for the construction of sheds.

## 7.4 Polytunnels

### Characteristics

A polytunnel is a tunnel covered in polythene. Polytunnels come in a wide variety of shapes, but are typically semi-circular, square or elongated in shape. The structure of the polytunnel is designed to create a micro-climate that provides higher temperatures and humidity by trapping incoming solar radiation, heating up the interior of the building faster than the heat can escape the structure. As such, polytunnels extend the growing season of various fruit and vegetable plants. Another benefit of polytunnels is that they are not a permanent structure.

### Existing permitted development rights

There is currently a lack of clarity in PDR for polytunnels, or indeed their qualification as development. This means that there can be inconsistent treatment between different planning authorities in determining whether a planning application is required. It was recommended in the *Review of the General Permitted Development Order 1992* (Scottish Government, 2007)<sup>63</sup>, and also the HoPS<sup>64</sup> Scoping Paper that polytunnels should be treated as agricultural buildings. The potential introduction of PDR specifically for polytunnels has the potential to provide clarity and improve consistency for developers.

### Potential changes to permitted development rights

Due to the lack of clarity in existing PDR for polytunnels, the SA has considered the following potential changes to PDR:

- No change in PDR
- PDR for up to a percentage of land holding area excluding flood risk areas.
- PDR for up to a percentage of land holding area including flood risk areas.
- Up to a percentage of land holding area and less than 200m to existing residential properties not connected with the farm.
- Up to a percentage of land holding area and less than 25m from the metalled portion of a trunk or classified road.

### Sustainability appraisal findings

<b>Key issues</b>
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<sup>63</sup> Scottish Executive, 2007. *Review of the General Permitted Development Order 1992* [pdf]. Edinburgh: Scottish Executive. Available at: <http://www.gov.scot/Resource/Doc/173656/0048437.pdf>

<sup>64</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/corporate-report/2017/04/planning-review-extension-permitted-development-rights-report/documents/45337d5e-bdef-4bf5-99fe-d004e2b0dde4/45337d5e-bdef-4bf5-99fe-d004e2b0dde4/govscot:document/?inline=true/>

## **Permitted development rights based on a proportion of land holding**

### ***Excluding flood risk areas and Including flood risk areas***

Potential significant impacts in terms of flood risk and impacts on landscape, although these are noted as reversible due to the temporary nature of polytunnels. Flood risk is recognised as greater if PDR include flood risk areas, however the overall effect is significant for both options;

Minor negative but reversible effects on cultural heritage, population and human health;

Mixed long term effects on sustainable economic development and climate change adaptation.

Minor positive long term impacts on material assets and avoiding greenhouse gas emissions.

### **Proximity to receptors**

Potential significant reversible impacts in terms of impacts on landscape;

Minor negative impacts in terms of health and quality of life, and flood risk, although these are noted as reversible due to the temporary nature of polytunnels;

Minor positive impacts on avoiding greenhouse gas emissions.

Although it is uncertain whether introducing PDR would significantly increase the area and extent of polytunnel development in Scotland, it would provide greater clarity to developers which could bring forward development in areas where there are greater perceived restrictions. Therefore it is assumed for the purpose of the assessment that introducing PDR would potentially increase the development of polytunnels.

## **Percentage of total land holding area**

Potential **significant negative** effects are identified in relation to **flood risk** for introducing PDR up to a percentage of total land holding area for both alternatives which exclude flood risk areas and include flood risk areas.

Polytunnels can create a risk of increased surface water run-off because of the introduction of a large area of impermeable plastic sheeting. The space between polytunnels is likely to be grassed down and available for infiltration. Additionally, long-term table top polytunnels have integrated rainwater capture and recycling built into them and will reduce the level of surface water run-off leaving the field. However, where there is an increase in run-off, particularly during periods of heavy rainfall, this can result in a greater risk of localised flooding. Indeed this problem has previously been reported by those living close to existing polytunnel development, who consider that the

flooding of nearby roads has become a more frequent problem since the tunnels have been erected.<sup>65</sup>

This reflects the overall potential scale of polytunnel development, and the cumulative effects of development on adjacent land holdings. The impact would be greatest if PDR were extended to flood risk areas, though effects are judged as being significant even if such areas were to be excluded. To some extent the impact of flood risk is reduced if polytunnels are partially or fully removed during winter, but a residual risk remains during spring and summer, particularly if the intensity of rainfall events increases as a result of climate change. These effects are noted as temporary and reversible, although the purpose of the polytunnels will influence the way in which they are managed. For example polytunnels may be year round, seasonal (in place during a varying number of months depending on the crop being grown), or rotational and seasonal e.g. 3 years of summer tunnel coverage, followed by 6 years of general arable cropping.<sup>66</sup>

Increasing the extent of polytunnel development could also result in potential **significant negative** effects on **landscape character**, though it is recognised that the development is temporary and reversible. Again, there is potential for cumulative effects of development on adjacent land holdings.

**Minor negative** effects are identified in relation to **cultural heritage**, and in relation to **population and human health** due to potential increases in flood risk, particularly if PDR include areas of known flood risk, and potential impacts for air safety from glare.

Providing greater clarity to developers for future development results in **minor positive** effects on **material assets** through enhancing the value of the agricultural land, increasing the viability of the farm unit through increased flexibility for cropping and supporting farm diversification. **Minor positive** effects are also identified in relation to avoiding increasing **greenhouse gas emissions** as polytunnels are likely to contribute to climate change adaptation by facilitating the growth of crops within a controlled environment, offering greater protection from weather extremes. However, **minor negative** effects on **climate change adaptation** may also be experienced in areas of flood risk.

**Mixed effects** are identified in relation to **economy**. On one hand, significant positive effects are identified due to potential opportunities for enhancing the viability and profitability of agricultural units. On the other hand, it is possible that more extensive development of polytunnels could have an adverse impact on Scotland's landscapes which play an important role in supporting the visitor economy – particularly in areas designated for their landscape importance (e.g. National Parks and National Scenic Areas). This is regarded as a less significant impact given the likely scale and location of new polytunnel development (focused within parts of Eastern Scotland already

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<https://councillors.herefordshire.gov.uk/documents/s50058045/Appendix%201%20for%20Polytunnels%20Planning%20Advice.pdf>

<sup>66</sup> Based on examples in [http://www.pkc.gov.uk/media/27002/14-09-10-Item-5-1-ii-14-379-/pdf/14.09.10\\_-\\_Item\\_5\(1\)\(ii\)\\_14-379\).pdf?m=635452545874930000](http://www.pkc.gov.uk/media/27002/14-09-10-Item-5-1-ii-14-379-/pdf/14.09.10_-_Item_5(1)(ii)_14-379).pdf?m=635452545874930000)

accommodating intensive agriculture), and taking into account the temporary and reversible nature of the effect.

### **Proximity to receptors**

Increasing the proximity of polytunnel development to receptors could also result in potential **significant negative** effects on **landscape character**, though it is recognised that the development is temporary and reversible. Again, there is potential for cumulative effects of polytunnel development on adjacent land holdings, and with other development.

PDR that allowed development of polytunnels within 200m of existing residential properties not connected with the farm and less than 25m from the metalled portion of a trunk or classified road have more limited effects across the SA objectives. **Minor negative** effects are identified in relation to **flood risk**, specifically through surface water flooding and impacts on properties and roads. Flooding and the location of polytunnels within 25m of trunk or classified roads could impact on sightlines and has potential negative effects on **health and quality of life**. While reducing proximity to receptors would limit local landscape and visual effects it is likely that the overall extent of polytunnel development would continue to result in significant negative effects on wider landscape character.

**Minor positive** effects are also identified in relation to avoiding increasing **greenhouse gas emissions** as polytunnels are likely to contribute to climate change adaptation by facilitating the growth of crops within a controlled environment, offering greater protection from weather extremes.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Potential impacts could be reduced by measures to:

- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.
- Restrict permitted development less than 200m of existing residential properties not connected with the farm;
- Restrict permitted development less than 25m from the metalled portion of a trunk or classified road;
- Restrict permitted development over a certain area to avoid adverse effects on flood risk;
- Restrict development within aerodrome safeguarding zones; alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed.

## 7.5 Farm steading conversions

This proposed change to PDR would allow a change of use of existing agricultural buildings to dwellinghouses or flexible commercial use.

### Characteristics

Farm steadings are commonly defined as the outbuildings and/or service buildings of a farm. They either form part of a formal architectural composition or a more informal group of farm buildings linked through function.

### Existing permitted development rights

There are currently no PDR for the conversion of agricultural buildings to dwellinghouses and flexible commercial use.

### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- No change in PDR
- PDR for the conversion of agricultural buildings to dwellinghouses
- PDR for the conversion of agricultural buildings for flexible commercial use.

### Sustainability appraisal findings

#### Key issues

Permanent minor negative effects in terms of biodiversity, flood risk, greenhouse gas emissions, and cultural heritage;

Minor positive effects in terms of soil through re-use of existing buildings;

Mixed minor long term effects in terms of landscape, sustainable economic growth and the rural economy

The effects for both proposed changes are similar across the SA objectives, although the nature of the effects varies slightly.

**Minor negative** effects are identified for **biodiversity**, flora and fauna, in all areas, and specifically in relation to protected areas such as Natura sites and SSSI. This relates to the importance of existing farm buildings for nesting birds and bats and the potential impacts of development resulting in loss of nesting and roosting space. These effects can be mitigated through increasing awareness of the required statutory processes in relation to these species, and ensuring awareness of appropriate design guidance.

**Minor negative** effects are also identified in relation to **climatic factors** due to the likely journeys created as a result of the development for residential or commercial use. The effects of conversion to flexible commercial use could have a greater negative effect than conversion to dwellings as, depending on the type of use, there could be more journeys created in terms of employees, customers and deliveries.

**Minor negative** effects are also identified in relation to **cultural heritage**, due to the potential impacts on the character of rural buildings from conversion. These impacts may be greater in designated areas such as Historic Gardens and Designed Landscapes, World Heritage Site and Historic Battlefields, due to the greater sensitivity of these areas. These effects can be mitigated by appropriate design guidance and may be offset where conversion ensures continued use and maintenance of the building in question.

**Minor negative** effects are also identified in relation to **flooding**, as introducing PDR for the conversion of sheds to residential buildings potentially increases the number of people within known areas of flood risk. This could constitute a potential safety risk.

**Minor positive** effects are identified in relation to soil, as introducing PDR for the conversion of farm steadings would potentially increase the use of vacant farm buildings, bringing them back into use.

**Mixed effects** are identified for enhancing **landscape quality**. Development of derelict farm buildings through conversion for dwellings or for flexible commercial use could lead to positive enhancement of landscape character through restoring these buildings and bringing them into active use within the rural landscape. However it could also result in changes in the character of the rural landscape through the introduction of features which are out of context within a rural environment such as formal entrances, gates, fencing and hedging. These effects would be greater in National Scenic Areas and National Parks, reflecting the greater sensitivity of these landscapes.

**Mixed effects** are also identified in relation to the **economy** and **rural development**. Conversion of farm buildings supports the use of farm steadings for purposes which support rural population and the rural economy. However changes to rural buildings and the character of the surrounding land or garden ground it could lead to minor negative effects on rural character and particularly areas designated for their landscape value, or for which landscape character is important including National Scenic Areas, National Parks, Conservation Areas and Historic Gardens and Designed Landscapes. These effects could be mitigated through design guidance. In relation to impacts on other rural land uses, potential impacts from increasing the population within major hazard site consultation zones or major accident hazard pipelines is also identified.

**Minor positive** effects are identified as result of the **re-use of redundant and derelict buildings**.

Other sustainability impacts are considered to be negligible or unlikely.

It is important to note that introducing PDR for converting sheds into dwellings or for flexible commercial use could increase the risk of PDR being applied on top of PDR. This is because the construction of a shed is currently classified as permitted development (subject to certain conditions). This means that introducing PDR for converting sheds into dwellings or for flexible commercial use could potentially result in the uncontrolled development of converted sheds.

### **Mitigation of negative effects**

- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals

likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

- Raise awareness of major hazards and the issues to be considered in the consultation zones;
- Raise awareness of the requirement for species survey and the relevant statutory processes;
- Raise awareness of mitigation measures in building design to accommodate birds and bats;
- Design guidance for conversion of agricultural buildings in relation to landscape and cultural heritage.

### **7.6 Secondary, cumulative and synergistic effects**

PDR which allow the construction of larger agricultural sheds, more extensive areas of polytunnel and the conversion of redundant farm steadings to residential or commercial use will all combine to support the **rural economy** at a time when wider trends, including the UK's withdrawal from the European Union present major challenges for the sector. This is regarded as a potential **significant positive cumulative** effect.

The combination of PDR for larger agricultural sheds and large polytunnel developments could lead to potential **significant cumulative impacts** on the **landscape**, particularly in areas designated for their landscape importance and in more prominent locations. It is likely that these cumulative effects will occur predominantly in the more productive arable areas of eastern Scotland which already accommodate intensive agriculture, however these developments could take place in any area, particularly as raised tables under polytunnels are not dependent on soil quality.

Large agricultural sheds and extensive areas of polytunnel could increase **flood risk** associated with surface water runoff, particularly in flood risk areas, although flood risk is an issue for all areas. This is regarded as a potential **significant negative cumulative effect**.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for agricultural development in combination with other development categories are discussed in Chapter 21.



## 8 Micro-renewables (domestic and non-domestic)

### Characteristics

Micro-renewable technologies or 'micro-renewables' produce heat (less than 45 kW) and / or electricity (less than 50 kW) from zero or low carbon source technologies. Examples of renewable sources include solar energy, wind energy, and biomass, energy can also be derived from the relatively consistent temperatures found in a body of water or the heat naturally present in the air or ground. Some micro-renewable technologies such as combined heat and power (CHP) systems may use fossil fuels, however, they are considered more efficient than conventional heating systems.

The types of micro-renewables to be considered in this report are as follows, with the particular usage context specified in brackets:

- **Free-standing wind turbine** (domestic and non-domestic) – a free-standing wind turbine is defined as a wind turbine which is not installed on a building. A wind turbine generates electrical energy as its blades are powered by the wind's kinetic energy.
- **Air source heat pump** (domestic and non-domestic) - Air source heat pumps (ASHP) transfer heat from the outside air to the interior of a building, or vice versa. ASHP are similar in appearance to air conditioning units as they use a refrigerant system consisting of a vapour compressor and a condenser to extract heat in one place and release it at another. In domestic heating use, the heat extracted by ASHP is used to power radiators, underfloor heating systems, or warm air convectors and hot water supply. ASHP are usually located at ground level immediately adjacent to a building, or at roof level.
- **Flues for biomass heating systems** (domestic and non-domestic) - Biomass heating systems generate energy through the combustion of natural products such as wood chips, pellets or logs. A biomass system usually consists of a biomass boiler, fuel storage, flue (or chimney), hydronic systems that deal with the distribution and release of the heat generated by the boiler and a central control device. The internal elements of biomass heating systems do not require planning permission; however, other controls apply in a smoke control area to equipment which is not exempted under section 21 of the Clean Air Act 1993<sup>67</sup>. However, some aspects of the overarching biomass heating system in which the boiler operates may be subject to planning restrictions. PDR apply to flues for biomass heating systems where they meet the criteria set out in *The Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Order 2009*<sup>68</sup>.

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<sup>67</sup> Clean Air Act 1993 [pdf]. Available at: <http://www.legislation.gov.uk/ukpga/1993/11/content>

<sup>68</sup> The Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Order 2009 (Scottish Statutory Instrument 2009/34)

- **Flue for CHP system** (domestic) – CHP systems simultaneously generate electricity and heat for water and space heating. CHP systems are highly efficient as they can recover the heat from the power generation process, especially in a domestic setting where there is no need for transmission lines. Being internal, they generally do not require planning permission. External flues may require planning permission and some PDR apply, unless they are powered by biomass, which could have the potential to have adverse effects on air quality particularly in Air Quality Management Areas (AQMA)<sup>69</sup>.
- **Solar panels** (domestic) - Solar PV panels silently convert sunlight to electrical energy. They generate direct current (DC) that is converted to alternating current (AC) to be used by the electricity grid. There are various forms of PV technology (thin film, and crystalline) however these provide the same basic function. Regardless of the PV configuration, inverter hardware and transformers are required to change the DC PV output to useable AC power for the grid. Solar thermal panels use sunlight to provide a heat source for hot water systems. They can comprise flat panels, similar in appearance to solar PV panels, or arrays of solar collector tubes.
- **Underground pipes** within the curtilage of a non-domestic building for ground and water source heat pumps – underground pipes are often defined as the pipes ancillary to the systems that they support e.g. biomass heating systems.
- **Non-domestic agricultural buildings/forestry/industrial buildings:** erection and/or extension of building or structure for energy from burning biomass, energy from anaerobic digestion or biomass or storing biomass (non-domestic) - Agricultural, industrial and forestry buildings or structures are often used for energy from burning biomass, energy from anaerobic digestion or biomass or storing biomass due to their large size.

### **Rationale for extending permitted development rights**

The micro-renewables sector is facing a number of pressures. With the Feed-in-Tariff (FiT) scheme due to end in 2019 and no clarity over whether it will continue or be replaced, investor confidence in the sector has fallen. The non-domestic Renewable Heat Incentive (RHI) scheme has also been amended to exclude; wood-fuel drying, and the drying, cleaning or processing of waste as eligible heat uses. This combination of impacts on support/incentives for the industry has resulted in subdued investment in the renewable energy sector. Therefore, the consultation comments highlighted that PDR for micro-renewables could help to re-energise the sector.

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<sup>69</sup> Scottish Government, 2008. *Permitted Development Rights for Domestic Microgeneration Equipment: Consultation Paper* [online]. Available at: <http://www.gov.scot/Publications/2008/03/04090052/10>

The consultation, *Places, people and planning: A consultation on the future of the Scottish planning system*<sup>70</sup> considered that there was scope to further remove certain applications for microgeneration equipment from the planning system.

In addition to this, the HoPS Scoping Paper<sup>71</sup> states that there is scope to further relax PDR to support modern technology such as micro-renewables.

For example there may be scope to relax PDR for micro-renewables with a particular focus on the restrictions within Conservation Areas and to and within the curtilage of Listed Buildings. It is acknowledged that any relaxation would have to be subject to certain conditions to ensure that amenity is preserved.

## **8.1 Free standing wind turbines (domestic)**

### **Characteristics**

A free-standing wind turbine is defined as a wind turbine which is not installed on a building. A wind turbine generates electrical energy as its blades are powered by the wind's kinetic energy<sup>72</sup>.

### **Existing permitted development rights**

All PDR relevant to free-standing wind turbines are contained in Class 6G which permits the installation, alteration or replacement of a free-standing micro wind turbine within the curtilage of a dwelling. If the free-standing wind turbine is used for domestic purposes it is classed as a permitted development if it is located outside a protected/designated area, situated more than 100 metres from the curtilage of another dwelling and if it is the only wind turbine within the curtilage of the dwelling in question. These PDR do not apply in Conservation Areas, World Heritage Site, SSSI or Sites of Archaeological Interest. Prior notification/prior approval requirements also apply to these PDR. There are currently no PDR for non-domestic wind turbines.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No change to PDR
- Extend existing PDR to Conservation Areas, World Heritage Site, SSSIs, Sites of Archaeological Interest and within the curtilage of a Category A Listed Building.

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<sup>70</sup> The Scottish Government, 2017. *Places, people and planning: A consultation on the future of the Scottish planning system* [pdf]. Edinburgh: The Scottish Government. Available at: <https://beta.gov.scot/publications/places-people-planning-consultation-future-scottish-planning-system/>

<sup>71</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

<sup>72</sup> The Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland Amendment Order 2010 (Scottish Statutory Instrument 2010/27)

- Allow more than one turbine within the curtilage of a dwelling in all areas, including where PDR are currently restricted.
- Relax 100m distance to neighbouring property in all areas including where PDR are currently restricted.

## Sustainability appraisal findings

### Key issues

Potential significant negative effects on sites designated for their cultural heritage significance. Effects relating to setting are reversible, but direct effects on physical assets are permanent;

Minor positive long term effects on climate change, air quality, material assets and sustainable economic growth;

Minor negative temporary and permanent effects on biodiversity, and undesignated cultural heritage;

Mixed long term effects in relation to social, population and human health.

**Minor positive** effects are anticipated in relation to each proposed change for **climatic factors, air quality, material assets** and the **economy**. Generally, this is because of the effect of wind turbines in generating renewable energy, thereby reducing reliance on fossil fuels, which can help to reduce particulate emissions and improve air quality. Renewable energy generation utilises fewer resources, helps to provide a more robust electricity generation / distribution network and provide for jobs within a relatively new sector. Although the proposed changes are likely to increase the uptake and provision of turbines for micro-generation, the effects are anticipated to remain minor positive due to the still relatively low uptake.

**Minor negative** effects are anticipated in relation to **biodiversity** due to the potential for wind turbines to result in bird or bat strike<sup>73</sup>. The significance of the effects is however uncertain because the level of uptake as a result of the proposed changes is not known, and because the characteristics of each site will vary.

**Minor negative** effects are anticipated in relation to **cultural heritage**. This is due to the potential for developments to affect the setting of designated heritage assets and also the setting and physical extent of undesignated heritage assets. Each of the proposed changes would allow the provision of micro-turbines in areas designated for their historical importance, such as Conservation Areas, World Heritage Site, Sites of Archaeological Interest and within the curtilage of a Category A Listed Building, leading to potential **significant negative** effects in these locations. This is uncertain however as it depends on the specific context of each site.

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<sup>73</sup> Research undertaken at Stirling University and the University of Exeter identify the risk of bat strike. see <https://www.stir.ac.uk/news/2014/12/wind-turbine-warning-for-wildlife/index.html>, also <https://ore.exeter.ac.uk/repository/bitstream/handle/10871/22087/RichardsonS.pdf?sequence=1>

**Mixed effects** are anticipated in relation to social, population and human health, specifically health and quality of life and improving the living environment of people and communities. The proposed changes are anticipated to result in **minor positive** effects, by helping to decentralise electricity generation and therefore increase the reliability of electricity supply. The proposed changes will make it easier to develop micro-turbines, thereby resulting in increased beneficial effects. However, relaxing the PDR to allow the provision of turbines closer to other dwelling houses may result in **minor negative** but local effects on neighbours. Such effects are uncertain as they depend on the specific context of each site.

Negligible effects are anticipated in relation to Water and Soils.

### **Mitigation of negative effects**

Retain prior notification/prior approval in respect of the siting and external appearance of proposed wind turbines.

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained. Include size/scale thresholds and/or exclusion zones in the vicinity of aerodrome or technical sites where PDR would not apply.

## **8.2 Free standing wind turbines (non-domestic)**

### **Characteristics**

A free-standing wind turbine is defined as a wind turbine which is not installed on a building. A wind turbine generates electrical energy as its blades are powered by the wind's kinetic energy.

### **Existing permitted development rights**

There are currently no PDR for the installation, alteration or replacement of a non-domestic free-standing wind turbine.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No change to PDR
- Introducing PDR to non-designated areas
- Introducing PDR in Natura sites, National Scenic Areas, National Parks Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Site, SSSI, within the setting of a Category A Listed Building, within the setting of a Scheduled Monument.

## Sustainability appraisal findings

### Key issues

Potential significant negative effects on sites designated for their cultural heritage or landscape significance, with reversible effects on the setting of cultural heritage and landscape, but permanent effects on physical cultural heritage assets;

Minor long term positive effects on climate change, air quality, material assets and sustainable economic growth;

Minor negative effects on biodiversity, undesignated cultural heritage, the operation of aerodrome or technical sites;

Mixed long term effects in relation to social, population and human health.

Compared to the current situation – which is that there are no PDR, the proposed changes are anticipated to result in **minor positive effects** in relation to **climatic factors, air quality, material assets and economy**. Generally, this is because of the effect of wind turbines in generating renewable energy, thereby reducing reliance on fossil fuels, which can help to reduce particulate emissions and improve air quality. Renewable energy generation utilises fewer resources, helps to provide a more robust electricity generation / distribution network and provide for jobs within a relatively new sector. The proposed changes are likely to increase the uptake and provision of turbines for micro-generation; the effects are anticipated to be minor positive due to the relatively low uptake anticipated. The significance of the effects however is uncertain because the level of uptake of wind turbines is unknown.

The current situation, which requires planning permission for such developments, results in a level of scrutiny of developments. The proposals to create PDR may remove a level of scrutiny, potentially resulting in adverse effects from bird and bat strike, affecting flight radar systems or providing shadow flicker or noise emissions. As such it is considered that **minor negative effects** may arise from the proposed changes in relation to **Social, population and human health** (health and quality of life and improving the living environment of people and communities). The **significance of the effects however is uncertain** because this will depend on the specific site context where the non-domestic micro-wind turbines are constructed. It should be noted that **some minor positive effects** may occur in relation to **community benefits** from more reliable power sources and potential income streams.

The current situation, whereby planning permission is required for non-domestic micro-wind turbines, provides for a level of scrutiny for such developments. The proposal to allow for some non-domestic micro-wind turbines to be constructed without the requirement for planning permission has the potential to affect culturally important locations and sensitive landscapes. Given the proposals are to potentially allow micro-wind turbines in some designated areas, some potential **significant negative effects** are anticipated in relation to **cultural heritage and landscape and geodiversity**. These effects are **uncertain** at present as they will depend on the specific siting and design of the turbines.

Other sustainability impacts are considered to be negligible or unlikely.

## **Mitigation of negative effects**

To put in place a prior notification/prior approval mechanism in respect of the siting and external appearance of proposed wind turbines, particularly in areas designated for their landscape or cultural heritage importance

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

Include size/scale thresholds and/or exclusion zones in the vicinity of aerodrome or technical sites where PDR would not apply

### **8.3 Air source heat pumps - domestic**

#### **Characteristics**

ASHP transfer heat from the outside air to the interior of a building, or vice versa. ASHP are similar in appearance to air conditioning units as they use a refrigerant system consisting of a vapour compressor and a condenser to extract heat in one place and release it at another. In domestic heating use, the heat extracted by ASHP is used to power radiators, underfloor heating systems, or warm air convectors and heat water. ASHP are usually located at ground level immediately adjacent to a building, or at roof level.

#### **Existing permitted development rights**

Prior to March 2016, PDR did not apply if the installation was within 100 metres of another residential building amongst other requirements. As of March 2016, ASHP are classified as a permitted development provided it meets a number of conditions. The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2016 states that the ASHP must only be used to provide domestic heating. Only one such pump is permitted development on a dwelling or within its curtilage (e.g. garden). If it is within the curtilage it must not be higher than 3 metres, and not forward of a wall forming part of the principal elevation or side elevation where that elevation fronts a road. If it is actually on a dwelling, it must not protrude more than 1 metre from the wall, roof plane, roof ridge or chimney, and in Conservation Areas is only permitted if at ground level and on a rear elevation. The installation of ASHP must also comply with the MCS 020 Planning Standard or equivalent. The MCS 020 Planning Standards sets out a number of procedures that installers should follow to ensure that noise impacts are acceptable and that the right measures are taken to minimise potential visual impacts. The installation of ASHP is not permitted within a World Heritage Site or the curtilage of a Listed Building. There is currently no specific permitted development for non-domestic ASHP.

#### **Potential changes to permitted development rights**

The SA has considered the following:

- No change in PDR
- Extend existing PDR to World Heritage Sites and within the curtilage of a Listed Building.

- Relax current location restrictions on a dwelling and in the curtilage of a building in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas.
- Increase the number of ASHP allowed within the curtilage of a building (particularly for flats/housing associations) in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas.

## Sustainability appraisal findings

### Key issues

Potential significant negative effects on cultural heritage, impacts on setting may be reversible, however physical impacts may be permanent;

Minor positive long term effects in terms of reducing greenhouse gas emissions, sustainable economic growth, smarter operation of the planning system, rural communities, material assets, air quality, health and quality of life and providing a healthy living environment.

Current restrictions on PDR help ensure that the development to provide new ASHP does not have an adverse effect on designated heritage assets. Extending existing PDR to World Heritage Sites and within the curtilage of a Listed Building; relaxing the current location restrictions of ASHP on dwellings; and increasing the number of permitted ASHP allowed within the curtilage of a building could result in potential **significant negative** effects on **cultural heritage**. Impacts on setting may be reversible, but physical impacts may be permanent.

It is expected that all the potential changes in PDR would reduce the number of planning applications (although the number of applications which currently relate to this type of development is unknown). A **minor positive** effect has therefore been recorded for all of the proposed changes in relation to this element of the SA objective of economy.

By supporting the uptake of renewable technologies and helping to underpin Scotland's sustainable economic development, all proposed changes to PDR will help promote **sustainable economic growth** and transition to a low carbon economy over the long term. A potential beneficial effect is also expected in relation to **rural communities** given that ASHP can help provide a relatively stable source of renewable energy. **Minor positive** effects have therefore been recorded for all options in relation to these elements of the economy which have been considered.

**Minor positive** effects are anticipated in relation to the SA objective of **climatic factors**, with an uptake in development of ASHP increasing the supply of low carbon energy. The effect identified in relation to material assets is likely to be similarly positive, both with long term effects.

Reducing dependency on fossil fuels in Scotland and increasing the uptake of renewable energy technologies would likely result for all options considered and therefore a **minor positive** effect is recorded in relation to **air quality**.



**Minor positive** long term effects are also likely in relation to **health and quality of life** and providing a **healthy living environment**. The development of ASHPs is likely to help promote **air quality and amenity issues** which are likely to affect air quality within Scotland.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Consider a prior notification/prior approval scheme within World Heritage Sites and within the curtilage of a Listed Building to ensure that potential impacts on cultural heritage are identified and addressed.

## **8.4 Air source heat pumps – non-domestic**

### **Characteristics**

ASHP transfer heat from the outside air to the interior of a building, or vice versa. ASHP are similar in appearance to air conditioning units as they use a refrigerant system consisting of a vapour compressor and a condenser to extract heat in one place and release it at another. In domestic heating use, the heat extracted by ASHP is used to power radiators, underfloor heating systems, or warm air convectors and heat water. ASHP are usually located at ground level immediately adjacent to a building, or at roof level.

### **Existing permitted development rights**

There are currently no PDR for the installation, alteration or replacement of non-domestic ASHP.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No change in PDR
- Introduce PDR for non-domestic ASHP in non-designated areas.
- Introduce PDR in Natura sites, National Scenic Areas, National Parks Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, SSSI, within the setting of a Category A Listed Building, within the setting of a Scheduled Monument.

## Sustainability appraisal findings

### Key issues

Potential significant adverse effects in areas designated for their cultural heritage importance, including reversible effects on setting, and permanent effects on structures.

Minor positive long term effects in terms of climate change, material assets, economy and air quality;

Minor negative but reversible effects in terms of landscape effects.

Introducing PDR for non-domestic ASHP could result in uncontrolled development which could be to the detriment of the integrity and the setting of heritage assets, as there would no longer be consideration through the planning system. These effects include visual impacts on the setting of heritage assets, which are reversible, as well as permanent physical damage resulting from the attachment of equipment to historic buildings and structures. Therefore, an **uncertain significant** effect has been recorded in relation to **Cultural Heritage** for these options, though this is only likely to affect the most sensitive locations such as World Heritage Sites, the curtilage of listed buildings and Conservation Areas.

ASHP development would support a low-carbon economy and would help to promote the uptake of this type of renewables technology across the country. Introducing PDR is expected to have a long term **minor positive** effect on **climatic factors** given that the change which would result would extend beyond designated areas. The effect identified in relation to **Material Assets** is likely to be similarly **minor positive** as all options would help to promote the further uptake of ASHP.

Introducing PDR for non-domestic ASHP is expected to have a **minor positive** effect on the **economy** by indirectly supporting the uptake of renewable technologies and helping to underpin Scotland's sustainable economic development. Furthermore, it is expected that introducing PDR for non-domestic ASHP would help to reduce the overall number of applications which are required to be dealt with through the planning system although the specific number of applications which currently relate to this this type of development is unknown.

Reducing dependency on fossil fuels in Scotland and increasing the uptake of renewable energy technologies would have a **minor positive** effect on air quality.

Mixed minor effects are identified for social, population and human health reflecting the role of ASHP in improving air quality, but also the local impacts on amenity from noise, particularly where residential and commercial properties are in close proximity.

Other sustainability impacts are considered to be negligible or unlikely.

### Mitigation of negative effects

Restrict PDR in areas designated for their cultural heritage importance.

## **8.5 Domestic solar panels (on dwellinghouses)**

### **Characteristics**

Solar PV panels silently convert sunlight to electrical energy. They generate DC that is converted to AC to be used by the electricity grid. There are various forms of PV technology (thin film, and crystalline) however these provide the same basic function. Regardless of the PV configuration, inverter hardware and transformers are required to change the DC PV output to useable AC power for the grid. Solar thermal panels use sunlight to provide a heat source for hot water systems. They can comprise flat panels, similar in appearance to solar PV panels, or arrays of solar collector tubes.

### **Existing permitted development rights**

As defined within The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2011 the installation of solar panels on domestic buildings is permitted, where they meet certain criteria, within the following classes:

- Class 2B – this class covers the installation of solar panels on a dwellinghouse. In order to be classified as a permitted development, the solar panels must not protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building. PDR do not cover developments on balconies. Moreover, the materials used must be as similar in appearance to the existing roof covering as is reasonably practicable. However, Class 2B PDR do not apply in a Conservation Area or within the curtilage of a listed building ( Listed Building consent is required if the proposed development affects a Listed Building.
- Class 3B – this class includes any building, engineering, installation or other operation which includes free standing solar panels in the curtilage of a dwellinghouse.
- Class 4A – this class specifies PDR for solar panels installed on a building containing one or more flats. In order to be classified as a permitted development, the solar panels must not protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building. The same sort of restrictions apply as for Class 2B.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No change to PDR
- Extend existing PDR into Conservation Areas.
- Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs.
- Allow development on balconies in Conservation Areas, Listed Buildings and areas outside CAs and the curtilage of Listed Buildings.

## Sustainability appraisal findings

### Key issues

Potential significant negative effects on cultural heritage, including reversible effects on setting and permanent effects on physical structures, and reversible effects on safety at aerodrome or technical sites;

Minor positive long term effects in terms of climate change, material assets, air quality, resourcing the planning system, sustainable economic growth and rural development;

Minor negative but reversible effects in terms of landscape.

Current restrictions on PDR help ensure that the development of domestic solar panels does not have an adverse effect on heritage assets, including the appearance of individual buildings and wider historic townscape. Extending existing PDR to Conservation Areas could result in the deployment of solar panels on prominent roofs within historic townscapes, resulting in potential for **significant adverse** impacts. This could be exacerbated if PDR were simultaneously extended to allow panels that protrude by more than one metre or that are located on balconies. The latter changes could also affect the setting and character of undesignated historic assets outwith Conservation Areas. Impacts on setting would be reversible, however impacts on physical structures may be permanent.

Whilst PDR for solar panels in the vicinity of aerodromes are already in place in other parts of the UK,<sup>74</sup> concerns were raised by one consultee that the installation of solar panels in the vicinity of aerodrome or technical sites could individually or cumulatively (reflecting the likely scale of domestic solar installations) create a source of glint and glare, affecting aircraft safety. This is a potentially **significant adverse** impact associated with existing PDR and any extension to PDR, however impacts are reversible.

**Minor positive** effects are anticipated from both the existing PDR and each of the proposed changes in relation to the SA objectives of **climatic factors** and **material assets**. These effects have been identified given that solar PV and thermal installations are a low-carbon and renewable energy source and the current and extended rights would encourage take up among householders.

Measures to support the take up of domestic solar panels would also help reduce dependence on fossil fuels which can affect **air quality** as a result of their combustion and exhaust gases from power stations, vehicles and similar sources. This is likely to result in **minor positive** effects.

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<sup>74</sup> The Town and Country Planning (General Permitted Development) (England) Order 2015 Available at: [http://www.legislation.gov.uk/ukxi/2015/596/pdfs/ukxi\\_20150596\\_en.pdf](http://www.legislation.gov.uk/ukxi/2015/596/pdfs/ukxi_20150596_en.pdf) Requires determination of prior approval particularly in relation to the impact of glare on neighbouring uses of land

While most domestic solar installations are likely to be in built up areas, there is potential for some **landscape** impacts where solar panels affect the appearance of vernacular or prominent buildings or where they create a source of glare and reflection in the landscape. This is a potential **minor adverse** effect.

The proposed changes would help to reduce the overall number of planning applications for solar panels, so uncertain **minor positive** effects have been recorded in terms of efficient use of the **planning system**.

By supporting the further development of domestic scale solar energy development, existing PDR and proposed changes to PDR encourage the sustainable use of resources, resulting in **minor positive** effects in terms of **material assets**. It would also support the objective of promoting **sustainable economic growth** and supporting **rural development**, resulting in potential **minor positive** effects.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Limit the extension of PDR within Conservation Areas, for example by only allowing installation of solar panels on roofs facing away from, or not visible from, public roads.
- Consider requiring prior notification/prior approval within Conservation Areas so that potentially damaging installations can be identified and avoided. However, this would reduce or limit the positive effects identified in relation to more efficient use of the planning system, material assets and the economy. Consider restricting PDR for domestic solar panels in the vicinity of aerodrome or technical sites.

## **8.6 Domestic solar panels (flats)**

### **Characteristics**

Solar PV panels silently convert sunlight to electrical energy. They generate direct current (DC) that is converted to alternating current (AC) to be used by the electricity grid. There are various forms of PV technology (thin film, and crystalline) however these provide the same basic function. Regardless of the PV configuration, inverter hardware and transformers are required to change the DC PV output to useable AC power for the grid. Solar thermal panels use sunlight to provide a heat source for hot water systems. They can comprise flat panels, similar in appearance to solar PV panels, or arrays of solar collector tubes.

### **Existing permitted development rights**

As defined within The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2011, the installation of solar panels on domestic buildings is permitted, where they meet certain criteria, within the following class:

- Class 4A – this class specifies PDR for solar panels installed on a building containing one or more flats. In order to be classified as a permitted development, the solar panels must not protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building.

## Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- No change to PDR.
- Extend existing PDR to Conservation Areas.
- Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside Conservation Areas.
- Allow development on balconies in Conservation Areas, Listed Buildings and areas outside Conservation Areas and Listed Buildings.

## Sustainability appraisal findings

### Key issues

Potential significant but reversible negative effects on cultural heritage and safety at aerodrome or technical sites;

Minor positive long term effects in terms of climate change, material assets, air quality, resourcing the planning system, sustainable economic growth and rural development;

Minor negative but reversible effects in terms of people's living environment and effects on landscape.

Current restrictions on PDR help ensure that the development of domestic solar panels does not have an adverse effect on heritage assets, including the appearance of individual buildings and wider historic townscape. Extending existing PDR to flats within Conservation Areas could result in the deployment of solar panels on prominent roofs within historic townscapes, resulting in potential for **significant adverse** but reversible impacts. This could be exacerbated if PDR were simultaneously extended to allow panels that protrude by more than a metre or that are located on balconies. The latter changes could also affect the setting and character of undesignated historic assets outwith Conservation Areas.

Concerns were raised by one consultee that the installation of solar panels in the vicinity of aerodrome or technical sites could cumulatively create a source of glare, affecting aircraft safety. This is a potentially **significant adverse** but reversible impact associated with existing PDR and any extension to PDR.

**Minor positive** long term effects are anticipated from both the existing PDR and each of the proposed changes in relation to the SA objectives of **climatic factors** and **material assets**. These effects have been identified given that solar PV and thermal installations are a low-carbon and renewable energy source and the current and extended rights would allow for encourage take up among householders.

Measures to support the take up of domestic solar panels would also help reduce dependence on fossil fuels which can affect **air quality** as a result of their combustion

and exhaust gases from power stations, vehicles and similar sources. This is likely to result in long term **minor positive** effects.

While most domestic solar installations are likely to be in built up areas, there is potential for some **landscape impacts** where solar panels affect the appearance of vernacular or prominent buildings or where they create a source of glare and reflection in the landscape. This is a potential **minor adverse** but reversible effect.

Relaxation of PDR to allow solar installations to take place on balconies or protrude more than a metre from the building could impact on the **living environment** of the occupiers of neighbouring flats. This could result in **minor adverse** effects at a local level.

The proposed changes would help to reduce the overall number of planning applications for solar panels, so uncertain **minor positive** effects have been recorded in terms of efficient use of the **planning system**.

By supporting the further development of domestic scale solar energy development, existing PDR and proposed changes to PDR encourage the sustainable use of resources, individually and cumulatively resulting in **minor positive** effects in terms of **material assets**. It would also support the objective of promoting **sustainable economic growth** and (to a lesser extent, given that most flats are located in urban areas) supporting **rural development**, resulting in potential **minor positive** effects.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Limit the extension of PDR within Conservation Areas, for example by only allowing installation of solar panels on roofs facing away from, or not visible from, public roads.
- Consider requiring prior notification/prior approval within Conservation Areas so that potentially damaging installations can be identified and avoided, although this would reduce positive benefits for sustainable economic growth.
- Consider restricting PDR for domestic solar panels in the vicinity of aerodrome or technical sites.

## **8.7 Underground pipes within the curtilage of a non-domestic building for ground and water source heat pumps**

### **Characteristics**

Underground pipes within the curtilage of a non-domestic building for ground and water source heat pumps – underground pipes are often defined as the pipes ancillary to the systems that they support e.g. biomass heating systems.

### **Existing permitted development rights**

Underground pipes for ground and water source heat pumps are classified as a permitted development under certain conditions – Class 6I. The PDR apply to the curtilage of non-domestic buildings. The surface area of land under which the

installation, alteration or replacement of any underground pipes must not exceed 0.5 hectares. Additionally, underground pipes are currently not permitted within a World Heritage Site, the curtilage of a Listed Building, a site of archaeological interest, a Historic Garden and Designed Landscape.

### Potential changes to permitted development rights

The SA has considered the following:

- No change to PDR.
- Extend existing PDR into World Heritage Sites, within the curtilage of a Listed Building, a site of archaeological interest, a Historic Garden and Designed Landscape.

### Sustainability appraisal findings

#### Key issues

Potential significant permanent negative effects on cultural heritage;

Minor positive long term effects in terms of climate change, material assets, air quality, resourcing the planning system, sustainable economic growth, social, population and human health and supporting community cohesion and vitality;

Minor localised but permanent negative effects on water and soil.

Current restrictions on PDR help ensure that the development of underground pipes does not have an adverse effect on designated and non-designated heritage assets as well as areas of archaeological interest. Extending existing PDR into World Heritage Sites, within the curtilage of a Listed Building, a site of archaeological interest, a historic garden and designed landscape could result in significant adverse effects on cultural heritage as a result of the need for excavation.

The proposed changes would help to reduce the overall number of planning applications for underground pipes associated with renewable energy installations, so uncertain **minor positive** effects have been recorded in terms of efficient use of the **planning system**. It is anticipated, however, that the number of such applications within World Heritage Sites, the curtilage of Listed Buildings, Sites of Archaeological Interest and Historic Gardens and Designed Landscapes is relatively limited.

By indirectly supporting the uptake of renewable technologies the proposed changes to PDR are expected to help promote sustainable economic growth through transition to a low carbon economy and also support rural development in a similar manner. **Minor positive** effects have therefore been recorded for both options in relation to these elements of the **economy** which have been considered.

**Minor positive** effects are anticipated from the proposed changes in relation to the SA objectives of **climatic factors** and **material assets**, reflecting the support for low carbon renewable energy technologies. There are also likely to be **minor positive** effects with respect to **air quality**, though if the installation of underground pipes is



associated with biomass energy there could be localised impacts on air quality, particularly within or close to AQMA.

Underground pipes which form part of local or community heat networks could result in **minor positive** effects in relation to **social, population and human health** and supporting **community cohesion and vitality**.

Excavation to install underground pipes could result in **minor negative** effects on **water** and **soil**, though this will depend on the scale of development and the nature of the site in question.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Consider requiring prior notification/prior approval in World Heritage Sites, within the curtilage of a Listed Building, Sites of Archaeological Interest, Historic Gardens and Designed Landscapes so that potentially damaging developments can be identified and avoided. However, this would reduce positive effects for the economy and benefits to streamlining the planning system.

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained

## **8.8 Agricultural buildings – for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass**

### **Characteristics**

Agricultural buildings or structures are sometimes used to house biomass or biogas (anaerobic digestion) plants or to store biomass prior to combustion or distribution.

### **Existing permitted development rights**

Existing PDR allow for the erection or extension of non-residential agricultural buildings, structures or flues for the purposes of producing energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass; unless the development:

- would be carried out on agricultural land less than 0.4 hectares;
- would cover more than 465 square metres;
- would exceed 3 metres in height if located within 3 kilometres of the perimeter of an aerodrome;
- would exceed 12 metres in height if located more than 3 kilometres from the perimeter of an aerodrome;
- would generate more than 50 kW (electricity) and 45 kW (thermal);
- would be within 25 metres of a classified road; or

- would be located within an AQMA.

PDR also provide for a ‘cordon sanitaire’ which excludes permitted development for the construction, extension or use of buildings within 400 metres of a ‘protected building’ to minimise the potential for future problems of nuisance.

All such developments are subject to the need for prior notification/prior approval by the planning authority in respect of the siting, design and external appearance of the proposed building, structure or flue. The prior notification/prior approval procedure applies to the erection of a building, structure or flue or significant alteration of these.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No change in PDR.
- Allow schemes to generate more than 45/50KW outside AQMA.
- Increase in size beyond 465 square metres in areas outside AQMAs.
- Remove restriction on height (within 3km from the perimeter of an aerodrome) in areas outside AQMAs.
- Remove restriction on height (more than 3km from the perimeter of an aerodrome) in areas outside AQMAs.
- Remove restriction on distance to a classified road in areas outside AQMAs.
- Remove restrictions on distance from protected building (‘cordon sanitaire’) in areas outside AQMAs.

### **Sustainability appraisal findings**

#### **Key issues**

Potential significant adverse effects on safety at aerodrome or technical sites where tall buildings are permitted within 3km;

Minor long term positive effects in terms of climate change, water quality, sustainable economic development, material assets and rural development;

Mixed minor permanent effects on soil and landscape for larger, taller buildings;

Minor negative long term effects in terms of biodiversity, air and water.

Potential **significant negative** effects may arise in relation to **social, population and human health** from the potential change to allow buildings over 3m in height within 3 km of an aerodrome, due to the potential for large buildings and tall structures to affect radar and flight navigation.

By supporting the further development of renewable energy production, the changes in PDR will have **minor positive** effects on the aim of reducing **greenhouse gas**

**emissions.** This would be greater for larger schemes (e.g. above the 45KW electricity or 50 KW heat thresholds or where storage of larger amounts of biomass fuel can be accommodated), though the contribution at a national scale is unlikely to more than minor.

The proposed changes in PDR are likely to support an increase in anaerobic digestion plants. By creating a demand for farm wastes, this could help reduce the risk that slurry and other contaminants will impact on local watercourses. This is regarded as a **minor positive** effect in terms of the **water environment**.

Proposed changes to PDR will support rural businesses, adding new income streams and adding value to materials that would previously have been regarded as waste. This will result in **minor positive** effects in terms of **sustainable economic development, material assets** and **rural development**.

Effects on **soils** are likely to be **minor and mixed**. Proposed changes to PDR could result in the loss of valuable soil (negative effect), the re-use of vacant previously developed land (positive effect) or could provide opportunities for soil improvement (positive effect).

There could be a similar mix of **minor positive and minor negative** effects with respect to **landscape**. Changes in PDR may support the redevelopment of previously developed sites, the construction of new buildings within existing clusters of farm buildings or could introduce new farm buildings into the landscape. In most cases these will not differ significantly from conventional farm buildings, so the effects are likely to be similar to those associated with existing farming.

Potential **minor negative** effects have been identified with respect to **biodiversity, flora and fauna, air and water** (specifically flood risk) since the development of new buildings could result in the loss or fragmentation of habitats, additional emissions to air as a result of combustion and the introduction of new hard surfaces which could increase surface water run-off. The extent of any effect to a designated area will be limited by the provision of relevant wildlife protection legislation, and in sensitive areas and for developments over 0.5 hectares, EIA regulations may also ensure the effects are identified and addressed, where relevant.

The requirement for prior notification/prior approval by the planning authority in respect of the siting, design and external appearance of the proposed building, structure or flue means that there are unlikely to be significant adverse effects in relation to cultural heritage, social, population and human health (support community cohesion and vitality and support access to education and training).

### **Mitigation of negative effects**

- The proposed change to allow PDR for non-domestic agricultural buildings over 3m in height within 3km of aerodrome or technical sites is considered to potentially result in significant negative effects due to impacts on radar. It is recommended that an extension to the existing prior notification/prior approval mechanism could be employed to ensure proposed developments are acceptable. Alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed.

- In order to reduce potential negative effects on rural landscapes, it may be appropriate to restrict the erection of new agricultural buildings to locations which are close to existing buildings, and also require the building materials and vernacular to be appropriate in the context of agricultural buildings.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.
- Restrict development in areas of high flood risk or require the use of sustainable drainage systems to minimise increases in surface water run-off.

### **8.9 Forestry buildings (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)**

#### **Characteristics**

Forestry buildings or structures are sometimes used to house biomass or biogas (anaerobic digestion) plants or to store biomass prior to combustion or distribution.

#### **Existing permitted development rights**

The existing PDR allow for erection or extension of forestry buildings for the purposes of producing energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass; unless the development:

- would exceed 3 metres in height if located within 3 kilometres of the perimeter of an aerodrome;
- would be within 25m of a classified road;
- would be within 400m of the curtilage of a protected building ;
- would generate more than 50 kW (electricity) and 45 kW (thermal);
- would require more than one flue to be connected to biomass equipment;
- the flue forming part of the biomass equipment would be either greater in diameter than 500mm or greater in diameter than the existing flue, whichever is the greater (in case of replacement or alteration);
- would be located within an AQMA.

#### **Potential changes to permitted development rights**

The SA has considered the following:

- No change in PDR
- Allow schemes to produce greater than 45/50KW outside AQMA.
- Remove restriction on height (within 3km from the perimeter of an aerodrome) in areas outside AQMAs.

- Remove restriction on the number of flues allowed to be connected to biomass equipment in areas outside AQMAs.
- Remove restrictions on diameter (new) of the flue in areas outside AQMAs.
- Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs.
- Remove restrictions on proximity to a classified road in areas outside AQMAs.

## Sustainability appraisal findings

### Key issues

Potential significant adverse effects on safety at aerodrome or technical sites where tall buildings are permitted within 3km;

Minor long term positive effects in terms of climate change, water quality, sustainable economic development, material assets and rural development;

Mixed minor permanent effects on soil and landscape for larger, taller buildings;

Minor negative long term effects in terms of biodiversity air and water.

Potential **significant negative** effects may arise in relation to **social, population and human health** from the potential change to allow buildings over 3m in height within 3 km of an aerodrome, due to the potential for large buildings and tall structures to affect radar and flight navigation.

Proposed changes to PDR will support rural businesses, adding new income streams and adding value to materials that would previously have been regarded as waste. This will result in **minor positive** effects in terms of **sustainable economic development, material assets** and **rural development**.

By supporting the further development of renewable energy production, the changes in PDR will have **minor positive** effects on the aim of reducing **greenhouse gas emissions**. This would be greater for larger schemes (e.g. above the 45KW electricity or 50 KW heat thresholds or where storage of larger amounts of biomass fuel can be accommodated), though the contribution at a national scale is unlikely to more than minor.

There could be a similar mix of **minor positive and minor negative** effects with respect to **landscape** effects. Changes in PDR may support the redevelopment of previously developed sites, the construction of new buildings within existing clusters of farm buildings or could introduce new farm buildings into the landscape. In most cases these will not differ significantly from conventional forestry or farm buildings, so the effects are likely to be similar to those associated with existing rural activities.

The requirement for prior notification/prior approval by the planning authority in respect of the siting, design and external appearance of the proposed building, structure or flue means that there are unlikely to be significant adverse effects in relation to cultural

heritage, social, population and human health (support community cohesion and vitality and support access to education and training).

Potential **minor negative** effects have been identified with respect to **biodiversity, flora and fauna, air, and water** (specifically flood risk) since the development of new buildings could result in the loss or fragmentation of habitats, additional emissions to air as a result of combustion and the introduction of new hard surfaces which could increase surface water run-off. The extent of any effect to a designated area will be limited by the provision of relevant wildlife protection legislation<sup>75</sup>, and in sensitive areas and for developments over 0.5 hectares, EIA 2017 Regulations may also ensure the effects are identified and addressed, where relevant.

Effects on **soils** are likely to be **minor and mixed**. Proposed changes to PDR could result in the loss of valuable soil (negative effect), the re-use of vacant previously developed land (positive effect) or could provide opportunities for soil improvement (positive effect).

### **Mitigation of negative effects**

The proposed change to allow PDR for forestry buildings over 3m in height within 3km of aerodrome or technical sites is considered to potentially result in **significant negative** effects due to impacts on radar. It is recommended that an extension to the existing prior notification/prior approval mechanism could be employed to ensure proposed developments are acceptable. Alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed.

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

## **8.10 Industrial buildings (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)**

### **Characteristics**

Industrial buildings or structures are sometimes used to house biomass or biogas (anaerobic digestion) plants or to store biomass prior to combustion or distribution. While agricultural and forestry buildings are most likely to be in rural locations, industrial facilities can be found in rural or urban settings.

### **Existing permitted development rights**

Existing PDR allow for the alteration or extension of non-residential industrial or warehouse buildings, structures or flues for the purposes of producing energy from burning biomass or storing biomass; unless:

- the height of the building, structure or flue as extended or altered would exceed the height of the original building, structure or flue;

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<sup>75</sup> Nature Conservation (Scotland) Act 2004. Conservation (Natural Habitats, &c.) Regulations 1994

- the floor area of the original building would be exceeded by more than 25% or 1,000 square metres whichever is the greater;
- the external appearance of the premises of the undertaking concerned would be materially affected;
- any part of the development would be carried out within 5m of any boundary of the curtilage of the premises;
- would generate more than 50 kW (electricity) and 45 kW (thermal);
- would require more than one flue to be connected to biomass equipment;
- the flue forming part of the biomass equipment would be either greater in diameter than 500mm or greater in diameter than the existing flue, whichever is the greater (in case of replacement or alteration);
- would be located within an AQMA;
- the development would lead to a reduction in the space available for the parking or turning of vehicles.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No change in PDR.
- Allow schemes to produce more than 50/45kW in areas outside AQMAs
- Remove restriction on height in relation to height of original building in areas outside AQMAs
- Remove restriction on footprint relative to size of original building in areas outside AQMAs
- Remove restriction on footprint relative to the provision of parking space in areas outside AQMAs
- Remove restriction on number of flues to be connected to biomass equipment in areas outside AQMAs
- Remove restrictions on diameter (new) of the flue in areas outside AQMAs
- Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs
- Remove restrictions on proximity to any boundary of the curtilage of the premises in areas outside AQMAs

### **Sustainability appraisal findings**

<b>Key issues</b>
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Potential significant adverse effects on safety at aerodrome or technical sites where tall buildings are permitted within 3km;

Potential significant permanent adverse effects on cultural heritage and landscape;

Minor positive long term effects in terms of climate change, water quality, sustainable economic development and material assets;

Mixed minor permanent effects on soil;

Minor negative permanent effects in terms of biodiversity air and water.

The proposal for PDR to allow larger and taller for industrial buildings could result in potential **significant negative** effects within 3km of aerodrome or technical sites due to impacts on radar. It is recommended that the prior notification/prior approval process could be employed to ensure proposed developments are acceptable.

Potential **significant negative** effects could result from the proposed change to remove the restriction of floor space and allow an increase in height. At present this is restricted to up to 25% of the existing floor space or 1,000 square metres (whichever is the greater). Currently there is no PDR for increasing height. PDR for extensions which go beyond the current provisions could result in buildings which are significantly larger and which could harm the character of their immediate surroundings. This therefore has the potential to result in significant negative effects in relation to cultural heritage and landscape.

**Minor positive** effects are anticipated from the proposed changes in relation to material assets and economy. This is due to the fact that the rights simplify the creation of opportunities for business, and also promote the prudent use of natural resources in accordance with the waste and energy hierarchies.

By supporting the further development of renewable energy production, the changes in PDR will have **minor positive** effects on the aim of reducing **greenhouse gas emissions**. This would be greater for larger schemes (e.g. above the 45KW electricity or 50 KW heat thresholds or where storage of larger amounts of biomass fuel can be accommodated), though the contribution at a national scale is unlikely to more than minor.

Potential **minor negative** effects have been identified with respect to **biodiversity, flora and fauna, air, and water** (specifically flood risk) since the development of new buildings could result in the loss or fragmentation of habitats, additional emissions to air as a result of combustion and the introduction of new hard surfaces which could increase surface water run-off. The extent of any effect to a designated area will be limited by the provision of relevant wildlife protection legislation, and in sensitive areas and for developments over 0.5 hectares, EIA regulations may also ensure the effects are identified and addressed, where relevant. Impacts on air will depend on the location of any combustion plant with respect to existing AQMAs or areas with poor air quality.

Effects on **soils** are likely to be **minor and mixed**. Proposed changes to PDR could result in the loss of valuable soil (negative effect), the re-use of vacant previously



developed land (positive effect) or could provide opportunities for soil improvement (positive effect).

The anticipated effects in relation to **water** (specifically the quality of watercourses and waterbodies) and social, population and human health (support community cohesion and vitality and support access to education and training) are considered negligible, as the extension or conversion of existing industrial buildings is not anticipated to affect these.

### **Mitigation of negative effects**

If the proposed changes to allow extensions beyond 25% or 1,000 square metres (whichever is the greater) or to allow an increase in height above the original building are pursued, it is recommended that the prior notification/prior approval mechanism could be employed to mitigate negative effects, particularly on sites within 3km of an aerodrome. However, this would reduce or limit the positive effects for the economy. Alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed.

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

## **8.11 Flues for biomass heating systems**

### **Characteristics**

Biomass heating systems generate energy through the combustion of natural products such as wood chips, pellets or logs. A biomass system usually consists of a biomass boiler, fuel storage, flue (or chimney), hydronic systems that deal with the distribution and release of the heat generated by the boiler and a central control device. Being mostly internal, biomass heating systems generally do not require planning permission; however, additional controls apply in a smoke control area for equipment which is not exempted under section 21 of the Clean Air Act 1993<sup>76</sup>. However, some aspects of the overarching biomass heating system in which the boiler operates may be subject to planning restrictions. PDR apply to flues for biomass heating systems where they meet the criteria set out in *The Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Order 2009*<sup>77</sup>.

### **Existing permitted development rights**

Flues for biomass (located on a dwelling house or a building containing a flat) are now classified as a permitted development provided it meets a number of conditions. The permitted sizing, scaling and siting criteria for flues forming part of a biomass heating system are contained in Class 6C. Development is not permitted by Class 6C if:

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<sup>76</sup> Scottish Government, 2011. *Planning Circular 2/2011: The Town and Country Planning (General Permitted Development)* [pdf]. Available at: <http://www.gov.scot/Resource/Doc/345961/0115156.pdf>

<sup>77</sup> The Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Order 2009 (Scottish Statutory Instrument 2009/34)

- the flue would protrude more than one metre above the highest part of the roof on which the flue is fixed, excluding any chimneys;
- in a Conservation Area or a World Heritage Site the flue would be installed on the principal elevation of the dwellinghouse, or building containing a flat; or
- if the building is located within an AQMA.

### Potential changes to permitted development rights

The SA has considered the following:

- No change to PDR
- Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites.
- Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas.

### Sustainability appraisal findings

#### Key issues

Potential significant adverse effects on cultural heritage;

Minor positive effects on climate change, material assets and the planning system;

Minor negative short term effects on air quality and long term effects on health.

It is likely that potential **significant adverse** effects on **cultural heritage** could result if changes to PDR allowed biomass flues to protrude more than a metre above the highest part of the roof in World Heritage Sites and Conservation Areas. The effects would depend on the nature and appearance of the area in question, but the change could result in the proliferation of flues which would be a visible and prominent element of historic roofscapes and the wider townscape.

It is also likely that potential **significant negative effects** on **cultural heritage** could result if changes to PDR allowed biomass flues to be installed on the principal elevation of buildings in World Heritage Sites and Conservation Areas. Again, the effects would depend on the nature and appearance of the area in question, but the change could result in the proliferation of flues which would affect the appearance and setting of historic buildings and be a visible and prominent element of the wider townscape.

**Minor positive** effects are anticipated from all the proposed changes in relation to the SA objectives of **climatic factors** and **material assets**. Biomass heating systems are a low-carbon and renewable energy source and the current and extended rights would allow for some flexibility in terms of development to support such systems.

Allowing for the provision of biomass heating systems is likely to help underpin sustainable economic growth as well as growth at rural locations in Scotland. Minor

positive effects have therefore been recorded for all the proposed changes in relation to economic growth and rural development as part of the SA objective of economy.

The proposed changes would help to reduce the overall number of planning applications for biomass flues, so uncertain **minor positive** effects have been recorded in terms of efficient more efficient use of the **planning system**.

Air quality could be adversely impacted upon as a result of smoke and odour from flues for biomass heating systems. **Minor negative** effects have therefore been recorded in relation to the SA objective of air quality for all the proposed changes.

Some release of hazardous pollutants such as particulates and NO<sub>x</sub> is likely and **minor negative** effects have been recorded in relation to **health and quality of life** and **health and living environment**. It should be noted that emissions from modern biomass heating systems are lower than for traditional log burning stoves or open fires.

### **Mitigation of negative effects**

Given that the severity of impacts on Conservation Areas and World Heritage Sites is likely to vary according their character and purpose of designation, use of prior notification/prior approval could ensure that the most sensitive cases are subject to planning authority scrutiny. However, this would reduce the positive effects on the economy in relation to more efficient use of the planning system.

## **8.12 Flues for combined heat and power systems**

### **Characteristics**

This permitted development right applies to the provision of flues associated with CHP systems. It recognises that the installation of CHP systems sometimes requires new flues to be installed on the exterior of the building (rather than using an existing flue within the building structure). In 2016, biomass CHP contributed 15% to the total renewable heat output in Scotland. During that year, there were 140 CHP schemes in Scotland – an increase of 2% since 2015. Moreover, CHP systems accounted for a minor proportion of renewable heat generated by locally owned schemes. It is estimated that 1% of the total operational capacity of locally owned schemes is covered by CHP technologies. However, these figures should be treated with caution. Calculating useful heat output for CHP systems is difficult without detailed metered data, as thermal efficiencies of individual CHP systems are often unknown.

### **Existing permitted development rights**

PDR pertinent to flues forming part of a CHP system on a dwellinghouse or building containing a flat are contained within Class 6F. Flues forming part of a CHP system are permitted provided they meet a number of criteria, which are nearly identical to the criteria pertinent to flues forming part of a biomass system. Development is not permitted by Class 6F if:

- the flue would protrude more than one metre above the highest part of the roof on which the flue is fixed, excluding any chimneys;
- in a Conservation Area or a World Heritage Site the flue would be installed on the principal elevation of the dwellinghouse, or building containing a flat; or

- the flue would be located within an AQMA and the CHP system is powered by biomass sources.

### Potential changes to permitted development rights

The SA has considered the following:

- No change in PDR.
- Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites.
- Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas.

### Sustainability appraisal findings

#### Key issues

Potential significant but reversible adverse effects on cultural heritage;

Minor positive long term effects on climate change, material assets and the planning system;

Minor negative long term effects on air quality and health.

It is likely that potential **significant adverse** effects on **cultural heritage** could result if changes to PDR allowed CHP flues to protrude more than a metre above the highest part of the roof in World Heritage Sites and Conservation Areas. The effects would depend on the nature and appearance of the area in question, but the change could result in the proliferation of flues which would be a visible and prominent element of historic roofscapes and the wider townscape.

It is also likely that potential **significant negative effects** on **cultural heritage** could result if changes to PDR allowed CHP flues to be installed on the principal elevation of buildings in World Heritage Sites and Conservation Areas. Again, the effects would depend on the nature and appearance of the area in question, but the change could result in the proliferation of flues which would affect the appearance and setting of historic buildings and be a visible and prominent element of the wider townscape.

**Minor positive** effects are anticipated from all the proposed changes in relation to the SA objectives of **climatic factors** and **material assets**. CHP heating systems are a low-carbon and renewable energy source and the current and extended rights would allow for some flexibility in terms of development to support such systems.

Allowing for the provision of CHP heating systems is likely to help underpin sustainable economic growth as well as growth at rural locations in Scotland. Minor positive effects have therefore been recorded for all the proposed changes in relation to economic growth and rural development as part of the SA objective of economy.

The proposed changes would help to reduce the overall number of planning applications for biomass flues, so uncertain **minor positive** effects have been recorded in terms of more efficient use of the **planning system**.

Air quality could be adversely impacted upon as a result of smoke and odour from flues for CHP heating systems, depending on the fuel source. **Minor negative** effects have therefore been recorded in relation to the SA objective of air quality for all the proposed changes.

Some release of hazardous pollutants such as particulates and NOx is likely and **minor negative** effects have been recorded in relation to **health and quality of life** and **health and living environment**.

### **Mitigation of negative effects**

Given that the severity of impacts on Conservation Areas and World Heritage Sites is likely to vary according to their character and purpose of designation, use of prior notification/prior approval could ensure that the most sensitive cases are subject to planning authority scrutiny. However, this would reduce or limit the benefits for more efficient use of the planning system.

### **8.13 Secondary, cumulative and synergistic effects**

Extending PDR for micro-renewables could result in potential **significant positive cumulative** effects on efforts to reduce **greenhouse gas emissions** and, to a lesser extent, improve **air quality** (in relation to those development types which do not release air pollutants). There could also be potential **significant positive cumulative effects** on **climate adaptation** since a more dispersed pattern of generation will make the energy network more resilient to disruption as a result of weather events. The changes could result in potential **significant positive cumulative effects** by improving the efficiency of the planning system, removing the requirement to apply for planning permission for a wide range of domestic scale renewables.

Extending PDR for micro renewables to Conservation Areas and other areas of historic importance could result in potential **significant negative cumulative effects** on **cultural heritage**. A number of changes (solar panel installations, buildings to store biomass) could combine to result in potential significant negative cumulative effects on safety at aerodrome and technical sites.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for micro-renewables in combination with other development categories are discussed in Chapter 21.

## 9 Non-domestic solar energy

### 9.1 Characteristics

Electricity from solar photovoltaic (PV) panels or hot water from solar thermal collectors provide or supplement energy needs.

Solar PV produces electricity from PV panels and is useful for supporting domestic use, supporting or supplementing other low carbon technology such as heat pumps, and providing energy to grid. Forms include roof-mounted PV panels, PV roof tiles, flexible panels and wall mounted PV.

Ground mounted PV can involve:

- PV panels;
- mounting structures;
- fencing, lighting and CCTV; and,
- inverters, cabling, and transformers.

Solar Thermal, usually roof mounted, utilises heat from the sun through a heat exchanger to supplement hot water or central heating.

### 9.2 Existing permitted development rights

As defined in *The Town and Country Planning (General Permitted Development) (Scotland) (Non-Domestic Microgeneration) Amendment Order 2011*<sup>78</sup>, PDR are extended to the installation, alternation or replacement of solar PV or solar thermal equipment on a non-domestic building, subject to certain conditions and limitations. The installation of solar PV or solar thermal equipment within 3 km of the perimeter of an aerodrome or technical site is not permitted under PDR or where it would exceed 50 kW of electricity generated or 45 kW of thermal heat produced. Furthermore, PDR do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden and designed landscape; a Conservation Area; or a National Park.

#### Installation on pitched roofs

Solar PV or solar thermal equipment installed on a pitched roof of a non-domestic building requires planning permission if any part of the solar PV or solar thermal equipment:

- protrudes more than 200 millimetres beyond the roof plane;
- projects higher than the roof ridge on which the equipment is fixed; or

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<sup>78</sup> The Town and Country Planning (General Permitted Development) (Scotland) (Non-Domestic Microgeneration) Amendment Order 2011 (Scottish Statutory Instrument 2011/136)

- protrudes outwith any of the edges of the roof on which the equipment is fixed.

### **Installation on flat roofs**

Solar PV or solar thermal equipment installed on a flat roof of a non-domestic building also requires planning permission if:

- the flat roof does not have a parapet wall; or
- where the flat roof does have a parapet wall, no part of the solar PV or solar thermal equipment should exceed the height of the parapet wall or protrude outwith any of the edges of the roof on which the equipment is fixed.

### **Installation on external walls**

Solar PV or solar thermal equipment installed on an external wall of a non-domestic building requires planning permission if any part of the solar PV or solar thermal equipment:

- protrudes 200 millimetres beyond the outer surface of that wall;
- extends beyond the boundaries of the curtilage of the non-domestic building; or
- is situated within 200 millimetres of any edge of the wall.

Although the proposals for extending PDR relate to non-domestic solar energy developments, it is noteworthy to briefly outline the existing PDR for solar panels on domestic properties. For solar panels on domestic properties, the installation is not limited by the potential output of the panels and installation falls within the 'one metre bubble' concept whereby development that does not add to the floor space of the house or flat and projects by less than one metre from the external wall of the building is considered to be permitted development (subject to certain other restrictions e.g. not in conservation areas or within the curtilage of a listed building).

## **9.3 Rationale for extending permitted development rights**

In summer 2015, a *Consultation Paper on Permitted Development Rights for Non-Domestic Solar Panels and Domestic Air Source Heat Pumps*<sup>79</sup> was undertaken. The consultation set out proposals for expanding the range of situations in which non-domestic solar panels and domestic ASHP can be installed without first requiring planning permission to be applied for. It suggested however that World Heritage Sites should be included in the list of areas where PDR for solar PV and solar thermal equipment do not apply, and that, in relation to flat roofs, equipment should not exceed one metre from the roof (excluding chimneys or other roof features) and should not be located on the roof closer to the edge of the roof than the height of the installed equipment. These proposals are more in line with existing PDR for domestic buildings and reflect the move to PDR for roof mounted solar arrays on non-domestic buildings in England of up to one megawatt.

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<sup>79</sup> The Scottish Government, 2015. *Permitted Development Rights: Non-Domestic Solar Panels and Domestic Air Source Heat Pumps Consultation* [pdf]. Edinburgh: Scottish Government. Available at: <http://www.gov.scot/Resource/0047/00479787.pdf>

Most comments were supportive of the proposals for extending PDR for non-domestic solar panels however two comments were received relating to safety concerns if PDR were extended within 3km of the perimeter of an aerodrome or technical site for non-domestic solar panels<sup>80</sup>. According to these comments, installation of solar panels in the vicinity of aerodrome or technical sites have the potential to impact safe operation in a number of ways e.g. glint and glare; interference with Communications Navigational and Surveillance equipment; and infringement of obstacle limitation surfaces.

#### 9.4 Potential changes to permitted development rights

Taking the above information into account the options for the potential extension of PDR for solar PV and solar thermal equipment on non-domestic buildings include:

- No change in PDR;
- Include World Heritage Sites in locations where PDR do not apply;
- Remove the restriction on development within 3km of an aerodrome or technical site
- Remove the restriction of 50kW of electricity generated or 45 kW of thermal heat produced
- Allow a wall mounted array to wrap around a building;
- Remove the restriction on the dimensions which solar panels can protrude or project beyond the current edge of the roof or ridge
- Remove current restriction on PDR for flat roofs with or without a parapet wall and implement the following restrictions: Equipment not to exceed 1 metre from the roof (excluding chimneys or other roof features) Equipment not to be located on the roof closer to the edge of the roof than the height of the installed equipment.

#### 9.5 Sustainability appraisal findings

##### Key issues

Potential significant adverse effects on safety at aerodrome or technical sites;

Minor negative but reversible effects on cultural heritage;

Minor positive long term effects on climate change, material assets, economy.

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<sup>80</sup> The Scottish Government, 2015. *Permitted Development Rights: Non-Domestic Solar Panels and Domestic Air Source Heat Pumps Analysis of Consultation Responses* [pdf]. Edinburgh: Scottish Government. Available at: <https://consult.gov.scot/development-rights/permitted-development-rights/results/permitted-development-rights-non-domestic-solar-panels-and-domestic-air-source-heat-pumps---consultation-analysis-report.pdf>



Installation of solar panels in the vicinity of aerodrome or technical sites was identified by a member of the VRG as potentially cumulatively creating a source of glare, affecting aircraft safety. This is a potentially **significant adverse** impact associated with existing PDR and any extension to PDR. It is most likely with respect to installations on pitched or flat roofs.

Several of the proposed changes to PDR could result in **minor negative** but uncertain effects on **cultural heritage** and **landscape**. The effects are likely to be greatest where solar panels are mounted on external walls, but could also result from roof mounted panels where changes result in a less harmonious relationship with the host building. Impacts on cultural heritage assets would be greater in areas designated for their historic importance. Similarly, impacts on landscape would be greater in areas designated for the landscape importance.

**Minor positive** effects are anticipated from both the existing PDR and all of the proposed changes in relation to the SA objectives of **climatic factors** and **material assets**. These effects have been identified given that solar PV and thermal installations are a low-carbon and renewable energy source and the current and extended rights would encourage further take up on non-domestic buildings. It is likely these changes would result in minor positive effects on the **economy** – by using solar PV, businesses could have more control over their electrical infrastructure, because energy is produced and may be used on-site, or sold to the grid to provide income. This, in turn, could support the transition to a low carbon economy.

Construction of non-domestic solar panels could have negative effects on biodiversity, flora and fauna, due to potential impacts on birds and bats within buildings particularly during construction, though these effects should be mitigated through the application of the correct procedures under wildlife protection legislation.

Other sustainability impacts are considered to be negligible or unlikely.

## **9.6 Mitigation of negative effects**

Restrict development in proximity of an aerodrome or other technical site used to provide air traffic services e.g. through prior notification/prior approval. Alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed

Restrict the potential changes to PDR which increase the likely size and scale of development in areas with cultural heritage designations and areas designated for their landscape value.

## **9.7 Secondary, cumulative and synergistic effects**

Installation of solar panels in the vicinity of aerodrome or technical sites could cumulatively create a source of glare, which was identified by a member of the VRG as potentially affecting aircraft safety. This could have potential **significant negative cumulative effects** in terms of **social, population and human health**.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for non-domestic solar energy in combination with other development categories are discussed in Chapter 21.

# 10 District heating and supporting infrastructure

## 10.1 Characteristics

Heat networks or district heating refers to a network system for distributing heat from a central location (instead of individual boilers in homes) to meet requirements for heating and hot water in residential and commercial developments. Heat is normally generated in an energy centre and distributed through a pipe network to which heat customers are connected. District heat networks can be supplied by a diverse range of sources including:

- Power stations.
- Energy from Waste (EfW) facilities.
- Industrial processes.
- Biomass boilers and Combined Heat and Power (CHP) plants.
- Gas-fired CHP units.
- Fuel cells.
- Heat pumps (ground, air and water).
- Geothermal sources.
- Electric boilers and
- Solar thermal arrays.

The main component of a district heating system other than the energy centre consists of the primary pipe network. This is generally located below the ground with surface connections where the pipework enters the buildings. The primary pipe network transports heat in the form of hot water or steam to each consumer, the hot water or steam is passed through a heat exchanger which is then passed onto heating systems such as radiators within buildings and is used as space heating and/or hot water. The anticipated lifetime of the pipework is around 40 to 50 years.

## 10.2 Existing permitted development rights

PDR are not currently extended to heat network providers, however, there are comparable PDR for similar developments provided by statutory undertakers. Section 214 of *The Town and Country Planning (General Permitted Development) (Scotland)*

*Amendment Order 1997*<sup>81</sup> defines a 'statutory undertaker' as meaning "persons authorised by any enactment to carry out any railway, light railway, tramway, road transport, water transport, canal, inland navigation, dock, harbour, pier or lighthouse undertaking or any undertaking for the supply of hydraulic power or water and a relevant airport operator". Article 2(1) of *The Town and Country Planning (General Permitted Development) (Scotland) Order 1992*<sup>82</sup> adds to this list: a universal services provider (within the meaning of the Postal Services Act 2000); the Civil Aviation Authority; public gas transporters within the meaning of section 7 of the Gas Act 1986; and, license holders within the meaning of section 64(1) of the Electricity Act 1989.

Class 38 extends PDR, for the purposes of water undertakings, to the laying underground of mains, pipes or other apparatus and any other development carried out in, on, over or under the operational land other than the provision of a building.

Class 39 extends PDR to public gas transporters for the laying underground of mains, pipes or other apparatus and any other development carried out in, on, over or under the operational land of the public gas transporter.

Class 40(1)(a) permits development by statutory undertakers for the generation, transmission or supply of electricity for the purposes of their undertaking consisting of: the installation or replacement in, on, over or under land of an electric line and the construction of shafts and tunnels and the installation or replacement of feeder or service pillars or transforming or switching stations or chambers reasonably necessary in connection with an electric line.

Part 20 Class 67 of *The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017*<sup>83</sup> extends PDR to electronic communications code operators for the purpose of the operator's electronic communications network in, on, over or under land for the construction, installation, alteration or replacement of any apparatus.

In November 2017, The Scottish Government published *Scotland's Energy Efficiency Programme: Second Consultation on Local Heat and Energy Efficiency Strategies and Regulation of District and Communal Heating*<sup>84</sup>. It consulted on a proposal to allow district heating operators the same or similar rights as other statutory undertakers for permitted development and wayleaves. It also consulted on a proposal whereby consent to develop district heating confers PDR for pipelines and associated infrastructure.

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<sup>81</sup> The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 1997 (Scottish Statutory Instrument 1997/1871)

<sup>82</sup> The Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (Scottish Statutory Instrument 1992/223)

<sup>83</sup> The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017 (Scottish Statutory Instrument 2017/189)

<sup>84</sup> The Scottish Government, 2017. *Scotland's Energy Efficiency Programme: Second Consultation on Local Heat and Energy Efficiency Strategies and Regulation of District and Communal Heating* [pdf]. Edinburgh: The Scottish Government. Available at: <https://beta.gov.scot/publications/scotlands-energy-efficiency-programme-second-consultation-local-heat-energy-efficiency/documents/00527606.pdf>

The Scottish Government's consultation paper proposed to introduce a new district heating consent system which would be managed and enforced by local authorities. Local authorities would be given a new statutory power to award consent, subject to the applicant meeting certain requirements set by the Scottish Ministers. The requirement to seek consents to develop district heating (new or extensions) would apply to all potential district heating developments, whether zoned by a local authority (via a Local Heat Energy Efficiency Strategy) or speculatively proposed by a district heating developer. This new statutory consent would operate in parallel/alongside any other aspects of the proposed development requiring planning permission. Once consent is granted, the district heating developer will be given PDR and wayleave rights for pipes and connections (but not new energy generation centres or energy storage centres).

### **10.3 Rationale for extending permitted development rights**

The rationale for extending PDR is to support the implementation of district heating schemes.

### **10.4 Potential changes to permitted development rights**

The SA has considered the following:

- No change in PDR.
- Introducing PDR for pipe work and associated infrastructure for district heating in all areas, but not including plant or equipment used to generate the heat supplied via district heating.

### **10.5 Sustainability appraisal findings**

#### **Key issues**

Minor positive long term effects in terms of greenhouse gas emissions, sustainable economic growth, resourcing of the planning system, health and living environment of people and communities;

Mixed and uncertain long term effects in terms of air quality depending on the heating source;

Minor negative local effects in terms of water, soil and landscape and geodiversity.

Potential significant negative effects are identified for cultural heritage

The current absence of PDR for permitted development means that district heating pipework and associated infrastructure will require an application for planning permission. The planning process provides scrutiny and therefore helps to avoid adverse impacts on habitats and species, air quality, quality of watercourse and waterbodies, valuable soils, cultural heritage, landscapes and geodiversity, material assets, and human health. However, the requirement to obtain planning consent places a burden on applicants and planning authorities which could grow if there is a significant increase in the deployment of heat networks.

Creating new PDR for pipe work and associated infrastructure for district heating in all areas would result in a number of **minor positive** effects. In relation to climatic factors this includes supporting technology which helps reduce **greenhouse gas emissions**, improved energy efficiency and use of low carbon fuels. In relation to the economic objectives, the proposed changes would support opportunities for **sustainable economic growth** in terms of improving energy resilience, and would potentially support **smarter resourcing of the planning system**. In relation to the improvement to the **health and living environment of people and communities**, the proposed changes may result in more reliable and lower cost fuel, helping to address the issue of fuel poverty.

**Mixed and uncertain minor positive and minor negative** effects are identified for **air quality**. This is because some fuel sources for district heating such as biomass can result in air quality impacts, whilst in some locations the district heating may reduce the use of fuel with greater air quality impacts, or it could be based on a less polluting fuel.

**Minor negative effects** are identified in relation to **water, soil and landscape and geodiversity** as pipes could result in local impacts on water and soil quality through construction and impacts on local hydrology, as well as on local landscape. However these effects are uncertain depending on the location of any underground pipework and the extent of the proposals.

Potential **significant negative** effects are identified for **cultural heritage**, from a range of potential impacts including uncertain impacts on unknown below ground archaeology and impacts on the setting of Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Sites and Scheduled Monuments.

Other sustainability impacts are considered to be negligible or unlikely. One member of the VRG commented that private property could be affected by a scheme that does not include that property, for example where curtilage is disputed or where works would directly affect private land. Any disputes over land ownership are not a planning consideration, and planning permission does not in itself grant property rights to carry out development.

## **10.6 Mitigation of negative effects**

The proposed framework for PDR for pipework and associated infrastructure for district heating sits within the context of the proposed requirement for a consenting regime to develop district heating, which would have conditions associated with it. This offers a potential additional mechanism to mitigate the negative effects identified. Other forms of potential mitigation for negative effects identified include:

- Restrict any new PDR within Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, and World Heritage Sites.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

Require the proposed consenting regime for district heating to include conditions on the requirement to avoid adverse effects on cultural heritage, landscape, geodiversity, water quality and air quality.

#### **10.7 Secondary, cumulative and synergistic effects**

No cumulative effects are identified because only a single change to PDR is included for this development type. No secondary or synergistic effects are identified.

# 11 Energy storage (non-domestic)

## 11.1 Characteristics

Energy storage is a key element to increasing the flexibility of the energy system to promote decarbonisation. Linking storage to renewable energy sources helps promote local use, address grid capacity issues and balance supply and demand.

Batteries provide mobile and highly flexible storage capacity and can be placed at several different places on the grid to ensure efficiency, including:

- (a) domestic scale installations, which can be used with micro renewable generators such as roof top solar or single wind turbines (covered in the next section);
- (b) installed 'behind the meter' storage for industrial and commercial consumers of electricity;
- (c) 'stand-alone' on demand systems designed to provide capacity and/or balancing services to grid operators, both on a small scale and at large utility scale; and
- (d) co-location of energy storage systems with commercial renewable energy installations.

The following bullet points give a high level overview of some of the key technology types as identified in *Energy Storage in the UK*<sup>85</sup>:

- (h) **Lithium-based batteries:** Lithium-ion batteries are a relatively established technology and are used in electronics and electric vehicles. A major advantage of Li-ion technology is its versatility: highly scalable, it can be adapted to practically any voltage, power and energy requirement. Li-ion batteries require sophisticated control electronics, which makes the technology somewhat complex.
- (i) **Lead-based batteries:** Lead-acid batteries were the first type of rechargeable battery in commercial use and are reliable and inexpensive. Lead-acid batteries are expected to have low applicability to commercial energy storage due to having relatively low energy density, slow recharge times and limited cycle life. Different designs of lead-based batteries are available – flooded (vented) lead-acid batteries that require maintenance, or maintenance free valve-regulated lead-acid batteries. Lead acid cells are robust and less sensitive to application conditions. They can be connected in large battery arrangements without sophisticated management systems.

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<sup>85</sup> Renewable Energy Storage, 2016. *Energy Storage in the UK: An Overview* [pdf]. London: Renewable Energy Association. Available at: [https://www.r-e-a.net/images/upload/news\\_415\\_REA\\_-\\_Energy\\_Storage\\_in\\_the\\_UK\\_Report\\_2016\\_Update.pdf](https://www.r-e-a.net/images/upload/news_415_REA_-_Energy_Storage_in_the_UK_Report_2016_Update.pdf)

- (j) **Sodium-based batteries:** Sodium-sulphur batteries have energy densities much higher than lead-acid batteries as well as a longer cycle life and lifespan. This, combined with high efficiency and low self-discharge make sodium-sulphur batteries suitable for longer term bulk energy storage, however they must be maintained at a temperature of 300° – 350°C.
- (k) **Flow-batteries:** Flow batteries convert between chemical energy and electrical energy via a reversible electrochemical reaction between two liquid electrolyte solutions with dissolved metal ions. The electrolyte solutions are pumped through the electrochemical cell from storage tanks, hence the name ‘flow battery’. Flow batteries are defined by the electrolyte solution with vanadium redox and zinc-bromine the most prevalent.
- (l) **Pumped-hydro storage:** Primarily used for load-balancing, pumped storage stores energy by gravitational potential, using the difference in height between two reservoirs of water. During times of low demand water is pumped to a higher elevation for release at times of increased and peak demand. At release, water is directed through turbines to produce electricity. This technology has a high storage capacity and high power ramp rates, however there are limited available sites as it relies on natural geography and geology.
- (m) **Compressed air energy storage (CAES):** CAES stores energy either in an underground structure or an above-ground system, by running electric motors to compress air and then releasing it through a turbine to generate energy. It can help the grid by storing energy during low demand (off-peak) and then releasing it during high-energy demand (peak load) periods. CAES technology has large capacity but the main issues with it are relatively low round-trip efficiency and geographic location limitations. Although it consumes energy in the process overall, it creates around three times the energy a similar sized conventional gas turbine would produce.
- (n) **Flywheels:** Flywheels are charged by accelerating the inertial masses also known as the rotors. The energy is stored as the rotational kinetic energy of the flywheel. To discharge the kinetic energy it is extracted by a generator, which decelerates the rotation. Flywheels have good cycle stability, a long life cycle, are low maintenance, high power density and use environmentally inert materials. At the same time, they currently have relatively low efficiency and high levels of self-discharge.
- (o) **Hydrogen Production and Storage:** Hydrogen production and storage allows for conversion of energy into hydrogen either to be reconverted back into electricity, used in fuel cells, hydrogen boilers or used to power vehicles. There are different hydrogen storage techniques however the most popular is storing the gas under high temperatures used mainly for stationary applications. Smaller amounts can be stored above ground, in tanks or bottles, and large amounts stored underground mainly in piping systems. Hydrogen storage facilities are likely to be located at brownfield or industrial locations close to high energy use or transport facilities.
- (p) **Synthetic natural gas:** Synthetic gas processes are referred to as “Power to Gas” technologies. After splitting water another step is added to the mix and with



the help of an electrolyser the hydrogen and carbon dioxide react to generate methane. Synthetic natural gas can also be stored in over-ground pressure tanks, underground or can be directly injected into the gas grid. The most important advantage of synthetic methane is that it can be injected into the existing natural gas storage infrastructure without restrictions. However, on the other hand it has relatively low efficiency.

- (q) **Thermal energy storage:** There are a number of thermodynamic energy storage technologies in development and operational - notably thermal energy storage, high temperature thermal energy storage, pumped heat electrical storage and liquid air energy storage. Thermal energy (chilled water or hot water) is produced during periods of off-peak electrical demand (or usage), collected in a thermal energy storage tank, then withdrawn and distributed to the facility during on peak periods. Warm and chilled water enters and exits the tank through diffusers located at the top and bottom of the tank. These diffusers are designed to eliminate turbulence and allow the water in the tank to stratify, with the colder (and denser) water at the bottom and the warmer water at the top.

For the purposes of this report we are concentrating on the impacts of battery storage.

## 11.2 Existing permitted development rights

There is currently a lack of a specific definition of electricity storage in planning legislation however applications are generally treated as generation developments whereby developments with a generating capacity of 20 MW or more are classed as 'major' and developments with a generating capacity of less than 20 MW are classed as 'local'. Applications for 50MW and above are a considered to be outwith the scope of this report.

Class 40 (1) of *The Town and Country Planning (General Permitted Development) (Scotland) Order 1992*<sup>86</sup> sets out PDR for statutory undertakers for the generation, transmission or supply of electricity for: "...*(d) the extension or alteration of buildings on operational land of the undertaking; ... and (f) any other development carried out in, on, over or under the operational land of the undertaking*". 'Operational land' in relation to statutory undertakers is land which is used for the purpose of carrying on the undertaking and in which an interest is held for that purpose. For instance, the installation of underground electric cables and the extension or alteration of buildings is permissible, subject to certain restrictions. This assumes that the addition of the energy storage facility on 'operational land' does not constitute a material change of use from the pre-existing operations and can be classed as ancillary development.

## 11.3 Rationale behind proposed changes to permitted development rights

The rationale for extending PDR is to facilitate energy storage in the form of battery storage as part of a robust and resilient energy supply system, managing peaks in demand and supply. Energy storage was also identified as a potential development type in association with the Scottish snow sports centres, and the assessment covers development within this context.

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<sup>86</sup> The Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (Scottish Statutory Instrument 1992/223)

## 11.4 Potential changes to permitted development rights

The SA has considered the following:

- PDR for the installation, alteration or replacement of battery facilities for statutory undertakers for the generation, transmission or supply of electricity.
- PDR for the installation, alteration or replacement of battery facilities at generating sites.
- PDR for the installation, alteration or replacement of battery facilities at a distance from generating sites and equipment.
- PDR for the installation, alteration or replacement of electric lines to connect battery storage to the electricity network. NB: this would be for connections within the site where generation and storage are co-located. Connections to the wider network or between generating sources and remote storage would be for Class 40 PDR or energy consent for power lines).

## 11.5 Sustainability appraisal findings

### Key issues

Minor positive long term effects in terms of greenhouse gas emissions, air quality, sustainable economic growth, material assets, resourcing of the planning system;

Minor negative but reversible effects in terms of biodiversity and soils;

Significant negative but reversible effects in terms of cultural heritage, landscape.

Introducing PDR for all of the potential changes would likely result in **minor negative** effects on **biodiversity, flora and fauna**. Negative effects would arise through the loss or severance of habitats or direct impacts on species in areas of future development.

Development would also be likely to result in the loss of soil resources and agricultural land, particularly in areas of previously undeveloped land or out with existing generation sites and would be likely to have **minor negative** effects on **soils**. This would be particularly true in areas of best and most versatile land or high carbon soils, which are found many upland locations, including in association with the snow sports centres. However, these impacts are uncertain given that the significance of the impacts depends on the scale, extent and type of future development.

It is possible that the development of energy storage facilities could have an impact on undesignated **cultural heritage** assets and on the setting of nationally important cultural heritage assets. There could be potential **significant negative** effects where there is no pre-existing consenting process in place or in relation to wider impacts on the setting of nationally important cultural heritage resources. Minor negative effects are identified for undesignated sites, These effects are uncertain depending on local factors such as the sensitivity of the heritage asset in question, the previous use of the site and the topography of the wider landscape.

Similarly **negative** effects are identified for **landscape and geodiversity** as a result of the introduction of new structures into the landscape. These effects would be significant in areas designated for their landscape value such as National Scenic Areas and National Parks, which would be impacted by energy storage development in association with the snow sports centres, although larger scale developments in any location would require EIA screening.

Positive effects are identified for all of the potential changes for a number of other topic areas. **Minor positive** effects are identified for **climatic factors** as a result of the wider contribution energy storage can make towards tackling climate change, especially in reducing greenhouse gas and carbon emissions compared to fossil fuel generated energy resources. Furthermore, they provide enhanced energy resilience and efficiency throughout the network, increasing balance supply, reducing overall energy demand as well as significantly reduce energy loss during transmission and distribution.

The changes would also be expected to provide indirect **minor positive** effects on **air quality** through the contribution they can make towards reducing emissions of air pollutants, reducing overall reliance on fossil fuel generated energy. **Minor positive** effects on **material assets** result from greater energy security and sustainability for non-domestic enterprises, particularly in remote rural areas where extreme weather conditions can adversely impact upon the continuity of power supply. Linked to these effects, there are associated **positive** effects on the **economy** by supporting sustainable economic growth. Development associated with the snow sports centres would be particularly beneficial in terms of supporting rural development.

The introduction of PDR would also increase efficiency of the planning system by clarifying the circumstances in which planning permission is required as well as ensuring consistency between local authorities. PDR may also reduce bureaucratic burden for those applying for energy storage facilities.

Other sustainability impacts are considered to be negligible or unlikely.

### **11.6 Mitigation of negative effects**

- Restrictions on the scale and location of PDR for any new structures in areas designated for their cultural heritage or landscape importance.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

### **11.7 Secondary, cumulative and synergistic effects**

Cumulative positive effects are identified in relation to material assets through the effect of increased energy storage on stabilizing the energy supply and supporting the use of renewables. Secondary effects may include increased cumulative landscape effects of energy storage infrastructure alongside renewable energy development. No synergistic effects are identified.



# 12 Energy storage (domestic)

## 12.1 Characteristics

There are two main markets for electricity storage at domestic scale: (1) new domestic installations linking microgeneration with electricity storage, and (2) existing microgeneration installations where there is potential to 'retrofit' electricity storage<sup>87</sup>.

Battery energy storage in residential buildings allows users to store electricity from local generation (PV panels, small wind turbines etc.) when it is not needed and discharge it when needed. This can increase the percentage of self-consumed electricity from a maximum 30% without storage to around 70%, optimising efficiency and reducing the amount of additional power needed from the grid<sup>88</sup>.

The two types of batteries most commonly offered for domestic energy storage in domestic properties are lithium-ion and lead-acid batteries (the characteristics of these batteries are described in the section above on 'Non-Domestic Energy Storage'). Storage battery systems are typically around 1kW to 7kW.

## 12.2 Existing permitted development rights

There are no existing specific PDR for the installation, alteration or replacement of domestic energy storage facilities (i.e. batteries storing energy from domestic PV panels or small wind turbines). Planning permission is not required for the internal installation of domestic energy storage facilities within a residential property.

Class 2B in *The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2011*<sup>89</sup> extends PDR for improvements, additions or other alterations that are not an enlargement of a dwelling house. As domestic energy storage batteries are similar in size to standard boilers and their height, width and depth is generally less than one metre, PDR may already extend to certain domestic energy storage batteries. However, it should be noted that development is not permitted by this class if it would be within a Conservation Area.

Class 3B of The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2011 extends PDR for the carrying out of any building, engineering, installation or other operation within the curtilage of a dwellinghouse, required for a purpose incidental to the enjoyment of that dwellinghouse. Typical development permitted by this class includes oil tanks for domestic heating, however, PDR do not apply in Conservation Areas or within the curtilage of a Listed Building.

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<sup>87</sup> Energy Networks Association, 2014. *Electricity storage guide for communities and independent developers* [pdf]. Available at:

<http://www.energynetworks.org/assets/files/news/publications/ENA%20Electricity%20Storage%20Guide.PDF>

<sup>88</sup> EUROBAT, 2013. *Battery Energy Storage for Smart Grid Applications* [pdf]. Available at: [https://eurobat.org/sites/default/files/eurobat\\_smartgrid\\_publication\\_may\\_2013.pdf](https://eurobat.org/sites/default/files/eurobat_smartgrid_publication_may_2013.pdf)

<sup>89</sup> The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2011 (Scottish Statutory Instrument 2011/357)

### 12.3 Rationale for extending permitted development rights

The rationale for extending PDR is to help balance energy supply and demand at the domestic scale.

### 12.4 Potential changes to permitted development rights

As stated above, domestic energy storage facilities (batteries storing energy from domestic PV panels or small wind turbines) are not explicitly covered by PDR (although they may be subject to PDR if they are within a one metre bubble of a dwellinghouse).

The SA has considered the following potential changes to PDR:

- PDR for the installation, alteration or replacement of domestic energy storage facilities.

### 12.5 Sustainability appraisal findings

#### Key issues

Minor positive long term effects in terms of climate change, air quality, material assets, sustainable economic growth, and social, population and human health;

Minor negative but reversible effects on cultural heritage.

The introduction of new PDR for domestic energy storage facilities would result in **positive** effects on **climatic factors** by supporting domestic scale renewable energy deployment and the consequent reduction in greenhouse gas emissions. Energy storage can enhance energy resilience and efficiency throughout the network, increasing balance supply, reducing overall energy demand as well as significantly reducing energy loss during transmission and distribution.

Introducing PDR for domestic energy storage facilities would also result in indirect **positive** effects on **air quality** through reductions in emissions of air pollutants associated with fossil fuel use.

The introduction of new PDR for domestic energy storage facilities would likely result in positive effects on **material assets** by strengthening energy security and therefore sustainability, particularly in remote rural areas where extreme weather conditions can adversely impact upon the continuity of power supply.

The introduction of new PDR for domestic energy storage facilities would likely result in indirect **positive** effects on the **economy** through contributing to improving energy security by optimising the supply and demand. Furthermore energy storage can enable the integration of more renewables (especially solar PV and wind) in the energy mix and create revenue streams from price arbitrage, which helps to deliver the Scottish Government's clean growth agenda. This is likely to have beneficial effects on rural development through increased energy security, balance and system stability. Rural communities could benefit from a more secure energy supply, particularly in remote areas during electricity outages.

The introduction of PDR would also increase efficiency of the planning system by clarifying the circumstances in which planning permission is required as well as ensuring consistency between local authorities. PDR may also reduce bureaucratic burden for those applying for energy storage facilities.

**Minor positive** effects are expected for **social, population and human health**. The introduction of PDR could have a positive impact through by supporting measures to address fuel poverty and provide resilience in energy supply.

The introduction of new PDR for the installation, alteration or replacement of domestic energy storage facilities could result in **minor negative** effects on **cultural heritage**. Relaxing the conditions under which planning permission is required could affect heritage assets, their settings and the wider built environment. This is likely to particularly affect designated sites where there is no pre-existing consenting process in place. However, this effect is uncertain depending on local factors such as the sensitivity of the heritage asset in question and the location of the energy storage unit and physical works needed to accommodate it and connect it to the generating equipment.

Other sustainability impacts are considered to be negligible or unlikely.

#### **12.6 Mitigation of negative effects**

Provide location and guidance for installing external domestic energy storage units, particularly with respect to historic properties.

#### **12.7 Secondary, cumulative and synergistic effects**

No cumulative effects are identified because only a single change to PDR is included for this development type. No secondary or synergistic effects are identified.





# 13 Development relating to active travel

## 13.1 Characteristics

Increasing walking and cycling for transport and leisure is a key policy commitment in Scotland. Development relating to active travel is identified as the physical infrastructure required to support active travel<sup>90</sup>. Components of this are identified as:

- 1 Creating new walking and cycling routes
- 2 Surfacing cycle paths and footpaths.
- 3 Providing safe crossing points for pedestrians and cyclists.
- 4 Other developments to support active travel (e.g. car share parking spaces).
- 5 Docking stations for electric bikes (e-bikes)

The HoPS Scoping Paper<sup>91</sup> identified that it is important to note that bike sheds are simply sheds and no distinction can be made in planning terms. Bicycle storage and sheds are addressed under Chapter 17 'Householder developments'.

## 13.2 Existing permitted development rights

At present no PDR exist in relation to surface improvements to footpaths and cycle ways, new footpath and cycle routes, provision of safe road crossing points, provision of docking stations for e-bikes and other developments which might support sustainable transport in Scotland.

PDR relating to sheds, in which bikes are assumed to be usually stored, are relatively straightforward in the normal domestic situation (meaning the rear garden area of a house not in a Conservation Area or a Listed Building). Development is not permitted if it would exceed 4 metres in height, 3 metres at the eaves, and 2 metres at eaves if within 1 metre of the garden boundary.

Planning permission is required for a shed in a garden of a flat, front garden area of a house and a side garden area of a house which adjoins a public road.

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<sup>90</sup> Transport Scotland, 2016. *Review of Active Travel Policy Implementation 2016 Final Report*. Available at: <https://www.transport.gov.scot/media/10302/tp-active-travel-policy-implementation-review-october-2016.pdf>

<sup>91</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

### 13.3 Rationale behind proposed changes to permitted development rights

The rationale is to support Scottish Government policy objectives for increased walking and cycling for transport and leisure in Scotland. There is a greater focus on development within urban areas within the types of PDR change included as alternatives, such as car sharing and docking points for e-bikes.

### 13.4 Potential changes to permitted development rights

Potential changes include extending the scope of PDR to include route surfacing, route creation, safe crossing points, other developments to support sustainable travel, and docking stations for e-bikes.

### 13.5 Sustainability appraisal findings

#### Key issues

Minor positive long term effects in terms of air quality, biodiversity, climate change, economy, social, population and human health;

Minor negative long term effects in terms of biodiversity, cultural heritage, flood risk, soils and landscape and geodiversity.

Extending PDR for active travel is likely to have positive effects of helping to encourage modal shift, promoting active modes of transport and reducing a reliance on travel by private vehicle.

**Minor positive** effects have been identified in relation to **air** and **climatic factors** for the changes which would support active travel. It is expected that the creation of new routes and provision of further developments, such as car share parking, to benefit the promotion of sustainable transport would directly help to reduce the number of journeys being undertaken by private vehicle. Improving the surfaces of walking and cycle routes, providing safe crossing points and e-bike docking stations are likely to make walking and cycling easier and more attractive, supporting measures to increase the take up of these modes as alternatives to motorised transport.

The creation of new and surfaced access routes could result in **minor negative** effects in terms of **biodiversity, cultural heritage, flood risk, landscape** and **soils**. A **minor positive** effect may also be experienced in relation to biodiversity through the connection to active travel infrastructure and green networks.

PDR which support active travel are likely to make places more attractive as locations to live, work, visit and invest, thereby contributing to sustainable economic growth. Extending PDR in relation to the provision of new docking stations for e-bikes may have the added minor positive effect of helping to promote active tourism if the changes result in reductions in traffic volumes and congestion, there would be further economic benefits.

In relation to the objectives which relate to **social, population and human health** extending PDR for route creation and docking stations for e-bikes is expected to have the most positive effects. It is expected that the extension of PDR in these areas would directly help to promote the use of more active modes of transport within the population

at large. Allowing for increased flexibility with regards to the provision of new docking stations for e-bikes would help to promote cycling amongst groups which might otherwise be unlikely to take part in such an activity. These changes to PDR are also expected improve accessibility to services and facilities in Scotland which would likely help to enhance public health. Any reductions in traffic volumes could result in improvements in air quality with benefits in terms of health. Taken together, these changes are likely to result in minor positive effects in terms of **health and quality of life**.

Other sustainability impacts are considered to be negligible or unlikely.

### **13.6 Mitigation of negative effects**

Ensure that new cycle and walking routes avoid areas of biodiversity importance and are designed to avoid increasing flood risk. Ensure that route design fits with the existing landscape features and the existing landscape pattern<sup>92</sup>.

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

### **13.7 Secondary, cumulative and synergistic effects**

Extending permitted developments for active travel measures could combine to support a significant modal shift to walking and cycling. This could have potential **significant positive cumulative effects** in terms of **greenhouse gas emissions** and improve **air quality** and public **health**. Several of the measures would have synergistic effects, for example the provision of new cycle and walking routes complementing the provision of safe crossing points.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for active travel infrastructure in combination with other development categories are discussed in Chapter 21.

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<sup>92</sup> Design principles are included in Scottish Natural Heritage (2013, updated 2015) Constructed tracks in the Scottish Uplands. Available at: <https://www.nature.scot/sites/default/files/Publication%202015%20-%20Constructed%20tracks%20in%20the%20Scottish%20Uplands.pdf>

# 14 Habitat pond creation

## 14.1 Characteristics

Ponds are defined as: “*Man-made or natural bodies of freshwater between 1m<sup>2</sup> and 2 hectares in area, which hold water for all or part of the year*”<sup>93</sup>. This includes lochans, peat pools and other naturally formed small waterbodies, as well as the full range of man-made ponds. It also includes seasonal pools - a distinctive type of pond which dries up in summer and which usually supports specialised, and sometimes valuable, pond communities.

Pond creation and restoration for wildlife has been an important capital item delivered through agri-environment funding over the years, most recently through the Scottish Rural Development Programme Rural Priorities scheme from 2009 to 2014, and the current Agri-environment Climate Scheme since 2015.

## 14.2 Existing permitted development rights

There are currently no PDR for creation of wildlife ponds on agricultural land.

## 14.3 Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- PDR for pond creation for wildlife purposes on agricultural land (excluding stocking with fish).

## 14.4 Rationale behind proposed changes to permitted development rights

The rationale for extending PDR is to simplify the process of creating new wildlife ponds and create new opportunities for people to become involved in wildlife. Pond creation and restoration benefits a wide variety of wildlife and has significant biodiversity value. For instance, great crested newts require large networks of ponds for their breeding success and survival. As a result, great crested newts respond positively to newly created ponds, colonizing new ponds within dispersal distance of existing populations – often within one season.

In addition, the current Agri-environment Climate Scheme has required land managers to apply for planning permission for wildlife pond creation, or confirm planning permission is not required, prior to a claim being made on this item. Current planning guidance is ambiguous in relation to ponds – whilst it allows for other similar works for ‘agricultural purpose’, pond creation for wildlife is not included. As a result, there is currently considerable variation in the approach to the consenting of ponds taken by planning authorities across Scotland. Comments from the VRG group suggest that this has led to confusion amongst applicants as to whether planning permission is required, and where a planning application is needed the associated planning fee can make the

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<sup>93</sup> SEPA, 2000. *Ponds, pools and lochans Guidance on Good Practice in the management and creation of small waterbodies in Scotland* [pdf]. Available at:

[https://www.sepa.org.uk/media/151336/ponds\\_pools\\_lochans.pdf](https://www.sepa.org.uk/media/151336/ponds_pools_lochans.pdf)

proposal financially unviable. Therefore, the introduction of PDR would help to address these issues.

## 14.5 Sustainability appraisal findings

### Key issues

Potential significant positive permanent effects on biodiversity overall;

Minor positive local long term effects in terms of climate change adaptation, flooding, economy, population and human health;

Mixed minor local permanent effects in terms of water quality, soils, and landscape;

Minor negative effects in terms of cultural heritage.

Creating new PDR for creating wildlife ponds on agricultural land would result in mixed effects on **biodiversity**, flora and fauna, though potential **significant positive** effects are likely overall. Potential significant positive effects are identified, as new PDR would promote habitat creation, including for notable and protected species (e.g. great crested newts). However, it is possible that negative effects could arise as a result of important habitats being lost to make way for pond creation or changes to local hydrology.

Creating new PDR for creating wildlife ponds on agricultural land could also lead to a more extensive network of such ponds, which could facilitate species adaptation through changes in habitat ranges as a result of climate change. In addition, ponds can provide water attenuation and reduction in local surface water flood risk, therefore supporting **climate change adaptation**.

Changes to local hydrology may have mixed effects, particularly during construction and impacts on water quality and quantity if existing waterbodies drain into the new pond. Overall, **mixed effects** are expected with regards to **water**.

Mixed **minor positive and minor negative** effects are also expected with regards to **soil**, as pond creation may reduce compaction and soil degradation but it could also lead to loss of soil resource and agricultural land.

Introducing PDR for creating wildlife ponds on agricultural land could result in **minor negative** effects on **cultural heritage** through damage or removal of buried archaeological artefacts or by altering the water table, resulting in potential damage to organic remains, which can be better preserved in a wet environment. In addition, pond creation could result in loss of historic field boundaries and hedgerows and could alter the setting of historic assets.

Introducing PDR (excluding access tracks) for creating wildlife ponds on agricultural land could result in **mixed effects** with regards to **landscape and geodiversity**. Negative effects could arise if the pond is out of character with the existing area, or if excavated material is left on-site, although positive effects could arise as ponds can enhance landscape character.

Introducing PDR for creating wildlife ponds on agricultural land are expected to have **positive effects** with regards to **economy**, as this would open up opportunities for farmers to claim funding through agri-environment schemes or to create new leisure or educational opportunities. In addition, new PDR are expected to improve efficiency in the planning process by removing existing uncertainty over when an application for planning permission is required.

Introducing PDR for creating wildlife ponds on agricultural land is expected to have **mixed effects** on **social, population and human health**. This could increase risk of bird strike if ponds are developed within the proximity of aerodromes or technical sites, resulting in potential significant negative effects. However, there is also potential for positive effects if the ponds are made publically available for recreational and educational opportunities.

Other sustainability impacts are considered to be negligible or unlikely.

#### **14.6 Mitigation of negative effects**

Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

To minimise the risk of bird strike associated with wildlife ponds, PDR should not apply to areas in the vicinity of aerodrome or technical sites.

To minimise landscape effects, restrict PDR to exclude waterbodies not contained in raised structures or impoundments. In addition, the maximum size of a pond needs to be defined i.e. when a pond becomes a dam or reservoir. Furthermore, the design of any water retaining structures should aim to minimise potential visual impacts e.g. natural shaped embankments, rather than geometric features.

To minimise biodiversity effects, restrict PDR in areas designated for their nature conservation importance. In addition, good practice guidance should be followed. For instance, there is clear guidance on the selection of suitable locations, as well as the design of ponds which provide the greatest benefits to the great crested newt (and other wildlife) whilst preventing harm to other habitats and species. Other potential measures include proper signposting (on local authority websites, for example) to bodies requiring consultation, sources of expertise and best practice.

To minimise cultural heritage and landscape effects, restrict PDR in areas designated for their landscape or cultural significance.

#### **14.7 Secondary, cumulative and synergistic effects**

No cumulative effects are identified because only a single change to PDR is included for this development type. No secondary or synergistic effects are identified.



# 15 Peatland restoration

## 15.1 Characteristics

Peatland can become degraded as a result of drainage, forestry, grazing, peat cutting or erosion<sup>94</sup>. Actions to restore peat can include:

- Blocking channels and ditches.
- Stabilising large areas of bare peat through mats or vegetation regeneration.
- Scrub clearance or tree felling.

The techniques for undertaking peatland restoration can vary in intensity, from pulling over grass to the use of diggers to block drains and flatten edges of gullies<sup>95</sup>.

## 15.2 Existing permitted development rights

There are currently no PDR for peatland restoration activities.

## 15.3 Rationale behind extending permitted development rights

The rationale for introducing PDR is to support the restoration of peatlands, with benefits in terms of carbon management and carbon storage. The rationale also includes benefits to species, habitats and flood management.

## 15.4 Potential changes to permitted development rights

The SA has considered the following:

- Peatland restoration including activities such as blocking channels and ditches, stabilizing large areas of bare peat through mats or vegetation regeneration, scrub clearance or tree felling, but excluding the development of access tracks for the purposes of peatland restoration.

## 15.5 Sustainability appraisal findings

### Key issues

Potential significant permanent positive effects in terms of biodiversity, the water environment, reducing greenhouse gas emissions, climate adaptation, soils and the landscape;

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<sup>94</sup> ClimateXChange, 2017. *Peatland Action Programme lessons learned* [pdf]. Available at: [http://www.climatexchange.org.uk/files/6514/8941/7843/Peatland\\_Action\\_-\\_lessons\\_learned.pdf](http://www.climatexchange.org.uk/files/6514/8941/7843/Peatland_Action_-_lessons_learned.pdf)

<sup>95</sup> Glenk, K., Martin-Ortega, J. Byg, A. (2017). *Online Peatland Learning Module. Peatland Action Programme*, Scottish Natural Heritage. Available at: <http://www.see.leeds.ac.uk/peatland-modules/learning/17.php>



Minor positive long term effects in terms of economy, quality of life, education and training;

Mixed permanent effects on cultural heritage.

Introducing PDR for peatland restoration activities (excluding access tracks) could have potential **significant positive** effects on **biodiversity, flora and fauna** as a result of increased habitat areas for uniquely adapted and often rare birds, plants, fungi, micro-organisms and invertebrates. Grouse and wading bird populations also benefit through improved nesting habitat, in addition to reducing mortality rates through the removal of steep-sided ditches. Peatland also acts as an important regulator of water flow and quality, reducing suspended load and therefore positively impacting downstream fisheries.

The introduction of new PDR for peatland restoration activities (excluding access tracks) could result in potential **significant positive** effects on **climatic factors** by protecting and restoring the nationally significant role peatland areas play in carbon storage and sequestration. Peatlands restoration also supports climate change adaptation through the regulation of water flows helping to minimise the risk of flooding and drought and prevent seawater intrusion. Peatland can also act as a natural defence against wildfires.

Introducing PDR could have a potential **significant positive** effect on **water** resources as well as flood risk reduction and management. Peatland is an important regulator of water flow and water quality and is an important source of drinking water. Peatland also stores and slows surface water runoff, helping to maintain steady flow rates, thereby providing flood alleviation downstream.

Introducing PDR could have a potential **significant positive** effect on **soils** through the reduction of soils erosion and degradation. Peatland also provides a natural carbon store of national significance.

Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have **mixed minor** effects on **cultural heritage**. Positive effects relate to the preservation of peatland as valuable natural historical archives of our past, preserving important ecological and archaeological information such as pollen records and human artefacts. Peatland restoration would recreate historical natural landscapes. However, the restoration of peatland and the associated activities could also have **negative** effects through damaging undesignated, unknown archaeology.

Introducing PDR could have a potential **significant positive** effect on **landscape and geodiversity** through the reinstatement and regeneration of the natural landscape resulting in the enhancement of the landscape character, in keeping with more historic land uses.

Introducing PDR is likely to have a **minor positive** effect on the **economy** by supporting activities as deer stalking, grouse shooting, hillwalking and bird watching as well as supporting salmonid fishing enterprises through the improvement to water quality in rivers with peatland catchments. Peatland areas also provide raw ingredients

for the whisky industry in Scotland. These industries will help generate tourism and generate investment opportunities throughout rural areas.

Introducing PDR is likely to have a **minor positive** effect on social, population and human health objectives through enhanced amenity, access and recreation. Peatland restoration improves access to and support for recreational activities such as deer stalking, grouse shooting, hillwalking, fishing and bird watching. Furthermore, restoration would create areas for learning and education as peatland areas are important natural habitats affording opportunities for research, scientific study and fieldwork.

Other sustainability impacts are considered to be negligible or unlikely.

### **15.6 Mitigation of negative effects**

Consider restricting PDR, or requiring prior notification/prior approval in designated areas, particularly those designated for cultural heritage or archaeological assets.

Consider defining the types of peatland where PDR for restoration will apply (blanket bog, raised bog and fens).

### **15.7 Secondary, cumulative and synergistic effects**

No cumulative effects are identified because only a single change to PDR is included for this development type. No secondary or synergistic effects are identified.



# 16 Allotments and community growing schemes

## 16.1 Characteristics

Allotments are plots of land tended by a plot holder singly or in partnership with others and can be used for growing fruit, vegetables, flowers, and other plants. Community growing spaces include orchards, biodiversity areas, recreational spaces, that are managed by the community, often with the purpose of growing food, but also with other purposes such as improving amenity, reducing fly tipping and vandalism, improving biodiversity or creating a community space. For the purposes of this assessment, the assessment is based on the use of land by individuals or communities to grow flowers, plants and food for enjoyment and personal use<sup>96</sup>.

Within Scotland allotments are classed within Planning Advice Note (PAN) 65 Planning and Open Spaces as open space<sup>97</sup>. Creation of an allotment may require planning permission if it is a change of use of land<sup>98</sup>. In addition to the use of the land a range of development may come about in association with the creation of an allotment or community growing scheme. This may include<sup>99</sup>:

- Sheds and greenhouses.
- Polytunnels.
- Portable buildings and containers.
- Communal huts or clubhouses.
- Fencing.
- Access and car parking.
- Toilet facilities.
- Water storage.

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<sup>96</sup> Note that historically in Scotland there was a distinction between 'allotment' and 'allotment garden'. An allotment was quite a large piece of land (at least an acre) and could be used to keep livestock. An allotment garden (plot) was originally defined in law as being not more than 40 poles (that is ¼ acre or about 1000 sqm).

<sup>97</sup> Planning Aid for Scotland, 2011. *Planning For Community Developments A Guide to the Scottish Planning System for Community Led Developments*. Available at:

[http://www.dtascommunityownership.org.uk/sites/default/files/PAS\\_community\\_developments.pdf](http://www.dtascommunityownership.org.uk/sites/default/files/PAS_community_developments.pdf)

<sup>98</sup> Scottish Government, 2013. *Consultation: The Legislative Framework Governing Allotments Consultation Report*. Available at: <http://www.gov.scot/Resource/0043/00437675.pdf>

<sup>99</sup>Bradford, P., 2011. *A Guide for Allotments and Planning Law Digging below the surface*. Central Lancashire Community Food Growing Lead Group.

- Raised beds.
- Water supply and water butts.
- Compost bins.

Different planning controls may apply to development within local authority owned grounds (e.g. schools).

## 16.2 Existing permitted development rights

*The Town and Country Planning (General Permitted Development) (Scotland) Order 1992*) contains PDR which under certain conditions apply to allotments and community growing schemes, including:

- 1 **Class 7** – allows the construction, maintenance, improvement or alterations of fences, gates, walls or other means of enclosure provided that they are subject to a maximum height of 2m, or 1m if within 20m of a road.
- 2 **Class 8** – includes provisions for permitting the laying out and construction of a means of access to a road.
- 3 **Class 14** – includes provisions for permitting temporary buildings and uses under certain conditions. Class 14 PDR only apply when the buildings, moveable structures, works, plant or machinery required temporarily is to be carried out on, in, under, or over that land or on land adjoining that land. The temporary buildings and uses are only permitted for the duration of operation being or to be carried out on that particular land. Moreover, Class 14 PDR do not apply to mining operations.
- 4 **Class 18** – includes provisions for permitting developments carried out on agricultural land. Class 18 PDR apply to the erection, extension or alteration of a building; the formation, alteration or maintenance of private ways; or any excavation or engineering operations.

PDR included in Class 18 do not apply to works carried out on land less than 0.4ha or that consist of the erection, extension or alteration of a building or if the development is used for the storage of sewage sludge or for housing pigs, poultry, rabbits or animals bred for fur. Moreover, development of buildings is not classified as permitted development if it would exceed 465 square metres, would exceed 3 metres (if located within 3 kilometres of the perimeter of an aerodrome), would exceed 12 metres (if located within 3 kilometres of the perimeter of an aerodrome), would be within 25 metres of the metalled portion of a trunk or classified road or if it would be within 400m of any protected building.

- 5 **Class 20** – makes a provision for permitting the carrying out of works for the improvement or maintenance of watercourses or drainage works. Class 20 does not include further restrictions or conditions.
- 6 **Class 33** – includes provisions enabling local authorities to permit certain types of development carried out within their own district. These include works for the

erection of dwellinghouses (under section 12 of the SEA Act), any development under the Housing (Scotland) Act 1987(2) or any development under any enactment costing under £250,000.

HoPS Scoping Report on the Extension of PDR and the Options to Remove the Need for Planning Permission for More Development Types<sup>100</sup> considered that the erection of structures (i.e. sheds, greenhouses, toilets, polytunnels, fences and enclosures) on an existing allotment that is privately owned will require planning permission as it is deemed 'development'. If the allotment is owned by the local authority, on the other hand, different conditions apply. The erection of structures and buildings on an existing allotment may be permitted in such a situation under current PDR enjoyed by the Council for carrying out works on land within its own district (subject to specific conditions as set out in Class 33.Rationale for extending PDR.

The Scottish Government is committed to supporting the development of allotments and community growing spaces. The provision of allotments and associated development within allotment sites can help contribute towards aiding the achievement of some of the Scottish Government's National Outcomes, and National Indicators as well as UN Sustainable Development Goals, as set out in the National Performance Framework, such as:

- We are healthy and active;
- We value, enjoy, protect and enhance our environment;
- We live in communities that are inclusive, empowered, resilient and safe.

In their Scoping Report HoPS however considered that the setting up of new allotments can potentially result in environmental and amenity issues e.g. noise/disturbance resulting from vehicle movements or visual impacts caused by the proliferation of fences. Therefore, HoPS considers that allotments and community growing schemes should remain under planning control in order to ensure that the construction of physical features associated with allotments such as buildings and structures, water and drainage systems and car parking can be assessed in a comprehensive manner.

### **16.3 Change in use of land for allotments and community growing schemes**

#### **Existing permitted development rights**

There are currently no PDR for change in use from non-agricultural uses to allotments and community growing schemes.

#### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

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<sup>100</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

- Introduce PDR for use of land for allotments and community growing where a change of use of land is required

## Sustainability appraisal findings

### Key issues

Largely potential significant long term positive effects in terms of social population and human health, although with the potential for specific minor negative but uncertain effects;

Minor positive long term effects in terms of adapting to climate change, water and soil;

Mixed minor positive and negative long term effects on biodiversity, landscape, cultural heritage, climate change and air quality.

Creating new PDR for the change in use from non-agricultural uses to allotments and community growing schemes could have a mix of **minor positive** and **negative** effects on **biodiversity**, as these land uses can provide new habitats and attract wildlife, although PDR may lead to allotments and community growing schemes replacing more biodiverse habitat, depending on where they are located.

New PDR for the change in use from non-agricultural uses to allotments and community growing schemes could have **mixed minor positive and negative** effects on **climatic factors** and local **air quality**. On the one hand, it is likely that such developments will generate a small number of trips by car (or other vehicle), though careful choice of location should help maximise the number made on foot or bike. Travel by car will result in emissions of greenhouse gases and pollutants. However, these contributions are likely to be minor, as allotments and community growing schemes are likely to serve a fairly local catchment. On the other hand, allotments provide opportunities for local food growing, reducing food miles and associated greenhouse gas emissions.

New PDR for allotments and community growing schemes could play a role in **climate change adaptation**, as these land uses provide ecosystem services such as local cooling and slowing surface water runoff. This is likely to be a **minor positive** effect.

New PDR for allotments and community growing schemes are likely to have **minor positive** effects on **water** as soil and vegetation can slow surface water runoff and filter pollutants from surface water runoff.

Introducing PDR to allotments and community growing schemes could protect and improve soil quality. It could also help bring vacant land into use. This change is therefore likely to have **minor positive** effects with regards to **soil**.

New PDR for allotments and community growing schemes are likely to have **mixed effects** on **cultural heritage** and **landscape** as these land uses can be associated with a 'cluttered' appearance, due to features such as fencing, sheds and water butts. Depending on their location, this could degrade the local landscape or townscape, or the setting of heritage assets. Alternatively, creation of allotments and community growing schemes could enhance an already degraded landscape and improve visual

amenity by adding greenery to an area. This could also improve the setting of heritage assets.

Creating new PDR for allotments and community growing schemes could have potential **significant positive** effects, mixed with **minor negative** effects, with regards to **social, population and human health**. Negative effects include health and safety hazards arising from potential increases in the risk of bird strike, if new allotments and community growing schemes are located near aerodrome or technical sites and the potential for new sites to be located on contaminated land or within major hazard consultation zones. Some adverse effects on amenity of local residents may arise from an increased number of vehicle movements and increased noise and odour. However, positive effects are expected on social, mental and physical wellbeing, as allotments and community growing schemes present opportunities for people to exercise outdoors, gain access to affordable, healthy food, connect with nature and form social bonds and community ties. Allotments and community growing schemes may also provide informal educational opportunities. In most locations, the benefits are likely to significantly outweigh the disbenefits.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.
- Exclude sites designated for wildlife conservation and wooded sites;
- Restrict any new PDR for sites greater than 1000m<sup>2</sup>;
- Restrict any new PDR within Conservation Areas or adjacent to designated heritage assets;
- Exclude brownfield or contaminated land;
- Restrict any new PDR within aerodrome safeguarding zones; Alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed
- Restrict any new PDR within major hazard consultation zones;
- Restrict any new PDR for associated buildings and structures greater than the height of a standard household garage.

### **16.4 Perimeter fencing for allotments and community growing schemes**

Perimeter fencing helps ensure that allotments and community gardens are secure and safe.



## Existing permitted development rights

Current PDR for perimeter fencing include a height restriction of 1m if within 20m of a road and 2m in other locations.

## Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- Extending PDR to increase the height permitted to 2m within 20m of a road.
- Extending PDR to increase the height permitted to greater than 2m elsewhere.

## Sustainability appraisal findings

### Key issues

Minor negative but reversible impacts on landscape and minor negative uncertain effects on cultural heritage;

Mixed long term effects in terms of social, population and human health objectives.

Increasing the permitted height of perimeter fences could result in adverse impacts on **cultural heritage** and **landscape and geodiversity**, as this could allow taller fences to be constructed, which would have a greater visual impact and has potential to change the setting of heritage features.

Positive effects on **social, population and human health** could arise as a result of extending PDR to increase the height permitted to 2m within 20m of a road, as this would make it more difficult for people to break into the allotments and may help reduce crime and anti-social behaviour. However, relaxing height restrictions near roads could result in road safety risks, mainly due to visual obstruction. Due to the relatively low risk, potential adverse effects on road safety are judged to be minor. Overall, mixed effects are identified.

Other sustainability impacts are considered to be negligible or unlikely.

## Mitigation of negative effects

- Restrict any new PDR within Conservation Areas or adjacent to designated heritage assets.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained. .

## 16.5 Sheds and composting toilets

Sheds provide storage and shelter for allotment holders, while composting toilets provide an environmentally friendly facility on-site.

## Existing permitted development rights

Current PDR only allow temporary structures.

## Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- Extending PDR for sheds (including structures housing composting toilets) on allotments and community growing schemes.

## Sustainability appraisal findings

### Key issues

Minor positive long term effects on soil

Minor negative effects on landscape and cultural heritage;

Mixed minor effects on cultural heritage and social, population and human health.

Extending PDR to sheds and composting toilets could have **minor positive** effects for **soil** as they produce compost, which can be used on-site. This may help to maintain soil quality and nutrient levels.

Extending PDR to sheds and composting toilets could reduce the visual amenity of the allotment site and could adversely affect **landscape and geodiversity** and the settings of **cultural heritage** assets. This is regarded as a minor negative effect.

Extending PDR to sheds and composting toilets could encourage people to get involved in gardening opportunities and to spend more time on their allotments, therefore increasing opportunities for social interaction, community cohesion and other health and wellbeing benefits of allotments. However, extended PDR could have negative effects on the amenity of local residents, due to visual intrusion and odour, if they were poorly designed or not well maintained, resulting in **minor mixed** effects on **social, population and human health** overall.

Other sustainability impacts are considered to be negligible or unlikely.

## Mitigation of negative effects

- Restrict any new PDR within Conservation Areas or adjacent to designated heritage assets;
- Restrict any new PDR with regards to scale and design.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

There are separate regimes in place to deal with any potential environmental concerns associated with composting toilets.

## 16.6 Greenhouses and polytunnels

Greenhouses and polytunnels allow a much greater range of crops to be grown. They can be constructed by individual allotment holders or developed as a community or shared facility.

### Existing permitted development rights

Current PDR are only permitted for temporary structures.

### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- Extend PDR to greenhouses and polytunnels as permanent structures on allotments and community growing schemes (PDR for polytunnels more generally are considered separately in chapter 7 of the report).

### Sustainability appraisal findings

#### Key issues

Minor positive long term effects in terms of reducing greenhouse gas emissions, health and living environment, community cohesion and vitality and providing opportunities for training and education;

Minor negative reversible effects in terms of landscape and minor negative uncertain effects on cultural heritage.

Extending PDR to greenhouses and polytunnels could reduce the visual amenity of the allotment site and could adversely affect **landscape and geodiversity** and the settings of **cultural heritage** assets. A small number of medium sized structures would have a lower visual impact than a larger number of structures of different designs and materials or very large polytunnels or greenhouses.

Positive effects include increasing the scope to grow a wider range of produce and increasing yields, reducing dependence on higher food miles products. This contributes to efforts to **reduce carbon emissions** and is considered to be a **minor positive** benefit.

Greenhouses and polytunnels can also provide a focus for community growing initiatives, supporting interaction, training and education. This is also regarded as a **minor positive** benefit.

Other sustainability impacts are considered to be negligible or unlikely.

### Mitigation of negative effects

- Restrict any new PDR within Conservation Areas or adjacent to designated heritage assets;
- Restrict any new PDR in terms of scale and design.

- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

## 16.7 Communal huts or clubhouses

Communal huts and clubhouses can provide indoor space for allotment holder events and for education and training.

### Existing permitted development rights

Current PDR are only permitted for temporary structures.

### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- Extending PDR to communal huts and clubhouses as permanent structures.

### Sustainability appraisal findings

#### Key issues

Minor mixed long term effects on social population and human health;

Minor negative long term effects on landscape and minor negative but uncertain effects on cultural heritage.

Extending PDR to communal huts and clubhouses could reduce the visual amenity of the allotment site and could adversely affect **landscape and geodiversity** and the settings of **cultural heritage** assets. This is regarded as a **minor negative** effect.

Extending PDR to communal huts and clubhouses is expected to have **minor mixed** effects with regards to **social, population and human health**. Such structures could pose a safety risk if located near an aerodrome (depending on their height) or put more users at risk if located within a major hazard consultation zone. In addition, the presence of communal huts and clubhouses could affect the amenity of local residents if used for events. However, communal huts and clubhouses could increase opportunities for social interaction and therefore increase the role of the allotment/community growing scheme in community cohesion. In most cases the effect will be positive.

Other sustainability impacts are considered to be negligible or unlikely.

### Mitigation of negative effects

- Restrict any new PDR within Conservation Areas or adjacent to designated heritage assets.
- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.

- Restrict any new PDR with regards to scale and design.
- Restrict any new PDR within aerodrome safeguarding areas or major hazard consultation zones. Alternatively further dialogue with airport operators will be required if or when any detailed legislative proposals are developed.
- Restrict the height of any new PDR for associated buildings and structures.

### 16.8 Car parking/vehicular or pedestrian access

In many cases, car parking and access for vehicles and pedestrians will be needed to avoid impacts on neighbouring roads and to provide loading areas.

#### Existing permitted development rights

There are no relevant existing PDR.

#### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- Creation of new PDR to allow construction of car parks for allotments and community growing schemes.
- Creation of new PDR for vehicular access and loading areas for allotments and community growing schemes.

#### Sustainability appraisal findings

##### Key issues

Minor negative permanent effects in terms of climate change adaptation, water and soils, and minor negative but uncertain effects for biodiversity;

Minor mixed long term effects in terms of greenhouse gas emissions, air quality, landscape, cultural heritage and social, population and human health.

Introducing PDR for car parking for allotments and community growing schemes and access and loading areas could have **minor adverse** effects on **biodiversity, flora and fauna** if developed on or near to sensitive areas for wildlife.

Introducing PDR for car parking for allotments and community growing schemes could encourage users to drive to their allotment, therefore potentially increasing emissions of pollutants and greenhouse gases associated with cars and vans. However, PDR for car parking and access and loading areas could help to reduce cars parked on the street, which could help to alleviate congestion in some areas. As such, both minor positive and minor negative effects are expected with regards to **climatic factors** and **air**.

Development of car parking, access and loading infrastructure could increase the area of permeable surfaces, due to introduction of hard standing. This could limit the ability to adapt to climate change and increase local flood risk, as well as increasing runoff of contaminated surface water into nearby waterbodies. This contributes to the negative effects identified with regards to **climate change adaptation**, as well as **water**.

Additionally, increased hardstanding could lead to loss of access to soil resources, therefore having negative effects on **soil**. These are all considered to be minor negative effects.

Introducing PDR for car parking for allotments and community growing schemes and access and loading areas could negatively affect the setting of heritage assets and local landscape character, due to visual impacts of car parking and introducing a more 'urban' feature onto the allotment or community growing schemes. However in some cases, enabling space for parking, access and loading could have positive implications for the setting of heritage assets and local landscape character as it may reduce the number of cars parked on the street. Overall, **minor mixed** effects are expected with regards to **cultural heritage** and **landscape and geodiversity**.

Similarly, introducing PDR for car parking for allotments and community growing schemes could encourage people to drive to their allotments, which would result in increased vehicle movements and therefore negatively affect the amenity of local residents. Dedicated parking or loading areas could also have minor positive effects by supporting the use of the site by people who are less physically able or with mobility issues, helping them to more easily move required equipment and therefore to access the wider health benefits of the site. Alternatively, local amenity could be improved if fewer cars were parked on the street, leading to **minor mixed** effects on **social, population and human health**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

- Existing protections afforded by The Conservation (Natural Habitats, &c.) Regulations 1994, as amended, would continue to apply in respect of proposals likely to have significant effect on any European Site. Notwithstanding those existing protections, the restriction on PDR in Natura sites could be retained.
- Exclude sites designated for wildlife conservation and wooded sites.
- Include size restrictions for PDR for car parks.
- Restrict any new PDR within Conservation Areas or adjacent to designated heritage assets.
- Design guidance to ensure car parking is constructed of porous material, and run off directed to permeable area and/or include SuDS.

### **16.9 Water and drainage systems**

Water and drainage systems can help ensure that allotment holders are able to irrigate produce during periods of dry weather whilst ensuring that waterlogging is avoided at wetter times of year. Irrigation is particularly important for greenhouses and polytunnels.

### **Existing permitted development rights**

There are no existing PDR.

## Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- Creation of PDR for water and drainage systems on allotments and community growing schemes.

## Sustainability appraisal findings

### Key issues

Minor positive long term effects in terms of soils, managing flood risk, and minor positive uncertain effects in terms of climate change adaptation;

Minor negative long term effects in terms of water resources and water quality.

Creation of PDR for water and drainage systems on allotments and community growing schemes could have minor negative effects on water resources and water quality. Allotments could create a major source of demand for water, though it is likely that some of this could be met from on-site capture and storage of rainwater. There is also a risk that surface water could become contaminated with fertilisers and pesticides, potentially impacting on adjacent water courses.

Installing drainage systems could also have **minor positive** effects on **soil**, as it could prevent soil becoming dried during drought or waterlogged during periods of rain, thereby helping to maintain or increase the area of productive soil.

There could also be **minor positive** benefits in terms of **climate change adaptation**, with installation of rainwater harvesting systems helping to provide a source of water during drought. Effective drainage schemes could make allotments more resilient to flooding.

Other sustainability impacts are considered to be negligible or unlikely.

### Mitigation of negative effects

No mitigation measures are considered necessary, though encouragement should be given to measures to capture and re-use rainwater.

### 16.10 Portable buildings and containers for the purposes of the allotment or community growing site

Portable buildings and containers are sometimes used to securely store equipment associated with growing activities.

### Existing permitted development rights

Current PDR are permitted for temporary structures for the duration of the operation.

### Potential changes to permitted development rights

To clarify that existing PDR apply to portable buildings and containers for the purpose of allotments and community growing sites.

## Sustainability appraisal findings

### Key issues

Minor negative long term effects are identified for landscape and minor negative but uncertain effects are identified for cultural heritage.

PDR for portable buildings and containers could reduce the visual amenity of the allotment or community growing site and could have minor negative effects on **landscape and geodiversity** and the settings of **cultural heritage** assets.

Other sustainability impacts are considered to be negligible or unlikely.

### Mitigation of negative effects

- Introducing improved clarity on PDR would effectively be a continuation of the current situation,, therefore no mitigation is identified.

### 16.11 Secondary, cumulative and synergistic effects

The SA considered a series of elements which would contribute to an allotment or community growing scheme. Most of the predicted effects depend on the full range of elements being implemented (whether through PDR or planning applications) so many of the positive effects can be regarded as synergistic and would not be delivered by elements such as sheds, perimeter fencing or watering systems on their own. Potential **significant positive synergistic effects** include provision of fresh **locally sourced food**, reducing food miles and associated **greenhouse gas emissions**, **community cohesion and vitality** and the creation of opportunities for **training and education**.

The principal **negative cumulative effect** reflects the potential effect of allotment and community garden development on the setting of **historic assets and townscapes**. Allotments, particularly when well established, can have an untidy and haphazard appearance which could contrast with some historic sites.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for allotments and community growing schemes in combination with other development categories are discussed in Chapter 21.



# 17 Householder developments

## 17.1 Characteristics

Householder PDR are established so that in a number of instances limited alterations and extensions, to and within the curtilage of a property, can be carried out without the need to submit an application for planning permission. This ensures that minor and uncontroversial development does not slow down the effectiveness and efficiency of the planning system. In Scotland, householder PDR are explained within *Circular 1/2012: Guidance on Householder Permitted Development Rights*<sup>101</sup>.

The HoPS Scoping Paper<sup>102</sup> proposed exploration of a more radical and comprehensive transfer of functions in full or part to the Building Standards Regulatory System, consideration of which is outwith the scope of this report. HoPS also considered that there may be scope to relax householder PDR, including by removing some of the restrictions within Conservation Areas and to and within the curtilage of Listed Buildings. A Round Table discussion on PDR and the Historic Environment was convened by the Minister for Local Government & Communities on 25 January 2018 with historic environment stakeholders. The meeting invited views specifically on Permitted Development in conservation areas, as well as on the existing tensions for permitted development and the historic environment more widely. Whilst the discussion was not limited to householder development specifically, the group discussed: the opportunities for extending PDR in the historic environment; the tensions in that regard, especially in relation to conservation areas; and, striking the right balance between development needs and conservation objectives. The views expressed have helped to inform this report.

HoPS also raised specific questions with regard to the reviewing and tightening of specific language and terminology related to PDR, for example reviewing the definition of 'curtilage' within current case law definition.

The proposed options for extending PDR are based on the classes identified in Circular 1/2012.

Changes to PDR are considered in relation to the following types of householder development:

- Single storey ground floor extensions.
- Ground floor extensions of more than one storey.

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<sup>101</sup> Scottish Government, 2012. *Guidance on Householder Permitted Development Rights: Circular 1/2012* [pdf]. Available at : <http://www.gov.scot/Resource/0050/00502132.pdf>

<sup>102</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

- Porches.
- Enlargements of roofs.
- Access ramps.
- Improvements or alterations that are not an enlargement.
- Ancillary buildings.
- Any building, engineering, installation or other operation.
- Hard surfaces.
- Decking or raised platforms.
- Gates, fences or other enclosures.
- Improvements or alterations to the external appearance of a dwelling situated within a building containing one or more flats.

## **17.2 Single storey ground floor extensions**

This category typically covers single storey extensions to the rear of a property, including conservatories, car-ports, canopies and roofs.

### **Existing permitted development rights**

Currently, PDR apply to single storey, ground floor extensions in all areas except Conservation Areas and with respect to flatted properties (flatted properties). Extensions must be located to the rear of a property (i.e. not in front of the principal elevation or side elevation where said elevation fronts a road), with a footprint no larger than the existing house and resulting in no more than half the front or rear curtilage being developed. There are limits on the height of the extension (4m to eaves) and further restrictions on size where the proposed extension lies within 1m of the property boundary.

### **Potential changes to permitted development rights**

The SA has considered the following:

- o No change in PDR
- o Extending existing PDR to Conservation Areas
- o Extending existing PDR to flatted properties
- o Remove requirement for extensions to be at rear of property – PDR applying at side or front of property – excluding Conservation Areas / flatted properties
- o Remove requirement for extensions to be at rear of property – PDR applying at side or front of property – all areas

- o Remove the restriction on the height of the eaves – excluding Conservation Areas/ flatted properties
- o Remove the restriction on the height of the eaves- all areas
- o Remove restriction on footprint relative to size of original dwellinghouse – excluding Conservation Areas/flatted properties
- o Remove restriction on footprint relative to size of original dwellinghouse – all areas
- o Remove restriction on footprint relative to curtilage – excluding Conservation Areas/flatted properties
- o Remove restriction on footprint relative to curtilage – all areas
- o Remove restrictions on size within 1m of boundary – excluding Conservation Areas/flatted properties
- o Remove restrictions on size within 1m of boundary – all areas
- o Extending these increased PDR to all areas, including Conservation Areas.

## Sustainability appraisal findings

### Key issues

Potential permanent significant negative effects on nationally significant cultural heritage assets depending on the extent to which PDR are extended.

Minor mixed local long term effects on people's living environment and on the aim of supporting sustainable economic growth.

Minor negative permanent effects in terms of biodiversity, flooding, soils and landscape.

Extending PDR for single storey, ground floor extensions are most likely to have negative impacts on **heritage assets and their settings**.

- Outside Conservation Areas, increasing in the maximum size of extensions and removing the requirement for them to be located to the rear of properties, could result in **minor negative** impacts on undesignated historic buildings and their contribution to the wider built environment.
- Extending existing PDR to Conservation Areas could result in unsympathetically designed extensions affecting unlisted buildings. While the impact would be mitigated by retaining limits on size and restrictions to the rear of properties, this could have an impact on otherwise historic buildings and the character of the wider Conservation Area. This is considered to be a **minor negative** impact overall.
- Allowing increased PDR within Conservation Areas could result in a significant increase in the scale of impact on designated heritage assets and their settings,

with increased potential for unsympathetic schemes that prominently impacted in the appearance, structure and setting of buildings within Conservation Areas. This could result in potential **significant negative** effects.

Making it easier for people to improve their **living environment** by extending their home is a **minor positive** effect which will be enhanced if restrictions on the size or location of extensions are relaxed. However, there could be **minor negative** effects if extensions have a greater impact on neighbours or if the increase in value that results from property improvement makes it harder for many people to afford to live in Conservation Areas.

Extending PDR for ground floor extensions would bring minor positive effects in terms of **sustainable economic growth**, allowing people to invest in their properties and providing work for the building trade. It is, however, possible that unsympathetically designed developments could have an indirect, negative economic effect within Conservation Areas, particularly if poorly designed schemes reduced the attractiveness of the Conservation Area as a place to live, work, visit or invest. In the case of the maximum increase in PDR within Conservation Areas, this could be a **minor negative** effect.

Single storey, ground floor extensions could also result in minor impacts in terms of **biodiversity, flooding, soil and landscape**, though the changes in PDR are unlikely to result in a significant increase in this effect.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Identify any Conservation Areas where, by virtue of their character, layout or patterns of public accessibility, single storey, ground floor extensions to the rear of properties would have a particularly major impact. Consider limiting any extension of PDR in these cases, or introducing the requirement for prior notification/prior approval.

Within Conservation Areas, limit PDR to extensions to the rear of the property.

Outside Conservation Areas, limit PDR to extensions at the rear or side of the property.

Require prior notification/prior approval with or without a neighbour consultation scheme for extensions within 1m of a property boundary. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required.

However this would reduce or limit any potential benefits for the efficient use of the planning system.

## **17.3 Ground floor extensions of more than one storey**

### **Existing permitted development rights**

Currently, PDR apply to ground floor extensions of more than one storey in all areas except Conservation Areas and with respect to flatted properties. Extensions must be located to the rear of a property, no taller than the existing building and with a footprint

no larger than the existing house and not result in more than 50% of the relevant curtilage being developed. The extension must be at least 10m from the nearest boundary for PDR to apply.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No Change to PDR
- Extend existing PDR to Conservation Areas
- Extend existing PDR to flatted properties
- Remove requirement for extensions to be at rear of property – PDR applying at side or front of property– excluding Conservation Areas/ flatted properties
- Remove requirement for extensions to be at rear of property – PDR applying at side or front of property
- Remove restriction on height– excluding Conservation Areas/ flatted properties
- Remove restriction on height– all areas
- Remove restriction on footprint relative to size of original dwellinghouse– excluding Conservation Areas/ flatted properties
- Remove restriction on footprint relative to size of original dwellinghouse– all areas
- Remove restriction on footprint relative to curtilage– excluding Conservation Areas/ flatted properties
- Remove restriction on footprint relative to curtilage– all areas
- Remove or reduce restrictions on size within 10m of boundary– excluding Conservation Areas/ flatted properties
- Remove or reduce restrictions on size within 10m of boundary– all areas.

### **Sustainability appraisal findings**

#### **Key issues**

Potential significant permanent negative effects on nationally significant cultural heritage depending on the extent to which PDR are extended;

Minor mixed local, long term positive effects on people’s living environment and on the aim of supporting sustainable economic growth;

Minor negative permanent effects in terms of biodiversity, flooding, soils and landscape.

Extending PDR for ground floor extensions of more than one storey are most likely to have negative impacts on **heritage assets and their settings**.

- Outside Conservation Areas, increasing the maximum size of extensions and removing the requirement for them to be located to rear of properties, could result in **minor negative** impacts on undesignated historic buildings and their contribution to the wider built environment.
- Extending existing PDR to Conservation Areas could result in unsympathetically designed extensions affecting unlisted buildings. While the impact would be mitigated by retaining limits on size and restrictions to the rear of properties, this could have an impact on otherwise historic buildings and the character of the wider Conservation Area. This is considered to be a **minor negative** impact overall.
- Allowing increased PDR within Conservation Areas could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the appearance, structure and setting of buildings within Conservation Areas. Such extensions could be out of proportion with the existing building, its footprint and curtilage. Extensions could be more visible by virtue of their height and possible location on side and front of buildings rather than being confined to the rear. This could result in potential **significant negative** effects.

Making it easier for people to improve their **living environment** by extending their home is a **minor positive** effect which will be enhanced if restrictions on the size or location of extensions are relaxed. However, there could be **minor negative** effects if extensions have a greater impact on neighbours or if the increase in value that results from property improvement makes it harder for many people to afford to live in Conservation Areas (minor effect).

Extending PDR for ground floor extensions of more than one storey would bring **minor positive** effects in terms of **sustainable economic growth**, allowing people to invest in their properties and providing work for the building trade. It is, however, possible that unsympathetically designed developments could have an indirect, negative economic effect within Conservation Areas, particularly if poorly designed schemes reduced the attractiveness of the Conservation Area as a place to live, work, visit or invest. In the case of the maximum increase in PDR within Conservation Areas, this could be a **minor negative** effect.

Ground floor extensions of more than one storey could also result in minor impacts in terms of **biodiversity, flooding, soil and landscape**, though the changes in PDR are unlikely to result in a significant increase in these effects.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Identify any Conservation Areas where, by virtue of their character, layout or patterns of public accessibility, ground floor extensions of more than one storey to the rear of properties would have a particularly major impact. Consider limiting any extension of PDR in these cases, or introducing the requirement for prior notification/prior approval, however this would reduce or limit the benefits for a more efficient planning system.

Limit PDR to extensions to the rear of the property.

Require prior notification/prior approval with or without a neighbour consultation scheme for extensions within 10m of property boundary. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required.

#### **17.4 Porches**

This category covers construction of a small porch on any external door.

##### **Existing permitted development rights**

Currently, PDR apply to porches that have a footprint of 3 square metres or less, that are less than 3 metres in height and at least 2 metres from a boundary or road. These PDR do not apply in Conservation Areas or with respect to flatted properties.

##### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No Change to PDRs
- Extend existing PDRs to Conservation Areas
- Extend existing PDRs to flatted properties
- Remove restriction on the footprint of the porch– excluding Conservation Areas/ flatted properties
- Remove restriction on the footprint of the porch – all areas
- Remove restriction on the height of the porch– excluding Conservation Areas/ flatted properties
- Remove restriction on the height of the porch– all areas
- Remove minimum distance between porch and any boundary / road– excluding Conservation Areas/ flatted properties
- Remove minimum distance between porch and any boundary / road– all areas.

##### **Sustainability appraisal findings**

###### **Key issues**

Potential significant permanent negative effects on nationally significant cultural heritage assets depending on the extent to which PDR are extended;

Minor mixed long term effects on people's living environment and on the aim of supporting sustainable economic growth;

Minor negative permanent effects in terms of biodiversity, flooding, soils and landscape;

Minor positive long term effects on climatic factors particularly in relation to changes in Conservation Areas.

Extending PDR for porches is most likely to have negative impacts on heritage assets and their settings.

- Outside Conservation Areas, permitting larger porches, closer to the property boundary, could result in **minor negative** impacts on undesignated historic buildings and their contribution to the wider built environment.
- Extending existing PDR to Conservation Areas could result in unsympathetically designed porches affecting unlisted buildings. While the impact would be mitigated by retaining limits on size and restrictions on proximity to boundaries, this could have an impact on otherwise historic buildings and the character of the wider Conservation Area. This is considered to be a **minor negative** impact overall.
- Allowing increased PDR within Conservation Areas could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic porches that prominently impacted in the appearance, structure and setting of buildings within Conservation Areas. Such additions could be out of proportion and character with the existing building. This could result in potential **significant negative** effects.

Extending PDR for porches would bring **minor positive** effects in terms of sustainable economic growth, allowing people to invest in their properties and providing work for the building trade. It is, however, possible that unsympathetically designed additions could have an indirect, negative economic effect within Conservation Areas, particularly if poorly designed schemes reduced the attractiveness of the Conservation Area as a place to live, work, visit or invest. In the case of the maximum increase in PDR within Conservation Areas, this could be a **minor negative** effect.

Making it easier for people to improve their living environment by adding porches to their home is a **minor positive** effect which will be enhanced if restrictions on size or location are relaxed. However, there could be **minor negative** effects if porches have a greater impact on neighbours.

Increases in PDR for porches could contribute to improving the energy efficiency of people's homes, helping to reduce **greenhouse gas emissions**. This is considered to be a **minor positive** effect.

Extending PDR for porches could also result in **minor negative** impacts in terms of **biodiversity, flooding, soil and landscape**, though the changes in PDR are unlikely to result in a significant increase in these effects.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Identify any Conservation Areas where, by virtue of their character the addition of porches of limited size would have an unacceptable impact. Consider limiting any extension of PDR in these cases, or introducing the requirement for prior notification/prior approval.



Provide guidance to encourage designs that are sympathetic to the building in question and the wider townscape.

Require prior notification/prior approval with or without a neighbour consultation scheme for porches within 2m of property boundary. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required. However this would reduce or limit the benefits for a more efficient planning system.

### **17.5 Enlargements of roofs**

This category allows the construction of a typical rear facing dormer.

#### **Existing permitted development rights**

PDR allow the enlargement of a dwellinghouse by way of an addition or alteration to its roof. This class typically relates to the addition of a dormer. PDR require that:

- dormers are generally located to the rear of the property (i.e. not in front of a principal or side elevation where that elevation fronts a road);
- the distance between the dormer and boundary it fronts is a minimum of 10 metres;
- the height of the dormer is not higher than the existing dwellinghouse;
- the dormer, or dormers, covers less than half the roof; and,
- the distance between the dormer and the edge of the roof is a minimum of 0.3 metres.

There are no PDR in Conservation Areas.

#### **Potential changes to permitted development rights**

The SA has considered the following:

- No Change to PDR
- Extend existing PDR to Conservation Areas
- Extend existing PDR to flatted properties
- Allow dormers on front and sides– excluding Conservation Areas/ flatted properties
- Allow dormers on front and sides– all areas
- Allow height enlargement higher than the existing dwelling house– excluding Conservation Areas/ flatted properties
- Allow height enlargement higher than the existing dwelling house– all areas

- Allow roof enlargement covering more than half of the roof– excluding Conservation Areas/ flatted properties
- Allow roof enlargement covering more than half of the roof– all areas
- Remove restriction on the distance between the enlargement and the edge of the roof– excluding Conservation Areas/ flatted properties
- Remove restriction on the distance between the enlargement and the edge of the roof– all areas
- Reduce or remove the requirement for at least 10m between enlargement and boundary– excluding Conservation Areas/ flatted properties
- Reduce or remove the requirement for at least 10m between enlargement and boundary– all areas
- Extending these increased PDR to all areas, including Conservation Areas.

### Sustainability appraisal findings

#### Key issues

Potential permanent significant negative effects on nationally significant cultural heritage assets depending on the extent to which PDR are extended;

Minor mixed local long term effects on people’s living environment and on the aim of supporting sustainable economic growth;

Minor negative permanent local effects in terms of landscape and biodiversity;

Minor positive long term effects for climatic factors and soils.

Extending PDR for roof enlargement is most likely to have negative impacts on **heritage assets and their settings**. Extending existing rights to Conservation Areas could result in an increase in impacts since there would be potential for roof enlargements that are out of keeping with the historic character of an individual building and that visibly affect the appearance, structure and setting of buildings within a wider Conservation Area. While such enlargements would be limited to the rear of the property, and in proportion to the roof, the elevated location of the enlargement could increase the likelihood that it would be visible from within the wider Conservation Area. The overall effect could be **minor negative**. It is likely that extending PDR in areas outside Conservation Areas would result in a further increase in impact, particularly if roof enlargements become larger, more visible (on front as well as rear sections of roof) and out of proportion to the existing roof structure, extending to the edge of the roof and resulting in an increase in the overall height of the roof, and a significant change in the visual relationship between the building and its roof structure. This could have an adverse impact on townscape quality, particularly in more historic, but undesignated areas. This effect is considered to be **minor negative**. Applying extended PDR within Conservation Areas could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for schemes that

prominently impact on the appearance and setting of buildings within Conservation Areas. This is considered to be a potential **significant negative** effect.

Extending PDR for roof enlargement could also result in **landscape** impacts. While extending existing PDR to Conservation Areas would have a very slight effect on landscape, it is likely that extending PDR in areas outside Conservation Areas could result in more significant landscape impacts, resulting in roof structures whose appearance is out of proportion with the original building and where the legibility of the original structure is lost. The overall effect would be **minor negative**. Applying extended PDR within Conservation Areas could result in a further slight increase in the scale of impact on the landscape resulting in **minor negative** effects.

Extending existing rights to Conservation Areas could result mixed **economic effects**. Making it easier to improve their properties would allow people to invest in their homes and provide some work for the building trade. The impact on property value and business activity is uncertain. Roof enlargements could increase property values, though unsympathetically designed schemes could impact on the attractiveness of the Conservation Area as a place to live, work, visit or invest. It is likely these effects would generally be **minor and mixed** in nature. It is likely that extending PDR in areas outside Conservation Areas would result in a further slight increase in minor economic benefits associated with investment and upgrading of properties. Applying extended PDR within Conservation Areas could increase mixed economic effects benefits associated with investment and upgrading of properties (**minor positive**) and increasing property values but also the potential impact of very visible, poor quality development on the attractiveness of the Conservation Area as a place to live, work, visit or invest. This is considered to be a **minor negative** effect.

Existing PDR for roof enlargement allow people to improve their living environment and support better **quality of life**. Extending existing PDR to Conservation Areas is likely to result in a marginal increase in this **minor positive** effect. It is likely that extending PDR in areas outside Conservation Areas would continue to improve people's living environment, though removing the restriction on enlargement within 10m of the property boundary could increase the likelihood of impacts (loss of light, overlooking) on neighbours. Applying extended PDR within Conservation Areas would result in a further slight increase in minor positive effects associated with improvements in people's living environment and quality of life and **minor negative** effects in terms of potential effects on neighbours' amenity and quality of life.

Extending PDR for roof enlargement could also result in **minor impacts** in terms of **biodiversity** as a result of loss or disturbance to roost and nest sites within roof structures. There are potential **minor positive** effects in terms of **soil** (additional accommodation without increasing the footprint of the building) and **carbon emissions** (roof conversions requiring the upgrading of buildings' thermal efficiency and heating requirements), though the changes are unlikely to result in a significant increase in this effect.

Other sustainability impacts are considered to be negligible or unlikely.

## **Mitigation of negative effects**

Identify Conservation Areas where the development of dormers would have a particularly significant impact due to the character of buildings or the visibility of rear roofs. Consider restricting PDR, or requiring prior notification/prior approval in such cases.

Consider maintaining the limit on height of roof enlargement.

Consider maintaining the requirement that roof enlargements are located to the rear of properties, particularly in Conservation Areas.

Consider introducing the requirement for prior notification/prior approval within Conservation Areas, however this would limit or reduce the benefits to the efficient operation of the planning system.

Require prior notification/prior approval with or without a neighbour consultation scheme for developments within ten metres of property boundary. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required. However, prior notification/prior approval would limit or reduce the benefits to the efficient operation of the planning system

## **17.6 Access ramps**

### **Existing permitted development rights**

Currently, PDR allow access ramps with the following limitations:

- The combined length of all flights cannot be more than 5 metres .
- The combined length of all flights and landings cannot be more than 9 metres
- The height of the access ramp, including associated handrails, cannot be higher than 1.5 metres.
- The height of the platform cannot be higher than 0.4 metres .
- There are no PDR within a Conservation Area, for the curtilages of Listed Buildings or for flatted properties.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No Change to PDRs
- Extend existing PDRs to Conservation Areas
- Extend existing PDRs to flatted properties
- Allow ramps longer than 5m (total length of flights)– excluding Conservation Areas/ flatted properties
- Allow ramps longer than 5m (total length of flights)– all areas

- Allow ramps longer than 9m (total length of flights and landings)– excluding Conservation Areas/ flatted properties
- Allow ramps longer than 9m (total length of flights and landings)– all areas
- Allow height of the access ramp, including associated handrails to be greater than 1.5m– excluding Conservation Areas/ flatted properties
- Allow height of the access ramp, including associated handrails to be greater than 1.5m– all areas
- Allow platform height greater than 0.4m– excluding Conservation Areas/ flatted properties
- Allow platform height greater than 0.4m– all areas.

## Sustainability appraisal findings

### Key issues

Minor negative permanent local effects on cultural heritage, biodiversity, soils and landscape.

Minor positive long term effects for social, population and human health.

Existing PDR for access ramps are most likely to have negative effects on cultural heritage where ramps impact on the setting and historic character of historic buildings. However the overall size, scale and likely distribution of access ramps limit the extent of this effect. Extending PDR in areas outside Conservation Areas, extending existing PDR to Conservation Areas and applying extended PDR to Conservation Areas are each judged to have **minor negative** effects. Very **minor negative** effects are identified on **biodiversity, flora and fauna, soil and landscape** as a result of changes to garden habitat and construction of the ramps, and the visual impacts of ramps within the wider landscape.

Making it easier for people with reduced mobility to remain in their home and community provides **minor positive** effects for **social, population and human health**. Existing PDR support adaptation of people's homes to support access and mobility. Extending PDR in areas outside Conservation Areas, extending existing PDR to Conservation Areas and applying extended PDR to Conservation Areas are all judged to contribute to this effect.

Other sustainability impacts are considered to be negligible or unlikely.

### Mitigation of negative effects

Consider limiting PDR for taller and longer structures in Conservation Areas.

### 17.7 Improvements or alterations that are not an enlargement

This type of permitted development right effectively defines a one metre bubble surrounding a dwellinghouse within which a householder can carry out a wide range of different types of development without having to apply for planning permission. This

class covers the installation, alteration or replacement of solar PV or solar thermal equipment, the replacement of windows and installation of satellite dishes.

### **Existing permitted development rights**

Currently, PDR relating to improvements or alterations that are not enlargement exclude any changes that result in enlargement of the dwelling or include development of a balcony, roof terrace, raised platform or wind turbine. It does not include developments such as garden works, flues, ASHP or CCTV which are covered by other PDR. Developments must not project more than a metre from a roof or wall of the dwelling. PDR for improvements or alterations that are not enlargement do not apply within Conservation Areas or with respect to flatted properties.

### **Potential changes to permitted development rights**

Potential changes to PDR improvements or alterations that are not enlargement could include:

- No Change to PDR
- Extend existing PDR to Conservation Areas
- Extend existing PDR to flatted properties
- Allow development to project more than 1 metre from wall or roof – excluding Conservation Areas/ flatted properties
- Allow development to project more than 1 metre from wall or roof – all areas
- Allow development of balconies, roof terraces or raised platforms– excluding Conservation Areas/ flatted properties
- Allow development of balconies, roof terraces or raised platforms – all areas.

### **Sustainability appraisal findings**

#### **Key issues**

Potential significant negative effects on nationally significant cultural heritage assets depending on the extent to which PDR are extended;

Minor mixed long term local effects on people's living environment;

Minor negative local permanent effects on landscape and biodiversity;

Minor positive long term effects on the aim of supporting sustainable economic growth.

Extending PDR for improvements or alterations that are not enlargement are most likely to have negative impacts on heritage assets and their settings.

- Outside Conservation Areas, it is likely that extending PDR would result in the potential for impacts on undesignated historic buildings and their settings, for example though the retrofitting of roof terraces or balconies. This effect is considered to be a **minor negative**.

- Extending existing PDR to Conservation Areas could result in a notable increase in the scale of this impact since there would potentially be a range of changes which could affect the appearance of individual buildings and the wider Conservation Area. This could include, for example, the addition of solar panels on roofs. The overall effect is judged likely to be **minor negative**.
- Allowing increased PDR within Conservation Areas more significant impacts on designated heritage assets and their settings, with increased potential for schemes such as balconies and visually intrusive solar installations that prominently impact on the protected townscape. This could result in potential **significant negative** effects.

Extending PDR for improvements or alterations that are not enlargement would bring **minor positive** effects in terms of sustainable economic growth, allowing people to invest in their properties and providing work for the building trade. It is, however, possible that unsympathetically designed developments could have an indirect, negative economic effect within Conservation Areas, particularly if poorly designed schemes reduced the attractiveness of the Conservation Area as a place to live, work, visit or invest. In the case of the maximum increase in PDR within Conservation Areas, this could be a **minor negative** effect.

Making it easier for people to improve their living environment by improving their home is a **minor positive** effect which will be enhanced slightly if restrictions on the type or scale of improvements are relaxed. However, there could be **minor negative** effects if developments such as balconies or roof terraces have a greater impact on neighbours.

Improvements or alterations that are not enlargement could also result in **minor impacts** in terms of biodiversity and landscape, though the changes in PDR are unlikely to result in a significant increase in this effect.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Consider limiting any extension of PDR in Conservation Areas to rear facing roofs and elevations and/or introducing the requirement for prior notification/prior approval, however this would reduce benefits for a more efficient planning system.

Require prior notification/prior approval with or without a neighbour consultation scheme developments including balconies, roof terraces or raised platforms. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required. However prior notification/prior approval would reduce the benefits for a more efficient planning system

Maintain the restriction on the addition of balconies, roof terraces and raised platforms.

## **17.8 Ancillary buildings**

### **Existing permitted development rights**

PDR allow for the provision of any building required for a purpose incidental to the enjoyment of the dwellinghouse. Typical developments include sheds, garages, sun-houses and greenhouses. In summary, the effect of the limitations is that:

- Ancillary buildings are located to the rear of the property (i.e. not in front of a principal or side elevation where that elevation fronts a road)
- If 50% or more of the relevant part of the curtilage is to be developed, an application for planning permission would be needed.
- The height of the building is not higher than 4 metres and the sections within 1 metre of the boundary would be higher than 2.5 metres.
- The height of the eaves is not higher than 3 metres.

In the case of Conservation Areas or within the curtilage of a Listed Building PDR apply provided the footprint of the ancillary building does not exceed four square metres. Listed Building consent is required if the proposed development directly affects the character of a listed building.

### **Potential changes to permitted development rights**

The SA has considered the following:

- No Change to PDR
- Extend existing PDR to Conservation Areas
- Extend existing PDR to flatted properties– excluding Conservation Areas/ flatted properties
- Extend existing PDR to flatted properties – all areas
- Remove restriction to rear curtilage– excluding Conservation Areas/ flatted properties
- Remove restriction to rear curtilage– all areas
- Remove requirement for at least 50% of curtilage remaining undeveloped– excluding Conservation Areas/ flatted properties
- Remove requirement for at least 50% of curtilage remaining undeveloped– all areas
- Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m– excluding Conservation Areas/ flatted properties
- Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m– all areas.

### **Sustainability appraisal findings**

#### **Key issues**

Potential permanent significant negative effects on nationally significant cultural heritage assets depending on the extent to which PDR are extended;



Minor mixed local long term effects on people's living environment and on the aim of supporting sustainable economic growth;

Minor negative permanent effects in terms of biodiversity, flood risk, soils and landscape.

Extending PDR for ancillary buildings is most likely to have negative impacts on **heritage assets and their settings**. Extending existing rights to Conservation Areas and to the curtilage of Listed Buildings could result in a **minor negative** impact since there would be potential for unsympathetically designed ancillary buildings that affected the appearance, structure and setting of buildings within Conservation Areas. This would, however, be limited by PDR being granted only for ancillary buildings to the rear of properties and in proportion to the curtilage. Extending PDR in areas outside Conservation Areas and the curtilage of Listed Buildings could result in a **minor negative** impact, particularly if unsympathetically designed ancillary buildings become more visible by virtue of their number, size or location (to the sides of front of properties). Applying extended PDR within Conservation Areas and the curtilage of Listed Buildings could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the setting of buildings within Conservation Areas. This could result in potential **significant negative** effects. This effect would be moderated with respect to listed buildings where Listed Building consent would be required for potentially damaging schemes, though determining where the trigger for such an application being required could be problematic.

Extending existing rights in Conservation Areas and within the curtilage of listed buildings could result **mixed economic effects**. Making it easier to construct ancillary buildings would allow people to invest in their homes and provide work for the building trade. New ancillary buildings could increase property values, though the loss of vernacular setting to buildings could impact on the attractiveness of the Conservation Areas in as a place to live, work, visit or invest, particularly such buildings were in more visible or prominent locations. Extending PDR in all areas, including Conservation Areas, could therefore result in minor negative effects.

Existing PDR for ancillary buildings allow people to improve their living environment and support better **quality of life**. Extending PDR (including within Conservation Areas) is likely to result in a slight increase in this **minor positive** effect. However, it is possible that removing restrictions on the size and location of ancillary buildings could have a **minor impact** on neighbours' amenity and quality of life.

Extending PDR for ancillary buildings could also result in minor impacts in terms of **biodiversity, flood risk, soil and landscape**, though the changes are unlikely to result in a significant increase in this effect.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Identify Conservation Areas where increased development of ancillary buildings would have a particularly visible and significant impact on their historic character and value. Consider restricting PDR, or requiring prior notification/prior approval in such cases.

However this would reduce or limit any potential benefits for the efficient use of the planning system

Require prior notification/prior approval with or without a neighbour consultation scheme for developments more than 2.5m in height within one metre of property boundary. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required. However this would reduce or limit any potential benefits for the efficient use of the planning system

Retain the requirement for ancillary buildings in Conservation Areas to be located to the rear of properties.

Require ancillary buildings outside Conservation Areas to be located to the rear or side of properties.

### **17.9 Any building, engineering, installation or other operation**

This category includes garden works including the installation of free-standing solar panels, oil tanks, flagpoles, swimming pools etc.

#### **Existing permitted development rights**

Currently, PDR apply to operations that are located to the rear of a property, that do not result in more than 50% of the relevant part of the curtilage being developed. These PDR do not apply in Conservation Areas, within the curtilage of Listed Buildings or with respect to flatted properties.

#### **Potential changes to permitted development rights**

The SA has considered the following:

- No Change to PDR
- Extend existing PDR to Conservation Areas
- Extend existing PDR to flatted properties
- Allow in all parts of the curtilage– excluding Conservation Areas/ flatted properties
- Allow in all parts of the curtilage– all areas
- Allow structures higher than 3m– excluding Conservation Areas/ flatted properties
- Allow structures higher than 3m– all areas
- Allow development of more than 50% of curtilage– excluding Conservation Areas/ flatted properties
- Allow development of more than 50% of curtilage– all areas.

## Sustainability appraisal findings

### Key issues

Potential permanent significant negative effects on nationally significant cultural heritage depending on the extent to which PDR are extended;

Minor mixed local long term effects on people's living environment and on the aim of supporting sustainable economic growth;

Minor negative permanent effects in terms of biodiversity, flood risk, landscape and soils.

Extending PDR for building, engineering, installation or other operations is most likely to have negative impacts on **heritage assets and their settings**.

- Outside Conservation Areas, this could result in **minor negative** impacts on undesignated historic buildings and their contribution to the wider built environment.
- Extending existing PDR to Conservation Areas could increase the scale of this impact since there would be potential for unsympathetically designed projects that impacted on the setting of buildings within Conservation Areas. This would, however, be limited by PDR being granted only for engineering and other operations to the rear of properties and in proportion to the curtilage. The overall effect would be **minor negative**.
- Applying extended PDR within Conservation Areas could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the setting of buildings within Conservation Areas. This could result in potential **significant negative** effects.

Extending PDR for building, engineering, installation or other operations would bring minor positive effects in terms of **sustainable economic growth**, allowing people to invest in their properties and providing work for the building trade. It is, however, possible that unsympathetically designed changes could have an indirect, negative economic effect within Conservation Areas, particularly if poorly designed schemes reduced the attractiveness of the Conservation Area as a place to live, work, visit or invest. In the case of the maximum increase in PDR within Conservation Areas, this could be a minor negative effect.

Making it easier for people to improve their **living environment** by carrying out works within the curtilage of their home is a minor, positive effect which will be enhanced if restrictions on size or location are relaxed. However, there could be minor negative effects if development has a greater impact on neighbours.

Extending PDR for building, engineering, installation or other operations could also result in minor negative impacts in terms of **biodiversity, flooding, soil and landscape**, though the changes in PDR are unlikely to result in a significant increase in these effects.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Identify any Conservation Areas where, by virtue of their character, building, engineering, installation or other operations would have an unacceptable impact. Consider limiting any extension of PDR in these cases, or introducing the requirement for prior notification/prior approval, however this would reduce or limit benefits for the efficient operation of the planning system.

### **17.10 Hard surfaces**

This category includes the construction or replacement of hard surfaces such as driveways or patios.

### **Existing permitted development rights**

This type of permitted development right generally permits the construction or replacement of a hard surface. If the hard surface is between the dwellinghouse and a road then the materials used should be permeable or, alternatively, rain water run off should be to a permeable surface within the curtilage. PDR for hard surfaces do not apply in Conservation Areas or within the curtilage of a listed building.

### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No Change to PDR
- Extend existing PDR to Conservation Areas
- Extend existing PDR to flatted properties
- Removal of requirement for porous materials– excluding Conservation Areas/ flatted properties
- Removal of requirement for porous materials-all areas.

### **Sustainability appraisal findings**

#### **Key issues**

Minor negative permanent local effects in terms of cultural heritage, flood risk, biodiversity and soils;

Minor mixed long term local effects on people's living environment and on the aim of supporting sustainable economic growth.

Extending PDR for hard surfaces are most likely to have negative impacts on **heritage assets and their settings**. Extending existing PDR to Conservation Areas could result in a **minor negative** effect as a consequence of new areas of hard surface altering the setting of historic buildings and the wider townscape. This would be exacerbated if it was associated with the removal of boundary walls along road frontages to allow

vehicular access and as a result of the visual impact of parked vehicles within the curtilage of historic buildings.

Removing the requirement to use porous materials for new hard surfaces between dwellings and roads could result in **minor negative** effects on **flood risk**, particularly in catchments where pluvial and fluvial flooding is already a concern. The development of non-porous hard surfaces would increase in surface water run-off that would result.

Extending PDR for hard surfaces to Conservation Areas would bring **minor positive** effects in terms of **sustainable economic growth**, allowing people to invest in their properties and providing work for the building trade. It is, however, possible that unsympathetically designed developments could have an indirect, negative economic effect within Conservation Areas, particularly if they reduced the attractiveness of the Conservation Area as a place to live, work, visit or invest. Removing the requirement to use porous materials could have a **minor negative impact** on the local economy if this leads to an increase in the risk of flooding. The severity of the impact could be locally significant in vulnerable areas, and if the quantity of hard surfaces is significant within a local catchment.

Making it easier for people to improve their **living environment** by improving their home is a minor positive effect which will be enhanced slightly if PDR for hard surfaces were extended to Conservation Areas. However, there could be minor negative effects if the removal of the requirement to use porous materials increases the risk of flooding, giving overall **mixed effects**.

Extending PDR for hard surfaces could also result in **minor impacts** in terms of **biodiversity** and **soil**, though the changes are unlikely to result in a significant increase in this effect.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Consider introducing the requirement for prior notification/prior approval within Conservation Areas. However this would reduce or limit any potential benefits for the efficient use of the planning system

## **17.11 Decking or raised platforms**

### **Existing permitted development rights**

PDR allow for construction of decking or raised platforms, with the following limitations:

- Development should be to the rear of the property (i.e. not be forward of a wall forming part of the principal elevation or side elevation where that elevation fronts a road).
- The floor level does not exceed 0.5 metres in height.
- The combined height of the deck and any wall, fence balustrade, handrail or other structure attached to it, should not exceed 2.5 metres.

- In the case of a Conservation Area or within the curtilage of a Listed Building, the deck or platform should not have a footprint exceeding 4 sq. m.
- There are no PDR for flatted properties.

### Potential changes to permitted development rights

The SA has considered the following:

- No Change to PDR
- Increase the max size of decking in conservation areas or curtilage of listed buildings
- Extend existing PDR to Conservation Areas, curtilage of listed buildings
- Extend existing PDR to flatted properties
- Allow taller structures– excluding Conservation Areas/ flatted properties
- Allow taller structures-all areas.

### Sustainability appraisal findings

#### Key issues

Potential significant negative reversible effects on nationally significant cultural heritage depending on the extent to which PDR are extended;

Minor mixed local reversible long term effects on people’s living environment and on the aim of supporting sustainable economic growth;

Minor negative reversible local impacts in terms of biodiversity.

In relation to cultural heritage, **existing permitted development rights for decking** are likely to result in **negligible** impacts on undesignated heritage assets and their settings. **Extending existing rights to Conservation Areas** could result in negative impacts since it would allow the introduction of new structures into the setting of buildings within the Conservation Area, as well as the loss of previous historic landscape features. The overall effect would be **minor negative**. Allowing the use of larger or taller structures would not have a significant effect on designated assets outwith Conservation Areas, but could have a potential **significant negative** effect within Conservation Areas since it would allow the introduction of new structures into the setting of buildings within the Conservation Area, as well as the loss of previous historic landscape features. No additional effects are identified for extending PDR to flatted properties.

Extending PDR for decking is most likely to have very **minor negative** impacts on biodiversity as garden habitats for birds, small mammals and insects are lost. In relation to Conservation Areas, this could affect more mature and established habitats, however even with the maximum change in PDR for decking, the impact is unlikely to be significantly different from the present situation, with **minor negative** effects overall.

**Existing PDR** for decking are likely to result in very **minor positive** economic effects, allowing people to invest in their homes and providing work for the building trade.

**Extending existing rights to Conservation Areas** could result **mixed effects**.

Making it easier to construct decking would allow people to invest in their homes and provide work for the building trade. The impact on property value and business activity is uncertain. New outside space could increase property values, though the loss of vernacular setting to buildings could impact on the attractiveness of the Conservation Area as a place to live, work, visit or invest. This could be a minor mixed effect. Extending existing rights in Conservation Areas and within the curtilage of listed buildings could result **mixed effects**. No additional effects are identified for extending PDR to flatted properties.

For impacts on social, population and human health, **existing PDR** for decking are likely to result in **minor positive** effects, allowing people to improve their living environment and support better quality of life. **Extending existing PDR** is likely to result in a slight increase in this **minor positive** effect; however it is possible that removing height restrictions on new decking could have an adverse effect on neighbours.

The impacts of potential changes to listed buildings and their curtilage are identified as negligible due to the requirement for Listed Building consent.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

Identify Conservation Areas where increased development of ancillary buildings would have a particularly visible and significant impact on their historic character and value. Consider restricting PDR, or requiring prior notification/prior approval in such cases. However this would reduce or limit any potential benefits for the efficient use of the planning system

Require prior notification/prior approval with or without a neighbour consultation scheme for developments more than 2.5m in height within one metre of property boundary. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required. However this would reduce or limit any potential benefits for the efficient use of the planning system

## **17.12 Gates, fences or other enclosures**

### **Existing permitted development rights**

Currently, PDR relating to gates, fences and other enclosures include the following restrictions:

- No part of the resulting gate fence, wall or other enclosure would exceed 2 metres in height.
- No part of the resulting gate fence, wall or other enclosure would exceed 1 metre in height where it fronts a road or extends beyond the line of the wall of the principal elevation or side elevation that is nearest a road.

- It replaces or alters an existing gate, fence, wall or other means of enclosure and exceeds whichever is the greater of the original height or the heights described in the above points.
- There are no PDR within a Conservation Area, in or bounding the curtilage of a Listed Buildings or for flatted properties (a more general permitted development right applies to gates, walls, fences and other means of enclosure not associated with dwellinghouses- Class 7 of Schedule 1 to the Town and Country Planning (General Permitted Development) (Scotland) Order 1992 ` – which would apply to flatted properties).

### Potential changes to permitted development rights

The SA has considered the following potential changes to PDR:

- No Change to PDR
- Extend existing PDR to Conservation Areas
- Extend existing PDR to the curtilage of Listed Buildings
- Extend existing PDR to flatted properties
- Additional PDR in all areas.
- Additional PDRs in areas except Conservation Areas and flatted properties

### Sustainability appraisal findings

#### Key issues

Minor mixed local reversible effects on people's quality of life Minor local reversible negative impacts in terms of cultural heritage and landscape.

**Existing PDR** support the quality of designated and undesignated heritage assets and their setting. **Extending existing PDR to Conservation Areas** could result in **minor negative** effects on undesignated buildings within Conservation Areas. Extending existing PDR to the curtilage of Listed buildings could result in **minor negative** effects on listed buildings. **Extending PDR in all areas** would increase the potential scale of these negative effects. In particular these impacts could be greatest in terms of impacts on the character of townscape and impacts on the setting and views to other cultural heritage resources.

Similar to the issues identified in relation to cultural heritage, **existing PDR** support landscape quality, particularly at the edge of settlements where garden boundaries can be prominent. Extending existing PDR to Conservation Areas and extending PDR in all areas would result in **minor negative** effects.

**Existing PDR** support the quality of life for residents as a result of ensuring adverse effects on their views and use of outside space are not restricted, with **minor positive** effects. **Extending PDR within Conservation Areas** or **within all areas** would increase potential negative effects on quality of life as a result of overshadowing by tall gates, fences and other enclosures, and a **minor negative** effect is identified.



No additional effects are identified in relation to flatted properties.

### **Mitigation of negative effects**

Consider limiting PDR for in Conservation Areas.

Require prior notification/prior approval with or without a neighbour consultation scheme for developments more than 2m in height within one metre of property boundary. The neighbour consultation scheme informs the requirement for prior approval, if no objections are received prior approval is not required. However this would reduce or limit any potential benefits for the efficient use of the planning system

### **17.13 Improvements or alterations to the external appearance of a dwelling situated within a building containing one or more flats**

PDR for flats are more restricted than those for dwellinghouses, reflecting the variety of flat types, tenure and proximity to neighbouring occupiers.

#### **Existing permitted development rights**

Currently, PDR allow changes to the appearance to flats with the following limitations:

- It is not an enlargement.
- It should not protrude more than 1 metre from the outer surface of an external wall, roof plane, roof ridge or chimney.
- It does not alter the dimensions of an existing window or door opening.
- It is not a balcony.
- It would not be on the roof or would result in a raised platform or terrace.
- It is not a wind turbine.
- There are no PDR within a Conservation Area, the curtilage of a Listed Buildings or for flatted properties.
- It is not development relating to the installation, alteration or replacement of a biomass heating system flue or a CHP system flue or ASHP (to which other classes of permitted development apply).

#### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- No change in PDR
- Extending existing PDR to Conservation Areas
- Allow development to project more than one metre from wall or roof– excluding Conservation Areas/ flatted properties
- Allow development to project more than one metre from wall or roof – all areas
- Allow development of balconies, roof terraces or raised platforms– excluding Conservation Areas/ flatted properties
- Allow development of balconies, roof terraces or raised platforms – all areas.

#### **Sustainability appraisal findings**

##### **Key issues**

Potential permanent significant negative impacts on nationally significant cultural heritage assets;

Minor mixed local long term effects on people's living environment;

Minor negative permanent effects in terms of biodiversity and landscape.

Existing PDR are likely to result in **minor** impacts on **cultural heritage** through impacts on older but undesignated properties. Extending PDR within Conservation Areas could result in potential **significant negative** effects on designated heritage assets and their settings, with increased potential for schemes that prominently impact on the protected townscape. These effects could be mitigated by restricting PDR in Conservation Areas or restricting changes to the rear of properties.

Existing PDR for improvements to the appearance of a flat may have a **minor negative** impact on **biodiversity** as a consequence of the effects on roost and nesting sites, and the potential changes are not expected to significantly influence this. Raising awareness of statutory responsibilities for protected species could help to mitigate these existing effects.

Existing PDR for improvements to the appearance of flats could result in **minor landscape** impacts, particularly where properties are located on the edge of settlements or in the open countryside, however none of the potential changes are anticipated to significantly increase this effect.

The existing PDR allow people to invest in and improve their home which has **minor positive** effects on health and quality of life, and the potential extensions to PDR support this effect. However extending PDR for development which extends from the wall or roof, and development of balconies, roof terraces or raised platforms has the potential to increase the amount that people are overlooked, resulting in potential **mixed** effects for these changes on health and quality of life. These effects could be mitigated by limiting PDR for these developments used to inform the requirement for prior approval.

### **Mitigation of negative effects**

Restrict extensions to PDR to require development of balconies, roof terraces or raised platforms to require neighbour consultation scheme.

Restrict changes in PDR in Conservation Areas.

Restrict changes in PDR in Conservation Areas to the rear of properties.

### **17.14 Secondary, cumulative and synergistic effects**

Extending PDR for householder developments could have a potential mixed cumulative effect overall. A **significant positive cumulative** effect is identified by allowing people to invest in their properties and improve their **living environment**. However, there is a risk that a number of the possible changes could have **negative cumulative effects** on **neighbours' living environment** for example by allowing development close to property boundaries.

There could be **mixed cumulative effects** for the **economy**, with many householder developments enhancing property value and providing a source of employment for the building trade. However, poorly designed or located developments could affect the

quality of the built environment, particularly within Conservation Areas, with a possible negative effect on property values.

Removing the requirement for a range of householder developments to secure planning consent in Conservation Areas could have a **positive cumulative effect** in terms of efficient **operation of the planning system**.

If all the possible changes were implemented and extended PDR were applied to Conservation Areas there could be potential **significant adverse cumulative impacts** on **cultural heritage**. The combination of extensions, roof enlargements, the addition of porches, ancillary buildings, decking and fencing could have a significant impact on the character and appearance of individual buildings and the wider townscape.

There could be more **minor adverse cumulative effects** on **biodiversity, flood risk** and the **landscape**.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for householder developments in combination with other development categories are discussed in Chapter 21.

# 18 Electric vehicle charging infrastructure

## 18.1 Characteristics

An electric vehicle charging point or station supply electricity to recharge electric vehicles, such as battery electric vehicles (BEVs); and plug-in hybrids and range-extended electric vehicles (both referred to as PHEVs). There are a range of charge point technologies available, supplying different levels of power and consequently providing different charging speeds. The three core types of electric vehicle charging are rapid, fast and slow:

- Rapid DC and AC chargers are the fastest way to charge an electric vehicle and are often found in motorway services or in locations close to main roads. Units supply high power AC or DC to recharge a car to 80% in 20-40 minutes rather than hours. The standard rapid charging speed is currently 50kW although with advances in technology there may be faster chargers available soon with speeds of up to 400kW. Due to their greater power consumption, they require larger feeder pillars or a substation and often more extensive civils works.
- Fast chargers, all of which are AC, typically offer between 7kW and 22kW speeds. Charging times vary on unit speed but a 7kW charger will recharge a compatible electric vehicle in 3-5 hours and a 22kW charger in 1-2 hours. These types of chargers tend to be found at destinations such as car parks, supermarkets or shopping centres. Fast charge units commonly have two sockets to charge two cars simultaneously.
- Slow charger units are rated 3kW. Charging times vary on unit speed but a full charge of an electric vehicle will typically take 6-12 hours. Slow charging is the most common method of charging electric vehicles at home and at the workplace. Other types of slow charger units include:
  - Socket networks. These are plug sockets discretely installed in the footway. There are several variants including bollards, popup posts and flip top boxes.
  - Street lamp chargers. Lamp post charging taps into the existing power network for street lighting.

## 18.2 Rationale for extending permitted development rights

HoPS views were requested on the scope to extend PDR for a wide range of developments, including developments which meet the Scottish Government's wider commitment to reducing emissions that cause climate change (such as installations supporting electric vehicles). In their *Scoping Report*<sup>103</sup> HoPS confirm their support for

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<sup>103</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension->

further extensions to PDR to facilitate sustainable developments such as electric vehicle charging infrastructure.

Potential extensions to PDR are considered in relation to:

- Wall mounted chargers
- Upstand mounted chargers.

### **18.3 Wall mounted chargers**

#### **Existing permitted development rights**

As defined in Part 2D of The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2014, two new classes of PDR (classes 9E and 9F) were introduced for the installation, alteration or replacement of electric vehicle charging points in off-street car parks. Class 9E relates to electrical outlets mounted on walls for recharging electric vehicles.

PDR are extended to wall mounted electric vehicle charging points in off-street car parks subject to the following conditions:

- Any name plate of the charging point provider or the energy supplier on the outlet (including its casing) must be no longer than 70cm.
- There must be no more than two name plates attached to the outlet (including its casing).
- Where two name plates are attached to the outlet (including its casing), each name plate must be facing in opposite directions
- Any name plate must not be illuminated.
- The charging points must be removed as soon as reasonably practicable when no longer needed as charging points for electric vehicles.
- The wall or land on which the charging point was mounted or into which the charging point was set must, as soon and as far as reasonably practicable, be reinstated to its former condition before the development was carried out.

For electrical outlets mounted on a wall (Class 9E), PDR are not extended if the electrical outlet (including its casing) would exceed 0.5 cubic metres or face onto and be within two metres of a road.

PDR do not extend to land within a site of archaeological interest; a National Scenic Area; a historic garden and designed landscape a Historic Battlefield; a Conservation Area; a National Park; or a World Heritage Site.

While there are no other PDR explicitly relating to other works relating to electric vehicle charging infrastructure for example, underground cabling Class 30 contains PDR for the erection, construction, maintenance, improvement or other alterations of buildings (within certain size constraints) by a local authority on land belonging to or maintained by the local authority for various functions they may be exercising.

### Potential changes to permitted development rights

The SA has considered the following:

- No change in PDR
- An increase in the volume (over and above the currently permitted 0.5 cubic metres) of the electrical outlets in all areas.
- An increase in the volume (over and above the currently permitted 0.5 cubic metres) of the electrical outlets in all areas, except where PDR do not currently apply.
- Removal of the restriction on development within two metres of a road in all areas.

### Sustainability appraisal findings

#### Key issues

Potential significant negative effects on cultural heritage due to possible impacts on nationally significant assets, although these effects are reversible;

Potential long term significant positive effects on climate change and air quality from indirect support for reducing vehicle emissions.

Minor positive long term effects in terms of supporting national sustainable economic growth, and local benefits for health and quality of life Extending PDR for wall mounted electric vehicle charging points in all areas (i.e. including designated areas where such rights do not currently apply) could result in potential **significant negative** effects on **cultural heritage** assets and their settings. Similarly, extending PDR to allow wall mounted electric vehicle charging points within 2 metres of a road or to increase the volume in all areas is likely to result in potential **significant negative** effects. This reflects the potential for the charging points to adversely impact the appearance, structure and setting of designated and undesignated assets. This is based on the worst case scenario of a significant number of charging points to be installed in any one location – fewer, more isolated charging points would result in a less significant effect.

These potential significant negative impacts would be avoided by limiting any increase in PDR to locations where PDR currently apply (i.e. excluding Sites of Archaeological Interest; National Scenic Area; Historic Gardens and Designed Landscapes Historic Battlefields; Conservation Areas; National Parks or World Heritage Sites). Under this scenario, the effects are likely to be similar to those from existing PDR, and would be **minor negative** in relation to designated and undesignated heritage assets and their settings and **negligible** in relation to the enhancement of heritage assets and their settings and the quality of the wider built environment.

Existing PDR are likely to have **minor positive** effects on **climatic factors** and **air quality** since they support the transition from oil based transport to electric vehicles. This is likely to result in lower levels of greenhouse gas emissions and air pollution. Each of the proposed changes to the PDR will further support the move towards electric vehicles through facilitating an increase in the number of charging points. There could be potentially **significant positive** effects on air quality and climatic factors.

**Minor positive** effects on the economy are likely to result from the existing PDR because they help to support a transition to a low carbon economy by facilitating a take up of electric vehicles, as well as encouraging electric vehicle purchases, thereby supporting and enhancing opportunities for sustainable economic growth. Each of the proposed changes to the PDR will support an increase in electric vehicle usage through the facilitation of more, and faster / more powerful charging points. The changes are likely to slightly increase the beneficial effects, however the effects are considered to remain **minor positive**.

The existing PDR are likely to result in **minor positive** effects regarding health and quality of life and living environment as they support electric vehicle usage which results in less air and noise pollution. Each of the proposed changes to PDR is likely to result in a slight increase in the beneficial impacts as they will support the uptake of electric vehicle usage through the facilitation of more charging points and faster / more powerful charging points, however the effects are considered to remain **minor positive**.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

In order to protect heritage, cultural and landscape designations do not extend PDR to cover: Sites of Archaeological Interest; National Scenic Areas; Historic Gardens and Designed Landscapes; Historic Battlefields; Conservation Areas; National Parks or World Heritage Sites.

## **18.4 Upstand mounted chargers**

### **Existing permitted development rights**

As defined in Part 2D of *The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2014*<sup>104</sup>, two new classes of PDR (classes 9E and 9F) were introduced for the installation, alteration or replacement of electric vehicle charging points in off-street car parks. Class 9F relates to upstands with electrical outlets for recharging electric vehicles.

PDR are extended to upstand mounted electric vehicle charging points in off-street car parks subject to the following conditions:

- Any name plate of the charging point provider or the energy supplier on the upstand or outlet (including its casing) must be no longer than 70cm.

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<sup>104</sup> The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2014 (Scottish Statutory Instrument 2014/142)



- There must be no more than two name plates attached to the upstand or outlet (including its casing).
- Where two name plates are attached to the upstand or outlet (including its casing), each name plate must be facing in opposite directions
- Any name plate must not be illuminated.
- The charging points must be removed as soon as reasonably practicable when no longer needed as charging points for electric vehicles.
- The wall or land on which the charging point was mounted or into which the charging point was set must, as soon and as far as reasonably practicable, be reinstated to its former condition before the development was carried out.

PDR for upstands with electrical outlets do not apply if the development would exceed 1.6 metres in height from the level of the surface used for the parking of vehicles; be within two metres of a road; or result in more than one upstand being provided for each parking space.

PDR do not extend to land within a site of archaeological interest; a National Scenic Area; a historic garden and designed landscape; a Historic Battlefield; a Conservation Area; a National Park; or a World Heritage Site.

While there are no other PDR explicitly relating to other works related to electric vehicle charging infrastructure, Class 30 contains PDR for the erection, construction, maintenance, improvement or other alterations of buildings (within certain size constraints) by a local authority on land belonging to or maintained by the local authority for various functions they may be exercising.

### **Potential changes to permitted development rights**

The SA has considered the following potential changes to PDR:

- An increase in the height (over and above the currently permitted 1.6 metres from the level of the surface currently used for parking) of the electrical outlets in all areas including: Sites of Archaeological Interest; National Scenic Areas; Historic Gardens and Designed Landscapes; Historic Battlefields; Conservation Areas; National Parks or World Heritage Site.
- An increase in the height (over and above the currently permitted 1.6 metres from the level of the surface used for parking) of the electrical outlets in all areas, except where PDR do not currently apply.
- Removal of the restriction on development within two metres of a road in all areas including: Sites of Archaeological Interest; National Scenic Area ; Historic Gardens and Designed Landscape; Historic Battlefields; Conservation Areas; National Parks or World Heritage Site.

### **Sustainability appraisal findings**

<b>Key issues</b>
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Potential significant negative effects on cultural heritage due to possible impacts on nationally significant assets, although these effects are reversible.

Potential long term significant positive effects on climate change and air quality from indirect support for reducing vehicle emissions;

Minor positive long term effects in terms of supporting national sustainable economic growth, and local benefits for health and quality of life

Extending PDR for upstands with electrical outlets in all areas (i.e. including designated areas where such rights do not currently apply) could result in potential **significant negative** effects on cultural heritage assets and their settings. Similarly, extending PDR for upstands with electrical outlets within 2 metres of a road or to increase the volume in all areas could result in potential **significant negative** effects. This reflects the potential for the charging points to adversely impact the appearance, structure and setting of designated and undesignated assets. This is based on the worst case scenario of a significant number of charging points to be installed in any one location – fewer, more isolated charging points would result in a less significant effect.

These potentially significant negative impacts would be avoided by the limiting any increase in PDR to locations where PDR currently apply (i.e. excluding Sites of Archaeological Interest; NS A; HGD L; Historic Battlefields; Conservation Areas; National Parks or World Heritage Sites). Under this scenario, effects are likely to remain similar to those from existing PDR, by avoiding adverse effects on designated and undesignated heritage assets and their settings.

The existing PDR are likely to have **minor positive** effects on **climatic factors** and **air quality**. The existing PDR encourage an uptake of electric vehicles which can use electricity generated from renewable sources, offer a dispersed pattern of supplying renewable energy which will reduce the risk of electric vehicles being unable to obtain any power in the event of disruption from climate change impacts and result in lower levels of greenhouse gas emissions and air pollution. Each of the proposed changes to PDR will further support the uptake of electric vehicles through facilitating an increase in the number of charging points and faster/ more powerful charging points. The changes are likely to support the wider deployment of electric vehicles and are considered likely to have potential **significant positive** effects on the objective of supporting measures to reduce carbon emissions.

**Minor positive** effects on the economy are likely to result from the existing PDR because they help to support a transition to a low carbon economy by facilitating a take up of electric vehicles, as well as facilitating electric vehicle purchases, thereby supporting and enhancing opportunities for sustainable economic growth. Each of the proposed changes to the PDR will support an increase in electric vehicle usage through the facilitation of more, and faster / more powerful charging points. The changes are likely to slightly increase the beneficial effects, however the effects are considered to remain **minor positive**.

**Mixed** effects are identified in relation to human health and quality of life. Extending PDR is likely to support electric vehicle usage which results in less air and noise pollution. Each of the proposed changes to the PDR is likely to result in a slight

increase in the beneficial impacts as they will support the uptake of electric vehicle usage through the facilitation of more charging points and faster / more powerful charging points, however the effects are considered to remain minor positive. However, relaxing height restrictions near roads could result in road safety risks, mainly due to visual obstruction. Due to the relatively low risk, potential adverse effects on road safety are judged to be minor.

Other sustainability impacts are considered to be negligible or unlikely.

### **Mitigation of negative effects**

In order to protect heritage, cultural and landscape designations do not extend PDR to cover: Sites of Archaeological Interest; National Scenic Areas; Historic Gardens and Designed Landscapes; Historic Battlefields; Conservation Areas; National Parks or World Heritage Sites.

### **18.5 Secondary, cumulative and synergistic effects**

Extending PDR for electric vehicle charging points could result in potential **significant positive cumulative** effects on measures to reduce **greenhouse gas emissions**. It could also result in potential **significant negative cumulative** effects on **cultural heritage**.

The proposed changes would help to reduce the overall number of planning applications for charging points which are likely to increase significantly as the use of electric vehicles grow, so cumulative uncertain **minor positive** effects have been recorded in terms of efficient use of the **planning system**.

Secondary, cumulative and synergistic effects resulting from potential changes to PDR for electric vehicle charging infrastructure in combination with other development categories are discussed in Chapter 21.

# 19 Defibrillator cabinets

## 19.1 Characteristics

A defibrillator is defined in the Defibrillators (Availability) Bill (Bill 91, 2016) as “*an external defibrillator used to deliver a therapeutic electric shock to the heart in order to treat a condition that affects the rhythm of the heart in order to re-establish normal conduction of the heart’s electrical impulse*”.

Defibrillator cabinets, Publicly Accessible Defibrillators (PADs) or Automated External Defibrillators (AEDs) are becoming an increasingly common feature in many towns, villages and cities and are often supported and funded by voluntary groups or local communities. They are required to be centrally located in an obvious and available space with appropriate signage, normally on the outside wall of an existing, prominent building or within a telephone kiosk, and be readily visible, even in poor lighting conditions. The most common colours are yellow and green. Dimensions of PADs vary however the size of a large PAD is approximately 500 X 400 X 250 mm. The unit requires electricity which limits the potential siting locations. Some external cabinets have alarms which warn off potential thieves or vandals or attract help when used in legitimate emergencies. Others have code locks and display a phone number to be called to receive the code to open the lock.

## 19.2 Existing permitted development rights

At present PADs are not covered by specific PDR, which means that the installation of a PAD is would need to obtain planning permission unless a planning authority considered it did no materially affect the exterior of the building. Planning permission is not required for indoor defibrillator cabinets.

## 19.3 Rationale for extending permitted development rights

The HoPS *Scoping Report on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types*<sup>105</sup> recommends that - to remove any uncertainty or doubt - the installation of an AED cabinet should be included in the categories of permitted development or alternatively it should be confirmed as” de minimis”<sup>106</sup> and no planning permissions required. HoPS consider that the installation of an AED on a Listed Building should still require Listed Building consent to be obtained.

## 19.4 Potential changes to permitted development rights

The SA has considered the following:

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<sup>105</sup> Heads of Planning Scotland, 2017. *Heads of Planning Scotland's Scoping Paper on the Extension of Permitted Development Rights and the Options to Remove the Need for Planning Permission for More Development Types* [pdf]. Available at: <https://beta.gov.scot/publications/planning-review-extension-permitted-development-rights-report/Planning%20Review%20Extension%20of%20permitted%20development%20rights.pdf>

<sup>106</sup> De minimis are minor works in planning terms and therefore no planning permission or fees are required.

- No change in PDR
- Introduce PDR for defibrillator cabinets on buildings and existing structures except listed buildings or structures.
- Introduce PDR for defibrillator cabinets on all buildings and existing structures.

## 19.5 Sustainability appraisal findings

### Key issues

Minor positive long term effects in terms of health and quality of life, however this effect is relatively small in scale in terms of the total population affected. Minor negative reversible effects on cultural heritage, although this effect is relatively small scale, impacts could occur on nationally significant assets.

The introduction of PDR for defibrillator cabinets on all buildings and existing structures except listed buildings or structures is likely to result in **minor negative** effects on heritage assets and their settings and the quality of the wider built environment.

Extension of the PDR to allow for defibrillator cabinets on all buildings and existing structures including listed buildings would not result in different effects as the requirement for Listed Building consent and Scheduled Monument consent would mitigate any adverse effects to the relevant listed building. This proposed change would therefore also result in **minor negative** effects, for the same reasons set out in the paragraph above.

The introduction of PDR for defibrillator cabinets under both proposed changes is likely to result in **minor positive** effects on health and quality of life by increasing access to potentially lifesaving equipment and associated medical support.

Other sustainability impacts are considered to be negligible or unlikely.

## 19.6 Mitigation of negative effects

Consider restricting PDR, or requiring prior notification/prior approval in designated areas. Any restrictions should relate to heritage designation only, however this would reduce or limit any potential benefits for the efficient use of the planning system.

# 20 Snow sports

## 20.1 Artificial Snow Production

Climate change, and its impact on snowfall, is presenting a challenge for the snow sports industry in the UK. The snow sport season in Scotland typically runs between December and early April. The 2016/17 ski season saw particularly low levels of snow in Scotland, with skiing only possible at Glencoe for 32 days out of the season. Although snowfall was much higher in 2017/18, there is interest in providing a means to safeguard the snow sports industry in years when snowfall is poor, through the use of artificial snow.

## 20.2 Characteristics

### Method of snow production

Artificial snow is made up of small particles of ice that are used to increase the amount of snow available for snow sports. It is produced by a machine that uses a high pressure pump to spray a mist of water into the air. These water droplets subsequently freeze to form snow. Snow machines generally only work when the temperature falls below -2 degrees Celsius, depending on humidity.

Artificial snow generation generally requires a water supply, energy supply, compressed air supply for snow guns, (snow fans incorporate an on board air compressor). Pipes leading from a water and energy source feed the snow gun with electricity and water. The water is then pumped through the gun/fan at a high pressure, causing a mist which then freezes. The water may first have been mixed with a nucleating material which helps to form the snow.

While all artificial snow is created using water and compressed air, this can be done in a number of ways. Options include the concentration of snowmaking in one location, with the snow subsequently being moved to parts of the ski area where it is needed, or snowmaking guns located on the slopes themselves and served by pipes and cables connecting them to water and power supplies.

### Infrastructure required

Generally the following infrastructure/equipment would be required for artificial snow production:

- A water source (e.g. a stream or reservoir);
- Water pumping station / pump house;
- Water pipes;
- Compressed air supply for snow guns;
- An energy source (e.g. oil or gas powered generator, or renewables such as wind, solar, hydro, or biofuels);
- Generator house;

- Electricity cables;
- Snow gun, fan, or Snowfactory unit;
- Platform for the snow gun/fan; and
- Access tracks (depending on whether snow is being transported when snow cover is incomplete).

### 20.3 Definition of 'development'

The Town and Country Planning (Scotland) Act 1997 Section 26, sets out that 'development' means 'the carrying out of building, engineering, mining or other operations in, on, over or under land or the making of any material change in the use of any buildings or other land'.

The snow gun/fan, if positioned on a tripod or wheels meaning that it is easily moveable, would be unlikely to fall within the definition of 'development' and so would not require planning permission.

One method of making snow (the Snowfactory) houses all equipment in a transportable storage container and just requires water and an energy source. This could be seen as temporary development and may not require planning permission. However, this may be open to interpretation from the planning authority as it could constitute 'engineering' works and thus be classed as 'development'.

The following infrastructure requirements would be seen as development as they would require the 'carrying out of building on land':

- Any necessary concrete platform for the snow gun/fan;
- Water pumping station/pump house;
- Generator house; and
- Access tracks.

The following would be seen as development as they would constitute 'engineering' works and the 'carrying out of building under land':

- Water storage reservoir; and
- Underground water pipes and electricity cables.

The following would be seen as development as they require the 'carrying out of building on or over land' and 'engineering' works:

- Energy source, such as a wind turbine, solar panels, biomass, etc.

### 20.4 Existing permitted development rights

There are currently no PDR (PDRs) specifically for the production of artificial snow. The paragraphs below set out existing PDRs for individual components of the above requirements for the production of snow, but which apply to other sectors or developers.

There are certain PDR for **access tracks** for the purposes of agriculture or forestry, provided that they do not exceed 50m in length and the PDRs do not extend to

designated areas. Separate arrangements apply to development relating to private ways for other purposes and a planning application would generally be required.

There are no current PDR for the **installation, alteration, or replacement of non-domestic, free-standing wind turbines**. However, there are PDRs for domestic, free-standing wind turbines under class 6G of the Town and Country Planning (General Permitted Development) (Scotland) Order 1992, which permits the installation, alteration, or replacement of a free-standing micro wind turbine within the curtilage of a dwelling. However, this is not permitted if located within a designated area (see below). Prior notification/prior approval requirements also apply to these PDRs. This is discussed in more detail in section 8.1 of the SA report.

PDR are extended to the **installation, alteration, or replacement of solar PV or solar thermal equipment on non-domestic buildings**, subject to certain conditions and limitations. PDRs do not extend to Historic Gardens and Designed Landscapes, National Scenic Areas, or National Parks, as discussed in section 9 of the SA report.

There are no current specific PDRs for **underground pipes for the transport of water or electricity**, other than in relation to statutory undertakers, such as certain utilities providers. However, underground pipes for ground and water source heat pumps are classified as a permitted development under Class 6I under certain conditions. The surface area of land under which the installation, alteration, or replacement of any underground pipes must not exceed 0.5 hectares. Underground pipes are not permitted within a designated landscape. This is discussed in more detail in section 8.7 of the SA report.

Existing PDR allow for the **erection or extension of non-residential agricultural buildings, structures, or flues** for the purposes of producing energy from burning biomass, energy from anaerobic digestion of biomass, or storing biomass, subject to certain conditions. They also allow for the erection or extension of forestry buildings for the purposes of producing energy from burning biomass, energy from anaerobic digestion of biomass, or storing biomass (subject to certain conditions) and the erection or extension of non-residential industrial or warehouse buildings, structures, or flues for the purposes of producing energy from burning biomass or storing biomass, subject to certain conditions. These PDRs are discussed in more detail in sections 8.8 of the SA report.

While there are no specific PDRs for the **transmission or supply of electricity** for anyone other than statutory undertakers (e.g. electricity infrastructure providers), Class 40 (1) sets out PDR for statutory undertakers for the generation, transmission, or supply of electricity for: *“(f) any other development carried out in, on, over or under the operational land of the undertaking”*. ‘Operational land’ in relation to statutory undertakers is land which is used for the purpose of carrying on the undertaking and in which an interest is held for that purpose.

Finally, there are currently PDRs for the ‘provision on land of **buildings, moveable structures, works, plant, or machinery required temporarily** in connection with and for the duration of operations being carried out on that land’.

It is noted that many of the above PDRs, especially those created in recent years, are not permitted if the development would be located in Historic Gardens and Designed



Landscapes, National Parks, or National Scenic Areas. Scotland has five outdoor snow sports centres, located at: Glenshee, Cairngorm, Glencoe, Nevis Range, and The Lecht. Of these, Cairngorm, Glenshee, and The Lecht are located in the Cairngorms National Park, while Glencoe and Nevis Range are located in National Scenic Areas.

## **20.5 Rationale for changes to permitted development rights**

The consideration of changes to PDR for snow sports follows an action agreed at the October 2018 Scottish Snow sports Strategic group meeting. This was followed by an initial review of issues relevant to PDR and snow sports, and a teleconference with stakeholders from the Scottish snow sports centres. The discussion with stakeholders also raised the issue of PDR for energy storage and micro-renewables, however it is noted that changes to PDR for these development types are already assessed within the context of the whole of Scotland in chapters 8, 9 and 11 of the SA report.

Snow fences were also discussed, however there are existing PDR for fences below 2m in height. Small scale hydro was also raised as an issue by stakeholders, however the likely number of hydro proposals at snow centres is likely to be limited, and, taking account of the sensitivity of the host environment, the benefits of PDR may not be realised for example because of the need to undertake EIA .

## **20.6 Potential changes to Permitted Development Rights**

The SA has considered the following potential changes to PDR:

- concrete platforms and towers for artificial snow generation and distribution (i.e. snow guns/fans);
- water storage reservoirs;
- underground electricity cables and water pipes;
- water pumping station/pump house;
- generator houses; and
- access tracks.

## **20.7 Sustainability appraisal findings**

### **Key issues**

Minor positive long term effects due to changes in PDR supporting increased resilience and adaptation of snow sports centres to climate change and for the economic and social objectives associated with the PDR changes supporting a more reliable and longer snow sports season.

Potential minor negative effects on biodiversity, flora, and fauna resulting from short term construction impacts, and long term damage to habitats, and permanent loss or damage to soil resources from concrete platforms, pump and generator houses, water storage, access tracks, and underground cables and pipes.

Potential minor but uncertain negative effects are identified on cultural heritage resulting from permanent loss or damage to archaeological resources from construction and development.

Potential minor negative effects on landscape and geodiversity, climatic factors, and material assets from long term landscape impacts of physical development as new structures in the landscape, the use of fossil fuel as an energy source in snow making, and potential impacts on the soil resource (including soils with high carbon content) as a result of development.

Potential mixed effects on the water environment from reduced pressure on current water resources, changes to existing waterbodies through the construction of reservoirs, and a potentially increased likelihood of flooding.

### **No change to PDR**

The following paragraphs summarise the SA findings for the alternative of ‘no change to PDR’, which is then followed by the SA findings for the potential PDR changes.

No change to PDR will ensure that the current protection measures provided by the planning system safeguard **biodiversity, flora, and fauna; water; soil, cultural heritage; landscape and geodiversity; and material assets**. This ensures consideration is given to potential impacts of developments on these topic areas as well as ensuring environmental quality is not diminished, resulting in a **minor positive** effect.

However, no change in PDR may have **minor negative** effects on **climatic factors**, the **economy** and aspects of **social, population, and human health**. Snow making is reliant on diesel powered generators which impact on greenhouse gas emissions, regardless of whether or not PDR are introduced. In addition, the costs and timescales associated with the current planning system may potentially adversely affect the snow sports centres’ ability to adapt to the increasing variability of weather patterns. This could impact on their economic resilience and viability, reduce opportunities for physical activity, and reduce the availability of sufficient training facilities for skiers.

No changes in PDR for the identified development types is expected to have **negligible** effects on **air** as the developments are unlikely to significantly affect air quality, although the potential for localised impacts is noted from fossil fuel powered generators.

### **Potential PDR changes**

The following paragraphs summarise the SA findings for the introduction of PDR for concrete platforms and lattice towers for snow fans/guns, water storage based on open water storage, underground electricity cables and water pipes, pumping stations, generator houses, and access tracks (for the purposes of snow making and distribution).

The potential changes in PDR are considered to have a **minor positive** effect on the rural **economy**. These changes could facilitate the development of snow making facilities and allow ski centres to operate for a much longer skiing season, bringing certainty to Scottish snow sports and subsequent benefits to the local and wider rural economy. Changes to PDR would also reduce the costs and timescales of the planning application process for developers. The volume of planning applications associated with snow making is not anticipated to have a notable impact on smarter resourcing of

the planning system, due to the limited scale and extent of these centres in relation to the total number of planning applications received.

Unlike environmental aspects, individual developments related to snow making activities have little to no bearing on the social aspects of the surrounding communities and wider population. However, the developments in combination may result in **minor positive** effects on these receptors due to longer ski seasons increasing or maintaining visitor numbers over a longer season, as well as improved opportunities for physical activity and better training facilities.

As all five ski centres potentially impact on nationally important biodiversity areas, the potential changes to PDR in relation to snow making infrastructure could potentially result in **minor negative effects** on **biodiversity, flora, and fauna** through the development of concrete platforms, pump and generator houses, water storage, access tracks, and underground cables and pipes, resulting in habitat loss and localised ground disturbance.

Impacts upon the water environment are varied. While the development of concrete platforms for snow fans/guns, water storage reservoirs, and underground water pipes may reduce stress on surrounding water bodies (a **minor positive** effect), the construction phase of development is expected to cause temporary disturbance and impact upon water quality through sedimentation and contamination if best practices are not followed (a temporary **minor negative** effect), resulting in an overall **mixed** effect. Impacts on flood risk are predicted to be mixed, due to PDR increasing the extent of impermeable surface area in the vicinity of ski centres and the potential for water storage reservoirs to either catch surface runoff or overflow.

Potential changes to PDR for concrete platforms, pump and generator houses, access tracks, water storage reservoirs, and underground cables and pipes within the areas surrounding the five ski centres are considered to have **minor negative effects** on **landscape and geodiversity, climatic factors** and **material assets**. As the potential developments are largely confined to the footprint of the five ski centres, landscape effects will be within the already developed landscape character of these areas. The potential developments support artificial snow production which is understood from discussions with stakeholders to be largely reliant on fossil fuels. The potential changes to PDR for the developments are likely to contribute to the release of greenhouse gases throughout the construction and operation of concrete platforms, pump and generator houses, access tracks, water storage reservoirs, and underground cables. However, these developments are considered to have a **positive effect** on the objective of climate change adaption by supporting continued snow sports operation. Potential impacts on the soil resource could result in **minor negative** effects on material assets.

The introduction of PDR could result in **minor negative** effects upon the protection and avoidance of adverse effects on soils. The construction and subsequent excavation works associated with the implementation of underground water pipes and electricity cables, while the construction of access tracks and water storage reservoirs may result in the disturbance or permanent loss of high carbon soils.

Potential changes in PDR are considered to have possible permanent **minor negative** effects upon cultural heritage from the construction of water storage reservoirs and access tracks, due to their development footprint. While these effects may also arise

from the construction of concrete platforms, water storage reservoirs, pump houses, or generator houses, the likelihood of such effects arising is **uncertain** as the presence and extent of any undiscovered archaeological features in the area is impossible to determine at this time. Impacts on setting are considered limited due to the locations of these developments and surface archaeology.

Impacts on all other objectives are judged to be **negligible**.

### **20.8 Mitigation of negative effects**

Minor negative effects are identified for a number of the SA topics across the development types, including biodiversity, flora, and fauna; soil; cultural heritage; water; landscape and geodiversity; climatic factors; and material assets. These effects could be potentially mitigated through the requirement for guidance on good design and good construction practices that reflect the sensitivities of the environments on which the snow sports centre are located.

### **20.9 Secondary, cumulative and synergistic effects**

Future development to support snow making at the Scottish snow sports centres is likely to require a combination of all the development types assessed, alongside other developments which are currently within PDR, such as snow fences.

The assessment of secondary, cumulative, and synergistic effects reflects the limited geographical extent over which these developments would occur, and no significant cumulative effects are identified as a result of the potential PDR changes. Minor positive secondary effects may occur from these developments working together to support a longer and more consistent snow season, reducing the magnitude of 'peak' travel issues. However the extent to which the potential changes to PDR would affect the quantity or rate of development coming forward is an area of uncertainty.

# 21 Secondary, cumulative and synergistic effects

## 21.1 All development types

This section considers possible cumulative and synergistic effects between all of the developments for which the potential to extend PDR has been assessed. It is not currently known which changes in PDR will be progressed and the extent to which rights will be increased. This section therefore summarises the maximum potential synergistic and cumulative effects.

Several potential changes to PDR could have potential significant negative impacts on biodiversity, flora and fauna. These include the development of new farm buildings, new path creation and householder developments. These could result in a net loss of biodiversity, though each type of development is likely to affect different habitats. PDR for wildlife ponds and peatland restoration could result in potential significant net positive effects.

A number of potential changes will act together to support policies to reduce greenhouse gas emissions and adapt to the changing climate. Key contributors include micro renewables, active travel, electric vehicle charging infrastructure, allotments and community growing schemes, town centre changes of use and telecoms infrastructure. These combine to form a potential significant positive cumulative effect.

Similarly, several potential changes will assist in improving air quality. These include most types of micro renewables, active travel, electric vehicle charging infrastructure and telecoms infrastructure. These combine to form a significant positive cumulative effect. A number of measures to support biomass energy could combine to have an adverse effect on air quality.

A number of potential changes relate to developments that could increase flood risk. In a rural context this could include new farm sheds, including those for biomass and anaerobic digestion plant, and for extensive polytunnels. In the urban context the main risk comes from a combination of householder developments each of which could increase the extent of sealed surfaces and the speed and volume of surface water runoff. The creation of wildlife ponds and peatland restoration could help reduce flood risk by intercepting and storing flood flows.

Significant cumulative effects on soil and derelict and vacant land are unlikely.

Several potential changes to PDR could have potential significant negative impacts on cultural heritage, with several having particular potential to affect Conservation Areas and undesignated historic townscapes, although this could be mitigated by restricting PDR in these areas. Key contributors include householder developments, micro-renewables and telecoms infrastructure. Allotments and community gardens could affect the setting of historic assets, whilst a more flexible approach to town centre changes of use could have mixed effects – on the one hand increasing the likelihood that buildings will be kept in viable use, but on the other increasing the possibility that adaptations or alterations will impact historic structures or their contribution to valued townscapes.

A number of potential changes could impact on rural landscapes. These include changes in PDR for new farm buildings, polytunnels, telecoms and energy storage. Wildlife ponds and peatland restoration could on the other hand have a positive effect.

Potential changes to PDR for telecoms and to allow a more flexible approach to town centre changes of use could combine to support measures designed to support town centre economies. Agricultural developments and micro renewables could support sustainable economic growth, including in rural areas, with minor positive effects overall. Householder developments could have mixed economic effects.

Several potential changes to PDR will combine to provide benefits in terms of population, living environment and health. Several would contribute to placemaking, including town centre changes in use, telecoms infrastructure, the development of allotments and community gardens, active travel infrastructure. Householder developments would have mixed effects, improving individual homes but potentially impacting on neighbours and enjoyment of the wider townscape. Several potential changes could combine to have potential significant negative cumulative impacts on safety at aerodrome or technical sites, however this can be mitigated either through appropriate restrictions on PDR in the vicinity of these sites, alternatively a more detailed evidence base will be required to inform the development of detailed legislative proposals. . This could include solar panels on roofs and walls (glare) tall structures (masts and turbines), tall buildings and wildlife habitats that could increase the risk of bird strike.

It is important to note that introducing PDR for converting agricultural sheds into dwellings could increase the risk of PDR being applied on top of PDR. This is because the construction of an agricultural shed is currently classified as permitted development, which means that introducing PDR for converting agricultural sheds into dwellings could potentially result in the uncontrolled development of converted sheds.

## 22 Monitoring

The precise specification of changes to PDR for each development type in this SA is unknown, as is the relative timing of their introduction and the endpoint at which all of the changes associated with this SA will be implemented. It is therefore not possible to specify monitoring and review arrangements at this stage. The Scottish Government recognise that we will need to consider appropriate monitoring of the impacts, including those on the environment, for changes for each development type, as well as looking at the wider cumulative effects of changes across development types. This could involve various approaches and combinations of approach, such as liaising with planning authorities, developers and statutory bodies, as well as commissioning research. As part of the Business and Regulatory Impact Assessment (<https://www.gov.scot/publications/business-regulatory-impact-assessments-toolkit/>) associated with developing changes to legislation we would set out commitments to appropriate monitoring and review, including how the previously mentioned cumulative effects will be captured.

## 23 Conclusions and next steps

This SA Report describes the process that has been undertaken to date in carrying out the SA of the reasonable alternatives for each development type. It sets out the findings of the SA highlighting any likely significant effects (both positive and negative, and taking into account the likely secondary, cumulative, synergistic, short, medium and long-term, and permanent and temporary effects), making recommendations for improvements and clarifications that may help to mitigate negative effects.

To summarise the broad areas of potential effect across the SA topic areas from all of the development types covered in this report:

Several potential changes to PDR could have potential significant negative impacts on **biodiversity, flora and fauna**. PDR for wildlife ponds and peatland restoration could result in potential significant net positive effects for this topic.

A number of potential changes will act together to support policies to reduce greenhouse gas emissions and to support adaptation to a changing **climate**, which combine to give a significant positive effect. Similarly, several potential changes will assist in improving **air quality**. A number of potential PDR changes relate to changes in the size and scale of development types that could significantly increase **flood risk**.

Several potential changes to PDR could have potential significant negative impacts on **cultural heritage**, with several having particular potential to affect Conservation Areas and undesignated historic townscapes, although this could be mitigated by restricting PDR in these areas.

Significant positive effects are identified from options which support the rural and urban economy. Several potential changes to PDR will combine to provide benefits in terms of **population**, living environment and **health**.

Several options could combine to have potentially significant negative cumulative impacts on safety at aerodrome or technical sites, however this can be mitigated either through appropriate restrictions on PDR in the vicinity of these sites, or alternatively through a more detailed evidence base to inform any future proposals in this respect.

### 23.1 Consultation on the Proposed Work Programme and the SA Report

The SA Scoping Report was issued to the SEA Gateway in February 2018 for consultation with the statutory consultation bodies as well as other stakeholders. The Scottish Government is inviting comments on the Work Programme and the SA Report. The consultation period is open for a 12 week period between 5 November 2019 and 28 January 2020. Consultation comments on both the Proposed Work Programme and the SA Report will be taken into account in the next iteration of the Work Programme.

The Work Programme will be progressed - alongside a wider suite of secondary legislation - following the passage of the Planning (Scotland) Bill by the Scottish



Parliament<sup>107</sup>. This will provide additional opportunities for stakeholders to comment on more detailed legislative proposals before they are finalised.

A further round of Habitats Regulation Appraisal (HRA) screening, and subsequent appropriate assessment (if required) of the Work Programme will take place following further development of the content of the Work Programme.

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## **Appendix 1 Relevant plans, programmes and strategies**

## Relevant plans, programmes and strategies

### General

Source	Key objectives	Implications / comments
<b>GENERAL</b>		
<b>International</b>		
<i>Aarhus Convention (1998)</i>	<p>To develop a number of rights of the public with regard to the environment. Local authorities should provide for:</p> <ul style="list-style-type: none"> <li>• The right of everyone to receive environmental information</li> <li>• The right to participate from an early stage in environmental decision making</li> <li>• The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general</li> </ul>	Ensure that the public are involved and consulted at all relevant stages of SA production.
<i>Johannesburg Declaration on Sustainable Development (2002)</i>	To make a significant commitment to building a humane, equitable and caring global society aware of the need for human dignity for all.	The SA framework should include sustainability objectives to <b>promote the principles of sustainable development</b>
<i>Seveso III Directive (2012)</i>	<p>This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.</p> <p>Article 13 of the Directive requires planning controls to apply to all establishments within the scope of the Directive and</p>	The SA framework should include sustainability objectives to <b>protect human health and the environment, and to ensure that extensions in respect to PDR comply with the</b>

Source	Key objectives	Implications / comments
	developments in the vicinity of these establishments. It also requires Member States to ensure that their land use or other relevant policies “ <i>take account of the need to maintain appropriate safety distances between establishments covered by this Directive and residential areas, buildings and areas of public use, recreational areas....</i> ”	<b>obligations set out in the Directive.</b> The Scottish Government will consider the requirements of Article 13 of the Directive in the assessments.
<b>European</b>		
<p><i>SEA Directive 2001</i>            Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment</p>	<p>The key objective of the SEA Directive is to provide for a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.</p>	<p><b>Requirements of the SEA Directive must be met in Sustainability Appraisals.</b></p>
<b>National (Legislation)</b>		
<p><i>The Town and Country Planning (General Permitted Development) Scotland Order 1992</i></p>	<p>The Order removes the need to apply for planning permission, primarily relating to minor or non-controversial developments or developments associated with an existing development – namely developments likely to receive planning permission where an application is required. The aim of PDR is to remove unnecessary applications for planning permission from the system, thus avoiding unnecessary burdens on developers and planning authorities.</p> <p>Secondary legislation has amended the GPDO 1992, including (but not limited to)</p> <ul style="list-style-type: none"> <li>• <b><i>The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2011</i></b>: amends PDR domestic solar PV or solar thermal equipment, free-standing wind turbines within</li> </ul>	<p>The SA framework should acknowledge the different types of development which are currently classified as permitted development.</p>

Source	Key objectives	Implications / comments
	<p>the curtilage of a dwellinghouse, free-standing solar within the curtilage of a dwellinghouse, flues for biomass, ground source heat pumps, water source heat pumps and flues forming part of a CHP system.</p> <ul style="list-style-type: none"> <li>• <b><i>The Town and Country Planning (General Permitted Development) (Non-Domestic Microgeneration) (Scotland) Amendment Order 2011</i></b>: extends PDR for non-domestic ground source heat pumps, water source heat pumps, solar PV or solar thermal equipment, non-domestic buildings which are used for the purposes of burning biomass or facilitating anaerobic digestion or buildings for storing biomass.</li> <li>• <b><i>The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2014</i></b>: includes two new PDR for the installation, alteration or replacement of electric vehicle charging points</li> <li>• <b><i>The Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2016</i></b>: extends PDR for domestic ASHP on a dwelling or within the curtilage of a dwelling.</li> <li>• <b><i>Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2017</i></b>: extends PDR for electronic communications infrastructure</li> </ul>	
<i>Town and Country Planning (Use Classes) (Scotland) Order 1997</i>	The Order allows some changes of use (within a use class) without the need for planning permission, under the SPZ scheme there is increased flexibility to change the use of	Ensure that potential changes of use are addressed.

Source	Key objectives	Implications / comments
	properties.	
<p><i>Town and Country Planning (Scotland) Act 1997</i></p> <p><i>As amended by The Planning etc. (Scotland) Act 2006)</i></p>	<p>The Act requires that development plans by planning authorities must be in line with the principles of sustainable development.</p>	<p>Sustainability appraisal should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economy and society.</p>
<p><b>National (Policies, Plans, Programmes and Strategies)</b></p>		
<p><i>National Planning Framework 3</i> (the Scottish Government, 2014)</p>	<p>The National Planning Framework 3 sets out the Scottish Government's spatial development/investment priorities over the next 20-30 years. It is a long-term strategy to promote environmental sustainability, equality in opportunity, technological progress and human well-being and health.</p> <p>Key outcomes of the framework are as follows:</p> <ul style="list-style-type: none"> <li>• Creating sustainable places</li> <li>• Reducing carbon emissions and adapting to climate change</li> <li>• Protecting and enhancing Scotland's natural cultural assets as well as facilitating their sustainable use</li> <li>• Supporting better transport and digital connectivity</li> </ul>	<p>The SA framework should include sustainability objectives to make Scotland a <b>successful, sustainable</b> place; a <b>low carbon</b> place; a <b>natural, resilient</b> place; and, a <b>connected</b> place.</p>
<p><i>Scottish Planning Policy</i> (The Scottish Government, 2014)</p>	<p>The purpose of the SPP is to set out national planning policies on how to address land use matters across the country. It is non-statutory, however, it is in line with the Town and Country Planning (Scotland)</p>	<p>The SA framework should include sustainability objectives to make Scotland a <b>successful, sustainable</b> place; a <b>low</b></p>

Source	Key objectives	Implications / comments
	<ul style="list-style-type: none"> <li>• Creating sustainable places</li> <li>• Reducing carbon emissions and adapting to climate change</li> <li>• Protecting and enhancing Scotland's natural cultural assets as well as facilitating their sustainable use</li> <li>• Supporting better transport and digital connectivity</li> </ul>	<b>carbon</b> place; a <b>natural, resilient</b> place; and, a <b>connected</b> place.

## Air

Source	Key objectives	Implications / comments
<b>AIR</b>		
<b>International</b>		
<i>UNECE Convention on Long Range Transboundary Air Pollution (198</i>	<p>The purpose of the UNECE Convention was to address the environmental consequences of air pollution. The main aim of the Convention was to reduce and prevent air pollution in order to improve air quality on the local, regional and national levels. To achieve this, the Convention sets out measures to be taken by parties to cut their emissions of air pollutions.</p> <p>The UNECE Convention has been extended by eight other protocols that identify measures to be undertaken by Parties to cut their emissions of air pollutants. These eight protocols include the following:</p> <ul style="list-style-type: none"> <li>• EMEP Protocol on Long-Term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutions in Europe (1984)</li> </ul>	<p>Include sustainability objectives to <b>protect and enhance air quality</b> from factors such as eutrophication and acidification</p>

Source	Key objectives	Implications / comments
	<ul style="list-style-type: none"> <li>• Helsinki Protocol on the Reduction of Sulphur Emissions (1985)</li> <li>• Nitrogen Oxide Protocol (1988)</li> <li>• Volatile Organic Compounds Protocol (1991)</li> <li>• Oslo Protocol on Further Reduction of Sulphur Emissions (1994)</li> <li>• Protocol on Heavy Metals (1998)</li> <li>• Aarhus Protocol on Persistent Organic Pollutants (1998)</li> <li>• Gothenburg Protocol on Abate Acidification, Eutrophication and Ground-level Ozone (1999)</li> </ul>	
<b>European</b>		
<p><i>The National Emissions Ceiling Directive 2001</i></p> <p>Directive 2001/81 EC on national emission ceilings for certain atmospheric pollutants</p>	<p>The Directives sets limits for the main causal factors of acidification, eutrophication and ground-level ozone.</p>	<p>Include sustainability objectives to <b>protect and enhance air quality</b> from factors such as eutrophication and acidification.</p>
<p><i>The Air Quality Directive 2008</i></p> <p>Directive 2008/50/EC on ambient air quality and cleaner air for Europe</p>	<p>Avoid, prevent and reduce harmful effects of air pollution on human health and the environment. The Directive Brings together existing legislation (at the time) on air quality, including objectives for key pollutants such as SO<sub>2</sub>, NO<sub>x</sub>, particulates, lead, benzene and ozone.</p> <p>The Directive sets out statutory limits for the concentration of different pollutants (Annex XI) and thresholds for human and environmental health (Annex II).</p>	<p>Include sustainability objectives to <b>reduce harmful effects of air pollution</b>.</p>



Source	Key objectives	Implications / comments
<p><i>The Industrial Emissions Directive 2010</i> Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)</p>	<p>This Directive lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air in order to achieve a high level of protection of the environment taken as a whole.</p>	<p>Include sustainability objective for <b>reducing air pollution caused by industrial emissions.</b></p>
<p><i>The Clean Air Policy Package and Clean Air Programme for Europe 2013</i></p>	<p>The Clean Air Policy Package and Clean Air Programme for Europe set targets up to 2030, and also introduces measures and proposals to reduce emissions and improve air quality across the EU.</p>	<p>Include sustainability objectives to <b>protect and enhance air quality.</b></p>
<b>National (Legislation)</b>		
<p><i>The Environment Act 1995</i></p>	<p>The Act requires the UK government and devolved administrations to produce a national air quality strategy. The most recent version of this national air quality strategy is The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, which defines the roles of the local and central government, as well as the (SEPA, industry, business, transport, individuals and other groups.</p> <p>In addition, the Act sets objectives for specific emissions and measures for monitoring. Where limits are not met, the local authority must declare it an AQMA</p>	<p>Include sustainability objective for <b>reducing air pollution.</b></p>
<p><i>The Air Quality (Scotland) Regulations 2000</i> <i>As amended by the Air Quality (Scotland) Amendment Regulations 2002 and the Air Quality (Scotland) Amendment Regulations 2016</i></p>	<p>Sets out air quality objectives for several substances in line with the Environment Act 1995. In contrast to EU requirement, Scotland has set stricter levels for specific pollutants including PM<sub>10</sub> and PM<sub>2.5</sub>.</p>	<p>Include sustainability objective for <b>reducing air pollution, particularly in relation to biomass boiler installations.</b></p>
<p><i>The Air Quality Standards (Scotland) Regulations (2010)</i></p>	<p>Sets statutory targets for concentrations of pollutants in ambient air in accordance with EU Directives. The Act allows</p>	<p>Include sustainability objective for <b>reducing air</b></p>

Source	Key objectives	Implications / comments
	<p>for Air Quality Management Zones to be identified and makes provision for the sharing of this information with the public.</p> <p>The Regulations were amended through The Air Quality Standards (Scotland) Amendment Regulations 2016.</p>	<p><b>pollution.</b></p>
<p><i>Pollution Prevention and Control (Scotland) Regulations 2012</i></p>	<p>Implements the requirements of the EU Industrial Emissions Directive in Scotland. The Act states that emissions to air, water and land must be considered together, and permits are considered based on the nature of the activity.</p> <p>The Act has been amended several times since 2012.</p>	<p>Include sustainability objective for <b>reducing air pollution, particularly in relation to biomass boiler installations.</b></p>
<p><b>National (Policies, Plans, Programmes and Strategies)</b></p>		
<p><i>Cleaner Air for Scotland – The Road to a Healthier Future</i> (the Scottish Government, 2015)</p>	<p>Presents a single framework which sets out further proposals for delivering improvements to air quality in Scotland.</p> <p>It summarises six broad types of key actions that could help to reduce air pollution and improve air quality;</p> <p><b>Transport</b> – reducing transport emissions by promoting active travel and/or low and zero emission fuels</p> <p><b>Legislation and Policy</b> – comply with European and Scottish legal requirements</p> <p><b>Communication</b> – inform and engage citizens</p> <p><b>Health</b> – protecting citizens from air pollution</p> <p><b>Placemaking</b> – minimise air pollution through appropriate design</p> <p><b>Climate Change</b> – achieve Scotland’s renewable targets</p>	<p>Include sustainability objective for <b>reducing air pollution and promote active/sustainable travel.</b></p>

## Biodiversity, flora and fauna

Source	Key objectives	Implications/comments
<b>BIODIVERSITY, FLORA AND FAUNA</b>		
<b>International</b>		
<i>Bern Convention (1979)</i>	To ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species) listed in Appendix III. To this end the Convention imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1,000 wild animal species.	The SA framework should <b>consider the preservation and protection of the environment.</b>
<i>Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979)</i>	To ensure that contracting parties work together to conserve terrestrial, marine and avian migratory species and their habitats (on a global scale) by providing strict protection for endangered migratory species.  The overarching objectives set for the Parties are: <ul style="list-style-type: none"> <li>• Promote, co-operate in and support research relating to migratory species</li> <li>• Endeavour to provide immediate protection for migratory species included in Appendix I</li> <li>• Endeavour to conclude Agreements covering the conservation and management of migratory species included in Appendix II</li> </ul>	The SA framework should include objectives <b>protecting biodiversity and the natural environment.</b>
<i>Ramsar Convention (1971)</i>	To promote the wise use of wetlands and their resources.  The Convention's mission is " <i>the conservation and wise use of all wetlands through local and national actions and</i>	The SA framework should take into account the <b>conservation of wetlands and their</b>

Source	Key objectives	Implications/comments
	<i>international cooperation, as a contribution towards achieving sustainable development throughout the world”.</i>	<b>resources.</b>
<i>United Nations Convention on Biological Diversity (2010)</i>	<p>The United Nations Convention on Biological Diversity (CBD) is a multilateral treaty which served three main goals, including:</p> <ul style="list-style-type: none"> <li>• Conservation of biological diversity</li> <li>• Sustainable use of its components</li> <li>• Fair and equitable sharing of benefits arising from genetic</li> </ul>	The SA framework should include objectives <b>protecting biodiversity and sustainable use of its components.</b>
<b>European</b>		
<p><i>The Habitats Directive 1992</i>            Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora</p>	<p>To promote the maintenance of biodiversity taking account of economic, social, cultural and regional requirements. Conservation of natural habitats and maintain landscape features of importance to wildlife and fauna.</p>	Include sustainability objectives to <b>protect and maintain the natural environment and important landscape features.</b>
<p><i>The Birds Directive 2009</i>            Directive 2009/147/EC is a codified version of Directive 79/409/EEC as amended</p>	<p>The preservation, maintenance, and re-establishment of biotopes and habitats shall include the following measures:</p> <ul style="list-style-type: none"> <li>• Creation of protected areas.</li> <li>• Upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones.</li> <li>• Re-establishment of destroyed biotopes.</li> <li>• Creation of biotopes.</li> </ul>	Include sustainability objectives for the <b>protection of birds.</b>

Source	Key objectives	Implications/comments
<i>Our Life Insurance, Our Natural Capital: an EU Biodiversity Strategy to 2020</i>	<p>The European Commission has adopted an ambitious new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020. The six targets cover:</p> <ul style="list-style-type: none"> <li>• Full implementation of EU nature legislation to protect biodiversity</li> <li>• Better protection for ecosystems, and more use of green infrastructure</li> <li>• More sustainable agriculture and forestry</li> <li>• Better management of fish stocks</li> <li>• Tighter controls on invasive alien species</li> <li>• A bigger EU contribution to averting global biodiversity loss</li> </ul>	<p>Include sustainability objectives to <b>value, protect and enhance biodiversity.</b></p>
<b>National (Legislation)</b>		
<i>Wildlife and Countryside Act 1981 (as amended)</i>	<p>The Act implements the principles of the Bern Convention and the EU Birds Directive in the UK. Since it came into force, the Act has been amended several times. The act applies to the terrestrial environment and inland waters.</p> <p>According to the Act, SNH is a regulator of the Wild and Countryside Act and is legally responsible for SSSIs and to enforce law when necessary.</p> <p>It is important to note that specific amendments, which only apply in Scotland due to devolution, have been made to the Act.</p>	<p>Include sustainability objectives to <b>value, protect and enhance biodiversity.</b></p>
<i>Natural Habitats (Conservation etc.) Regulations 1994</i>	<p>The Act amends the Wildlife and Countryside Act 1981 for Scotland. The Act, together with the Nature Conservation (Scotland) Act 2004, implements the EU Birds and Habitats</p>	<p>Include sustainability objectives to <b>value, protect and enhance</b></p>

Source	Key objectives	Implications/comments
	Directives.	<b>biodiversity.</b>
<i>Nature Conservation (Scotland) Act 2004</i>	The Act amends the Wildlife and Countryside Act 1981 for Scotland, and makes provision for the further conservation of biodiversity. The Act requires the Scottish Government to report on progress in relation to the Scottish Biodiversity Strategy	Include sustainability objectives to <b>protect biodiversity and the natural environment.</b>
<i>Wildlife and Natural Environment (Scotland) Act 2011 (as amended)</i>	The Act amends the Wildlife and Countryside Act 1981 for Scotland. The Act mainly changed the way land and the environment is managed in Scotland e.g. it made operational changes to how SSSIs are managed.	Include sustainability objectives to <b>protect and enhance designated biodiversity areas.</b>
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<i>Scotland's Biodiversity: It's in Your Hands</i> (Scottish Executive, 2004)	<i>Scotland's Biodiversity: It's in Your Hands</i> presents a 25 year strategy (until 2030) for the conservation and enhancement of Scotland's biodiversity. It sets out a number of outcomes in relation to; <ul style="list-style-type: none"> <li>• Species and habitats</li> <li>• People</li> <li>• Landscapes and Ecosystems</li> <li>• Integration and Co-ordination</li> <li>• Knowledge</li> </ul>	Include sustainability objectives to <b>value, protect and enhance biodiversity.</b>
<i>2020 Challenge for Scotland's Biodiversity – A Strategy for the conservation and enhancement of biodiversity in Scotland</i> (The Scottish Government, 2013)	The aims of the <i>2020 Challenge</i> are in line with the targets set by the aforementioned United Nations Convention on Biological Diversity and the EU's Biodiversity Strategy for 2020, and include: <ul style="list-style-type: none"> <li>• Protect and restore biodiversity on land and in Scotland's SAs</li> </ul>	Include sustainability objectives to <b>value, protect and enhance biodiversity.</b>

Source	Key objectives	Implications/comments
	<ul style="list-style-type: none"> <li>Involve and engage people in decisions about the environment</li> <li>Promote sustainable economic growth</li> </ul> <p>The 2020 Challenge and the 'Scotland's Biodiversity: It's in Your Hands' together make up the Scottish Biodiversity Strategy.</p>	

### Climatic factors

Source	Key objectives	Implications/comments
<b>CLIMATIC FACTORS</b>		
<b>International</b>		
<i>IPCC's Fifth Assessment Report on Climate Change (2014)</i>	To limit and/or reduce all greenhouse gas emissions which contribute to climate change	The SA framework should include sustainability objectives to <b>support reduction in emissions of greenhouse gases.</b>
<i>Paris Agreement (United Nations 2015)</i>	The main aim of the Paris Agreement centres on keeping global temperature rise this century below 2°C above preindustrial levels. Frameworks are to be put in place to help achieve these goals.	The SA framework should include objectives to <b>adapt and mitigate climate change.</b>
<b>European</b>		
<i>Emissions Trading System Directive 2009</i> Directive 2009/29/EC to improve and extend the greenhouse gas emission	The main aim of the Directive is to improve and extend the greenhouse gas emission allowance trading scheme of the Community	The SA framework should include objectives to <b>promote energy efficiency and reduce the emission of</b>

Source	Key objectives	Implications/comments
allowance trading scheme of the Community		<b>greenhouse gases.</b>
<i>Renewable Energy Directive</i> 2009 Directive 2009/28/EC on the use of energy from renewable sources	The Directive sets targets for renewable energy use within the EU, which requires that 20% of the energy consumed within the EU is renewable.	Include sustainability objectives to <b>promote renewable energy.</b>
<i>Energy Efficiency Directive</i> 2012 Directive 2012/30/EU on energy efficiency	The purpose of the Directive is to promote energy efficiency by establishing a set of binding measures to help the EU reach its 20% energy efficiency target by 2020.	The SA framework should include objectives to <b>promote energy efficiency and prudent use of resources.</b>
<b>National (Legislation)</b>		
<i>Climate Change (Scotland) Act</i> 2009	<p>The Act sets statutory targets for the reduction of greenhouse gas emissions and makes further provision about energy efficiency and about the reduction and recycling of waste. The Act sets an interim 42 percent reduction target by 2020 and an 80 percent reduction target for 2050.</p> <p>Secondary legislation has been made under the Climate Change (Scotland) Act 2009, including:</p> <ul style="list-style-type: none"> <li>• <i>The Climate Change (Annual Targets) (Scotland) Order 2010</i>: sets emission reduction targets for 2010-2022</li> <li>• <i>The Climate Change (Limit on Carbon Units) (Scotland) Order 2010</i>: places a limit on the amount of carbon units that may be credited to net Scottish Emissions for the period 2010-2012</li> <li>• <i>The Carbon Accounting Scheme (Scotland) Regulations 2010</i>: establish a scheme for monitoring</li> </ul>	Include sustainability objective to <b>reduce the emission of greenhouse gases and mitigate climate change</b>



Source	Key objectives	Implications/comments
	<p>compliance with annual reduction targets for 2010-22 (as amended in 2015 and 2016)</p> <ul style="list-style-type: none"> <li>• <i>The Climate Change (Annual Targets) (Scotland) Order 2011</i>: sets emission reduction targets for 2023-2027</li> <li>• <i>The Climate Change (Limit on Carbon Units) (Scotland) Order 2011</i>: places a limit on the amount of carbon units that may be credited to net Scottish Emissions for the period 2023-2027</li> <li>• <i>The Climate Change (Limit on Carbon Units) (Scotland) Order 2010</i>: places a limit on the amount of carbon units that may be credited to net Scottish Emissions for the period 2013-2017</li> <li>• <i>The Climate Change (Additional Greenhouse Gas) (Scotland) Order 2015</i>: adds nitrogen trifluoride as an additional greenhouse gas listed in the Climate Change (Scotland) Act 2009</li> <li>• <i>The Climate Change (Annual Targets) (Scotland) Order 2016</i>: sets annual reduction targets for 2028-2032</li> <li>• <i>The Climate Change (Limit on Carbon Units) (Scotland) Order 2010</i>: places a limit on the amount of carbon units that may be credited to net Scottish Emissions for the period 2018-2022</li> </ul> <p>Part 5 of the Climate Change (Scotland) Act 2009 also includes secondary legislation in relation to the energy performance of buildings and the functions of forestry commissioners.</p>	

Source	Key objectives	Implications/comments
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<i>A Low Carbon Economic Strategy for Scotland – Scotland, A Low Carbon Society (The Scottish Government, 2010)</i>	<p>The main purpose of the Low Carbon Economic Strategy is to achieve the targets as set out in the Climate Change (Scotland) Act 2009.</p> <p>The document provides a comprehensive framework for developing a low carbon economy across Scotland. The strategy sets out measures that could be undertaken by Parties to cut their greenhouse gas emissions. This vision relates to the energy sector, the built environment, Scotland's resources and businesses.</p>	The SA framework should include objectives to <b>support the reduction of greenhouse gas emissions</b>
<i>Towards a Low Carbon Scotland – Smart Cities (The Scottish Government, 2012)</i>	The purpose of the document is to highlight the ways in which Scotland can become a low carbon society by presenting a number of case studies about sustainable urban development in Scottish cities such as district heating development and a hydrogen bus project in Aberdeen, renewable energy projects in Edinburgh and the 'Energy from Waste' project in Glasgow.	The SA should consider the potential impacts (i.e. contribution to low-carbon economy) of renewable technologies such as <b>district heating, solar panels and wind turbines.</b>
<i>Climate Change Bill Consultation Paper (The Scottish Government, 2017)</i>	The Climate Change Bill contains proposals to amend the Climate Change (Scotland) Act 2009 in relation to only those parts that relate to emission reduction targets (including associated reporting duties).	The SA framework should include objectives to <b>support the reduction of greenhouse gas emissions.</b>
<i>A nation with ambition: The Government's Programme for Scotland 2017-18</i>	One of the key objectives of the Programme is to promote further investments in renewable energies, renewable technologies and sustainable modes of transport in order to tackle climate change.	The SA framework should include objectives to <b>support renewable technologies, sustainable modes of</b>

Source	Key objectives	Implications/comments
		<b>transport.</b>
<i>The Draft Climate Change Delivery Plan</i> (The Scottish Government, 2017)	The Climate Change (Scotland) Act 2009 requires that Ministers publish a report setting out policies and proposals to meet annual targets. With the publication of the Climate Change Delivery Plan, the Scottish Government aims to meet its emission reduction targets over the period 2017-2032.	The SA framework should include objectives to <b>adapt and mitigate climate change.</b>
<i>The Scottish Energy Strategy</i> (The Scottish Government, 2017)	Scotland's Energy Strategy sits alongside the aforementioned Climate Change Delivery Plan.  Three key themes underpin the Strategy; <ul style="list-style-type: none"> <li>• A whole-system view in which energy supply and consumption are seen as equal priorities</li> <li>• A stable energy transition towards renewable energies and sustainable transport</li> <li>• A smarter model of local energy provision which promotes local energy, community involvement and community ownership of energy generation</li> </ul>	The SA framework should include objectives to <b>adapt and mitigate climate change, support renewable technologies and local energy generation.</b>
<i>Scottish Emissions Targets 2028-2032 – The high ambition pathway towards a low-carbon economy</i> (Committee on Climate Change, 2016)	Sets out recommendations by the Committee on Climate Change which involves the following; <ul style="list-style-type: none"> <li>• Significant rollout of low-carbon heat pumps and heat networks</li> <li>• Promoting sales of electric cars</li> <li>• Stimulating afforestation in Scotland</li> <li>• Expanding renewable power and shutdown of coal-fired power</li> </ul>	The SA framework should include objectives to <b>support the development of renewable power and sustainable transport.</b>
Climate Ready Scotland: Scottish Climate Change Adaptation Programme	Addresses the impacts identified for Scotland in the UK Climate Change Risk Assessment (CCRA) published under	The SA framework should include objectives to adapt

Source	Key objectives	Implications/comments
(The Scottish Government, 2014)	section 56 of the UK Climate Change Act 2008. It aims to increase the resilience of Scotland's people, environment and economy to the impacts of a changing climate.	to climate change

## Cultural heritage

Source	Key objectives	Implications/comments
<b>CULTURAL HERITAGE</b>		
<b>International</b>		
<i>European Convention on the Protection of the Archaeological Heritage</i> (Valletta, 1992)	Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater.	Include sustainability objectives to <b>protect the archaeological heritage</b> .
<i>Revision of the 1985 Granada Convention</i>	Creation of archaeological reserves and conservation of excavated sites.	
<b>European</b>		
European Spatial Development Perspective (1999)	Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government.	Include sustainability objectives to <b>conserve natural resources and cultural heritage</b> .
<b>National (Legislation)</b>		
<i>Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997</i>	Provides main legislation to: <ul style="list-style-type: none"> <li>list buildings of special architectural or historic interest</li> <li>providing requirements in relation to changes affecting listed buildings and conservation areas</li> <li>setting out a framework for designating and managing</li> </ul>	Include sustainability objectives to <b>conserve cultural heritage, particularly in relation to Listed Buildings, Conservation Areas and</b>

Source	Key objectives	Implications/comments
	Conservation Areas	<b>buildings of special architectural or historic interest.</b>
<i>National Parks (Scotland) Act 2000</i>	Sets out for main aims for the National Parks of Scotland: <ul style="list-style-type: none"> <li>• Conserving and enhancing the natural and cultural heritage of the area</li> <li>• Promoting sustainable use of the natural resources of the area</li> <li>• Promoting understanding and enjoyment of the area by the public</li> <li>• Promoting sustainable economic and social development of the area's communities</li> </ul>	Include sustainability objectives to <b>conserve cultural heritage in National Parks.</b>
<i>Historic Environment Scotland Act 2014</i>	The Act established Historic Environment Scotland (HES) as a Non Departmental Public Body (NDPB). Under the Act, HES will be a statutory consultee in relation to listed buildings and conservation area consents, as well as in relation to EIA.  The Act also amended statutory processes in relation to the historic environment by changing the processes for the designation of sites and buildings (by scheduling and listing) and for consents relating to scheduled monuments, listed buildings and conservation areas.	Include sustainability objectives to <b>conserve cultural heritage and the wider historic environment.</b>  In addition, the role of Historic Environment Scotland should be taken into account.
<i>The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013</i>  <i>The Town and Country Planning (Neighbouring Planning Authorities and Historic Environment) (Scotland)</i>	Both Acts state that HES must be consulted on any development affecting a UNESCO World Heritage Sites in Scotland.	Include sustainability objectives to <b>conserve cultural heritage and the wider historic environment.</b>

Source	Key objectives	Implications/comments
<i>Direction 2015</i>		
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<p><i>Our Place in Time – The Historic Environment Strategy for Scotland</i> (The Scottish Government, 2014)</p>	<p>The Strategy provides a high level framework which sets out a 10-year vision for safeguarding the cultural, social, environmental and economic value of Scotland’s heritage assets.</p> <p>The Strategy sets out three main aims:</p> <ul style="list-style-type: none"> <li>• Investigating and recording the assets that make up Scotland’s historic environment</li> <li>• Protecting Scotland’s historic environment</li> <li>• Sharing information on the significance of Scotland’s historic environment</li> </ul> <p>Each ambition is underpinned by a number of strategic priorities e.g. application of new technologies.</p>	<p>Include sustainability objectives to <b>conserve the historic environment.</b></p>

## Landscape and geodiversity

Source	Key objectives	Implications / comments
<b>LANDSCAPE AND GEODIVERSITY</b>		
<b>International</b>		
<i>UN Conference on Environment and Development 1992</i>	The Biodiversity Convention requires that the Earth's natural resources, including landscapes and geological features, are used sustainably.	Include sustainability objectives <b>to protect, manage and plan for landscape provision.</b>
<b>European</b>		
European Landscape Convention (Florence, 2002)	The convention promotes landscape protection, management and planning.	Include sustainability objectives <b>to protect, manage and plan for landscape provision.</b>
<i>EU Seventh Environmental Action Plan to 2020</i>	<p>The EU's objectives in implementing the programme are:</p> <ul style="list-style-type: none"> <li>(a) to protect, conserve and enhance the Union's natural capital;</li> <li>(b) to turn the Union into a resource-efficient, green and competitive low-carbon economy;</li> <li>(c) to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing;</li> <li>(d) to maximise the benefits of the Union's environment legislation;</li> <li>(e) to improve the evidence base for environment policy;</li> <li>(f) to secure investment for environment and climate policy and get the prices right;</li> <li>(g) to improve environmental integration and policy</li> </ul>	Include sustainability objectives <b>to protect and enhance the natural environment.</b>

Source	Key objectives	Implications / comments
	<p>coherence;</p> <p>(h) to enhance the sustainability of the Union's cities;</p> <p>(i) to increase the Union's effectiveness in confronting regional and global environmental challenges.</p>	
<b>National</b>		
<i>Natural Heritage Futures (SNH, 2002)</i>	SNH's Natural Heritage Futures presents a vision for the future management of Scotland's regions and resources up until 2025. The applications cover farmlands, coasts and SAs, hills and moors, settlements, freshwater, forests and woodlands.	Include sustainability objectives to <b>protect and enhance the natural environment.</b>
<i>Scotland's Landscape (SNH, 2010)</i>	Scotland's Landscape is a Charter published by the Scottish Landscape Forum and SNH which sets the agenda for landscape planning and management in Scotland, which highlights the role of local communities and local and national designations in safeguarding landscapes.	Include sustainability objectives to <b>protect and enhance the natural environment.</b>
<i>Scotland's Geodiversity Charter 2018 – 2023 (Scottish Geodiversity Forum, British Geological Survey, Scottish Natural Heritage)</i>	Scotland's Geodiversity Charter supports the promotion and management of Scotland's geodiversity and better integration of geodiversity into policy and guidance, consistent with the economic, social, cultural and environmental needs of Scotland. This includes the conservation and enhancement of geoheritage and its special character.	Include sustainability objectives which <b>protect and enhance the natural environment.</b>

## Population and health

Source	Key objectives	Implications / comments
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Source	Key objectives	Implications / comments
<b>POPULATION AND HEALTH</b>		
<b>International</b>		
<i>International Health Regulations, 2007</i>	The International Health Regulations provide a legal instrument for upholding global public health security by preventing and responding to acute public health risks. The Regulations require countries to report certain disease outbreaks and public health risks to the World Health Organisation.	Include sustainability objective that <b>acknowledges the potential health hazards</b> that could be caused by the different development types.
<b>European</b>		
<i>The Bathing Water Quality Directive 2006</i> Directive 2006/7/EC on the quality of water intended for human consumption	The overall objective of the revised Directive remains the protection of public health whilst bathing.	Sustainability objectives should reflect the Directive requirements and <b>protect the quality of bathing waters.</b>
<i>The Drinking Water Directive 1998</i> Directive 98/83/EC on the quality of water intended for human consumption	Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	Include sustainability objectives to <b>protect and enhance drinking water quality.</b>
<i>The Noise Directive 2000/14/EC</i>	<ul style="list-style-type: none"> <li>• Monitor the environmental problem by drawing up strategic noise maps.</li> <li>• Informing and consulting the public about noise exposure, its effects and the measures considered to address noise.</li> <li>• Addressing local noise issues by requiring</li> </ul>	Include sustainability objectives to <b>reduce noise pollution.</b>

Source	Key objectives	Implications / comments
	authorities to draw up action Plans to reduce noise where necessary and maintain environmental noise where it is good.	
<b>National (Legislation)</b>		
<i>Public Health etc. (Scotland ) Act 2008</i>	The Act updates the law on public health, enabling Scottish Ministers to protect public health. It also makes provision for law on statutory nuisances.	Include sustainability objectives to <b>protect public health.</b>
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<i>National Performance Framework (The Scottish Government, 2016)</i>	<p>The main purpose of the National Performance Framework is to promote sustainable economic growth by setting out a measurement set that can be used to determine the extent to which key targets are being fulfilled. It sets seven broad targets in relation to:</p> <ul style="list-style-type: none"> <li>• Growth – stimulating economic growth</li> <li>• Productivity – improving productivity</li> <li>• Participation – improving economic participation</li> <li>• Population – increase population growth</li> <li>• Solidarity – reduce income equality</li> <li>• Cohesion – reduce inequalities in economic participation</li> <li>• Sustainability – reduce greenhouse gas emissions</li> </ul>	Include sustainability objective to <b>promote the principles of sustainable economic growth.</b>
<i>Let's make Scotland more active A Strategy for</i>	The strategy seeks to improve the levels of	Include sustainability

Source	Key objectives	Implications / comments
<i>Physical Activity (Physical Activity Task Force 2003)</i>	physical activity in Scotland in order to achieve health benefits. The strategy includes a number of objectives to improve physical activity including the need to improve environments to support inactive people to become active, alongside education and information.	objectives which <b>support opportunities for physical activity.</b>
<i>Cycling Action Plan for Scotland More people cycling more often (Scottish Government, 2010)</i> <a href="http://www.gov.scot/resource/doc/316212/0100657.pdf">http://www.gov.scot/resource/doc/316212/0100657.pdf</a>	The action plan includes the vision that by 2020, 10% of all journeys taken in Scotland will be by bike. It supports skills development, improvements to the cycle network, and active travel.	Include sustainability objectives which <b>support opportunities for active travel.</b>

## Soil

Source	Key objectives	Implications / comments
<b>SOIL</b>		
<b>European</b>		
<i>EU Management of Waste from Extractive Industries (2006/21/EC)</i>	<p>The purpose of the Directive is to prevent water and soil pollution from the deposition of waste into heaps or ponds and puts emphasis on the long-term stability of waste facilities to help avoid major accidents.</p> <p>The main elements of the Directive are:</p> <ul style="list-style-type: none"> <li>• Conditions for operating permits.</li> <li>• General obligations concerning waste management.</li> <li>• The obligation to characterise waste before disposing of it or treating it.</li> </ul>	Include sustainability objectives to <b>protect soil quality and minimise soil pollution from installations.</b>

Source	Key objectives	Implications / comments
	<ul style="list-style-type: none"> <li>Measures to ensure the safety of waste management facilities.</li> <li>A requirement to draw up closure plans.</li> <li>An obligation to provide for an appropriate level of financial security.</li> </ul>	
<p><i>The Industrial Emissions Directive 2010</i> Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)</p>	<p>This Directive lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.</p>	<p>Include sustainability objectives to <b>protect soil quality and minimise soil pollution from installations.</b></p>
<p><i>EU Soil Thematic Strategy 2006</i></p>	<p>Includes a thematic strategy which aims to:</p> <ul style="list-style-type: none"> <li>Establish common principles for the protection and sustainable use of soils</li> <li>Mitigate potential threats to soils</li> <li>Preserve soil functions</li> <li>Restore degraded and contaminated soils</li> </ul>	<p>Include sustainability objectives to <b>protect soils and minimise soil pollution from installations.</b></p>
<p><b>National (Policies, Plans, Programmes and Strategies)</b></p>		
<p><i>The Scottish Soil Framework</i> (The Scottish Government, 2009)</p>	<p>The Soil Framework sets out a vision for the enhancement and protection of soil consistent with the economic, social and environmental needs of Scotland.</p> <p>The Framework identifies 13 key outcomes, as follows:</p> <ul style="list-style-type: none"> <li>Protecting and enhancing soil organic matter</li> <li>Reducing soil erosion</li> <li>Maintaining soil structure</li> </ul>	<p>Include sustainability objectives to <b>protect soils and minimise soil pollution from installations.</b></p>

Source	Key objectives	Implications / comments
	<ul style="list-style-type: none"> <li>• Reduce greenhouse gas emissions from soils</li> <li>• Protecting soil biodiversity</li> <li>• Ensuring that soils contribute to sustainable flood management</li> <li>• Enhancing water quality through sustainable soil management</li> <li>• Enhancing soil's productive capacity</li> <li>• Reducing soil contamination</li> <li>• Reducing pressure on greenfield land and redirect development to brownfield sites where appropriate</li> <li>• Protecting soils with significant historical and cultural features</li> <li>• Enhancing knowledge base</li> <li>• Promoting effective coordination between stakeholders</li> </ul>	

## Water

Source	Key objectives	Implications/comments
<b>WATER</b>		
<b>European</b>		
<i>The Water Framework Directive 2000</i> Directive 2000/60/EC establishing a framework for community action in the field of water policy	The main aim of the Directive is to protect of inland surface waters, transitional waters, coastal waters and ground waters.	Include sustainability objectives to <b>protect and minimise the impact on water quality.</b>
<i>The Bathing Water Quality Directive 2006</i> Directive 2006/7/EC on the quality of water intended for human consumption	The overall objective of the revised Directive remains the protection of public health whilst bathing.	Sustainability objectives should reflect the Directive requirements and <b>protect the quality of bathing waters.</b>
<i>The Floods Directive 2007</i> Directive 2007/60/EC on the assessment and management of flood risks	Establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.	Include sustainability objectives that relate to <b>flood management and reduction of risk.</b>
<b>National (Legislation)</b>		
<i>Bathing Waters (Scotland) Regulations 2008</i>	The Act implements the EU Bathing Water Quality Directive.	Include sustainability objectives that relate to <b>flood management and reduction of risk.</b>
<i>Flood Risk Management (Scotland) Act 2009</i>	The Act requires local authorities to assess bodies of water to determine potential flood risk and carry out measures if required. The Act implements the EU Floods Directive.	Include sustainability objectives that relate to <b>flood management and</b>

Source	Key objectives	Implications/comments
		<b>reduction of risk.</b>
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<i>SEPA Draft River Basin Management Plans Scotland River Basin District / Solway Tweed River Basin District 2008</i>	Identifies key pressures and environmental impacts on Scottish water bodies, which may be exacerbated by climate change.	Include sustainability objectives that relate to <b>flood management and reduction of risk.</b>  In addition, the role of SEPA should be taken into account.
<i>Scotland's Bathing Waters: A Strategy For Improvement (Scottish Executive Environment Group, 2002)</i>	The main purpose of this strategic document is to reduce water pollution in bathing waters by implementing changes to agricultural practices, ensuring compliance with controls on industrial discharges and making use of SUDs.	Sustainability objectives should reflect the Directive requirements and <b>protect the quality of bathing waters.</b>

## Material assets

Source	Key objectives	Implications/comments
<b>MATERIAL ASSETS – RENEWABLE ENERGY</b>		
<b>European</b>		
<i>Renewable Energy Directive 2009</i> Directive 2009/28/EC on the use of energy from renewable sources	The Directive sets targets for renewable energy use within the EU, which requires that 20% of the energy consumed within the EU is renewable.	The SA framework should include objectives to <b>support renewable energy.</b>
<i>Energy Efficiency Directive 2012</i> Directive 2012/30/EU on energy efficiency	Promote energy efficiency by establishing a set of binding	The SA framework should include

Source	Key objectives	Implications/comments
	measures to help the EU reach its 20% energy efficiency target by 2020.	objectives to <b>promote energy efficiency and prudent use of resources.</b>
<b>National</b>		
<i>2020 Routemap for Renewable Energy in Scotland Update</i> (The Scottish Government, 2015)	Provides a progress report on development across the renewable energy sector. It sets out a number of collective actions for boosting Scotland's renewable energy sector.	The SA framework should include objectives to <b>support renewable energy development.</b>
<i>Heat Policy Statement: Towards Decarbonising Heat: Maximising the Opportunities for Scotland</i> (The Scottish Government, 2015)	The Heat Policy Statement sets out the Scottish Government's approach to decarbonise Scotland's heat system. The Heat Map includes a number of key measures that could help to achieve this such as diversifying sources of heat economic and maximising opportunities of the transition to a low carbon heat sector e.g. growing investments in district heating and geothermal.	The SA framework should include objectives to <b>support renewable energy development, particularly in relation to district heat networks.</b>
<b>MATERIAL ASSETS – DIGITAL COMMUNICATIONS INFRASTRUCTURE</b>		
<b>European</b>		
<i>EU Regulatory Framework for Electronic Communications</i> (Commission of the European Union, 2009)	The Regulatory Framework for Electronic Communications provides a reform package for strengthening the European electronic	The (future) development of electronic communications



Source	Key objectives	Implications/comments
	<p>communications market by encouraging competition and guaranteeing basic user rights.</p> <p>It provides a regulatory framework – covering a wide range of EU Directives – for electronic networks and associated services. The Framework is made up of five Directives (unofficially consolidated versions) and two Regulations:</p> <ul style="list-style-type: none"> <li>• Framework Directive 2002/21/EC and the Better Regulation Directive 2009/140/EC</li> <li>• Access Directive 2002/19/EC and the Better Regulation Directive 2009/140/EC</li> <li>• Universal Service Directive 2002/22/EC and the Citizens' Rights Directive 2009/136/EC</li> <li>• Directive on Privacy and Electronic Communications 2002/58/EC</li> <li>• Amending Directive 2006/24/EC and the Citizens' Rights Directive 2009/136/EC</li> <li>• The Regulation Body of European Regulators for</li> </ul>	<p>infrastructure should be taken into account.</p>

Source	Key objectives	Implications/comments
	<p>Electronic Communications</p> <ul style="list-style-type: none"> <li>The Regulation on roaming on public mobile communications networks</li> </ul>	
<p><i>Directive of the European Parliament and of the Council establishing the European Electronic Communications Code (Recast) COM/2016/0590</i></p>	<p>The European Commission proposed a new European Electronic Communications Code to reflect changes in the market, simplifying the process of investing in new top-quality infrastructures both locally and across national borders.</p>	<p>The (future) development of electronic communications infrastructure (locally and across national borders) should be taken into account.</p>
<p><b>National (Policies, Plans, Programmes and Strategies)</b></p>		
<p><i>Scotland's Digital Future – A Strategy for Scotland</i> (The Scottish Government, 2011)</p>	<p>Presents a strategic vision to achieve the digital ambitions of the Scottish Government, which include the following targets:</p> <ul style="list-style-type: none"> <li>Ensuring that broadband will be available to all by 2020, and making sure that significant progress will be made by 2015</li> <li>Ensuring that the rate of broadband uptake by people in Scotland will be at or above the UK average by 2013 and the highest among the UK Nations by 2015.</li> </ul>	<p>The (future) development of broadband technology (uptake and download speeds) should be taken into account.</p>
<p><i>Scotland's Digital Future – Infrastructure Action Plan</i> (The</p>	<p>The key aim of the Infrastructure</p>	<p>The (future)</p>

Source	Key objectives	Implications/comments
Scottish Government, 2012)	<p>Action Plan is to enhance Scotland's digital infrastructure in terms of ease of access, geographical coverage, price and choice of provision for consumers.</p> <p>The Infrastructure Action Plan sets out for key programmes to achieve this vision (in conjugation with the UK Government and Ofcom):</p> <ul style="list-style-type: none"> <li>• Programme 1: achieving a step change by 2015</li> <li>• Programme 2: achieving world-class digital infrastructure by 2020</li> <li>• Programme 3: delivering innovative and local solutions</li> <li>• Programme 4: increasing take-up and stimulating demand by raising digital participation rates (for businesses and individuals)</li> </ul>	development of broadband technology (uptake and download speeds) should be taken into account.
<i>Realising Scotland's full potential in a digital world: A Digital Strategy for Scotland</i> (The Scottish Government, 2017)	The Strategy sets out a vision for digital technologies and industries in Scotland. It builds upon the targets and goals achieved through the aforementioned 'Scotland's Digital Future: A Strategy for Scotland' back in 2011. The Strategy lists a wide range of actions that need to be taken	The (future) development of broadband technology (uptake and download speeds) should be taken into account.

Source	Key objectives	Implications/comments
	<p>in order to achieve the vision it presents. These actions can be divided into the following categories:</p> <ul style="list-style-type: none"> <li>• Actions to support digital transformation across the wider economy</li> <li>• Actions to support growth in the digital sector</li> <li>• Actions to transform the public sector</li> <li>• Actions to build a digital government</li> <li>• Actions to deliver high quality connectivity across the whole of Scotland</li> <li>• Actions to build a digitally-skilled nation</li> <li>• Actions to promote diversity in digital</li> <li>• Actions to support people and communities</li> <li>• Actions to promote digital inclusion and participation</li> </ul>	
<p><i>Mobile connectivity: Action plan</i> (The Scottish Government Digital Directorate, 2016)</p>	<p>The action plan sets out steps to be taken by The Scottish Government to deliver high quality digital connectivity</p>	<p>The (future) improvements to mobile connectivity across Scotland should be</p>

Source	Key objectives	Implications/comments
	<p>across Scotland.</p> <p>The action plan identifies 7 key areas of action (non-domestic rates; planning; public sector assets; innovative mobile solutions; emergency services mobile communications programme; mobile infill; 5G-ready infrastructure).</p>	<p>taken into account.</p>
<p><i>UK Digital Strategy 2017</i> (Department for Digital, Culture, Media and Sport, 2017)</p>	<p>The UK's Digital strategy is formed of seven strands:</p> <ul style="list-style-type: none"> <li>- Building world-class digital infrastructure for the UK.</li> <li>- Giving everyone access to the digital skills they need.</li> <li>- Making the UK the best place to start and grow a digital business.</li> <li>- Helping every British business become a digital business.</li> <li>- Making the UK the safest place in the world to live and work online.</li> <li>- Maintaining the UK government as a world leader in serving its citizens online.</li> <li>- Unlocking the power of data in the UK economy and improving public confidence in its use.</li> </ul>	<p>The (future) development of digital communications infrastructure should be taken into account.</p>
<p><i>Digital Communications Infrastructure Strategy</i> (Department for</p>	<p>The UK Government's long term</p>	<p>The (future)</p>

Source	Key objectives	Implications/comments
Digital, Culture, Media and Sport, 2015)	digital communications infrastructure strategy contains commitments to remove barriers to market investment and reduce legislative and regulatory red tape, framed around meeting the government's new headline ambition for the UK's broadband infrastructure.	development of digital communications infrastructure should be taken into account.
<i>Next Generation Mobile Technologies: A 5G Strategy for the UK</i> (Department for Digital, Culture, Media and Sport, 2017)	The strategy sets out the UK Government's ambition that the UK should be a global leader in 5G.	The (future) deployment of 5G networks across the UK should be taken into account.
<i>Communications Market Report</i> (Ofcom, 2017)	The report contains data and analysis on broadcast television and radio, fixed and mobile telephony, internet take-up and consumption.	Key figures from this report should be included in the SA Report to gain a greater understanding of the scale of Scotland's digital economy.
<b>MATERIAL ASSETS – FORESTRY AND BIOMASS</b>		
<b>European</b>		
<i>Renewable Energy Directive</i> 2009 Directive 2009/28/EC on the use of energy from renewable sources	The Directive sets targets for renewable energy use within the EU, which requires that 20% of the energy consumed within the EU is renewable.  In 2016, the European Commission put forward a proposal for a revised Renewable Energy Directive which includes updated sustainability criteria	The SA framework should include objectives to <b>include sustainability criteria for renewables in relation to biomass fuels used for heat and power.</b>

Source	Key objectives	Implications/comments
	for biofuels used in transport and bioliquids, and solid and gaseous biomass fuels used for heat and power.	
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<i>The Forestry Commissioners (Climate Change Functions) (Scotland) Order 2012</i>	Sets out the general duty of Forestry Commissioners in Scotland, which are required to contribute to the delivery of targets as set out in the Climate Change (Scotland) Act 2009.	The role of Forestry Commissioners, particularly in relation to biomass-based renewable technologies, should be taken into account.
<i>Scottish Forestry Strategy 2006</i>	<p>The Scottish Forestry Strategy sets out a vision for the forestry sector to improve the well-being of local communities, support businesses and tackle climate change. The vision is based on the following principles:</p> <ul style="list-style-type: none"> <li>• Sustainability</li> <li>• Long-term planning</li> <li>• Good woodland management</li> <li>• Integration with other land uses and businesses</li> <li>• Local priorities</li> <li>• Maintaining high professional standards</li> </ul>	The role of the forestry sector, particularly in relation to biomass-based renewable technologies, should be taken into account.
<i>Biomass Action Plan for Scotland</i> (Forestry Commission)	The Biomass Action plan sets out a	The role of the forestry

Source	Key objectives	Implications/comments
Scotland, 2007)	strategic vision for Scotland to improve assessments of resources and capacity building i.e. promoting planting rates and utilisation rates of underused materials to facilitate the development of the woodfuel sector.	sector, particularly in relation to biomass-based renewable technologies, should be taken into account.
<b>MATERIAL ASSETS – WASTE</b>		
<b>European</b>		
<i>The Landfill Directive 1999</i> Directive 99/31/EC on the landfill of waste	Prevent or reduce negative effects on the environment from the landfilling of waste by introducing stringent technical requirements for waste and landfills.	Include sustainability objectives to <b>increase recycling and reduce the amount of waste.</b>
<i>The Waste Framework Directive 2008</i> Directive 2008/98/EC on waste	Prevention or reduction of waste production and its harmfulness. The recovery of waste by means of recycling, re-use or reclamation. Recovery or disposal of waste without endangering human health and without using processes that could harm the environment.	Include sustainability objectives that <b>minimise waste production as well as promote recycling.</b>
<i>The Urban Waste Water Directive 1991</i> Directive 91/271/EEC concerning urban waste water treatment	Protect the environment from the adverse effects of urban waste water collection, treatment and discharge, and discharge from certain industrial sectors.	Include sustainability objectives to <b>reduce water pollution.</b>
<i>The Packaging and Packaging Waste Directive 1994</i>	Harmonise the packaging waste	Include sustainability



Source	Key objectives	Implications/comments
Directive 94/62/EC on packaging and packaging waste	system of Member States and promote recycling.	objectives to <b>minimise the environmental impact of waste and promote recycling.</b>
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<i>Scotland's Zero Waste Plan</i> (The Scottish Government, 2010)	The Zero Waste Plan presents a vision to minimise waste transport to landfills, promote recycling and enhancing collection methods. The key objective of the Plan is to maximise the economic and environmental opportunities of waste reduction and reuse.	Include sustainability objectives to <b>minimise the environmental impact of waste and promote recycling.</b>
<b>MATERIAL ASSETS – AGRICULTURE AND RURAL DEVELOPMENT</b>		
<b>European</b>		
<i>The Nitrates Directive</i> 1991 Directive 91/676/EEC on nitrates from agricultural sources.	Reduce pollution caused or induced by nitrates from agricultural sources and prevent further such pollution.	Include sustainability objectives to <b>reduce pollution caused by agricultural sources.</b>
<i>EU Common Agricultural Policy (CAP)</i>	CAP implements a system of agricultural subsidies and other programmes.  CAP can be divided into two main pillars: <ul style="list-style-type: none"><li>• Pillar 1: support to farmers' incomes. The Scottish</li></ul>	Include sustainability objectives to <b>support sustainable rural development.</b>

Source	Key objectives	Implications/comments
	<p>Government published two booklets to provide guidance on the implementation of pillar 1: The Greening booklet (2015) and The Basic Payment booklet (2015)</p> <ul style="list-style-type: none"> <li>• Pillar 2: support provided for the development of rural areas</li> </ul>	
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<p><i>Scotland Rural Development Programme 2014-2020</i> (The Scottish Government, Agriculture and Rural Development Division, 2015)</p>	<p>The Scottish Rural Development Programme delivers Pillar 2 of the CAP by funding economic, environmental and social measures in rural Scotland. The main priorities include:</p> <ul style="list-style-type: none"> <li>• Enhancing the rural economy</li> <li>• Supporting agricultural and forestry businesses</li> <li>• Protecting and improving the natural environment</li> <li>• Tackling climate change</li> <li>• Supporting rural communities</li> </ul>	<p>Include sustainability objectives to <b>support sustainable rural development and improving the natural environment.</b></p>
<p><i>Our Rural Future</i> (The Scottish Government, 2011)</p>	<p>Provides a response to the consultation 'Speak Up for Rural Scotland'. A number of key principles underpin the strategic document such as enhanced use of public transport,</p>	<p>Include sustainability objectives to <b>support sustainable rural development and local/community use of</b></p>

Source	Key objectives	Implications/comments
	more community control of assets/resources and renewable energy development with shared benefits for communities, commercial developers and land managers.	<b>renewables.</b>
<b>MATERIAL ASSETS – SUSTAINABLE TRANSPORT</b>		
<b>European</b>		
Directive 2014/94/EU on the deployment of alternative fuels infrastructure	The Directive established a common framework for public alternative fuel infrastructure to minimise the dependence on oil and to mitigate the environmental impact of transport. Alternative fuel is meant to include electricity, hydrogen, liquid or gaseous biofuels, synthetic and paraffinic fuels, natural gas and liquefied petroleum gas. Therefore, the Directive also includes legislation for recharging points (sockets and connectors) for electric cars/vehicles.	The SA framework should include objectives to <b>support sustainable transport, particularly in relation to recharging points for electric cars/vehicles</b>
<b>National (Legislation)</b>		
<i>The Alternative Fuels Infrastructure Regulations 2017</i>	Implements the requirement of Directive 2014/94/EU in the UK.	The SA framework should include objectives to <b>support sustainable transport, particularly in relation to recharging points for electric cars/vehicles</b>

Source	Key objectives	Implications/comments
<b>National (Policies, Plans, Programmes and Strategies)</b>		
<p><i>Switched On Scotland: A Roadmap to Widespread Adoption of Plug-in Vehicles 2016 Review</i> (Transport Scotland, 2016)</p>	<p>Presents a review of Switched on Scotland: A Roadmap to Widespread Adoption of Plug-in Vehicles (Transport Scotland, 2013).</p> <p>It is a strategic document which provides a vision for promoting the further adoption of plug-in vehicles. The document also identifies seven factors that influence the adoption of plug-in vehicles as follows;</p> <ul style="list-style-type: none"> <li>• Policy Frameworks</li> <li>• Communication &amp; Education</li> <li>• Economic Opportunity</li> <li>• Energy Systems</li> <li>• Market Development</li> <li>• Recharging</li> <li>• Sustainable Transport</li> </ul>	<p>The SA framework should include objectives to <b>support sustainable transport</b>, particularly in relation to recharging points for electric cars/vehicles</p>
<p><i>National Framework of Local Incentives for Electric Vehicles</i> (Urban Foresight, 2016)</p>	<p>The Framework, which is supported by Transport Scotland, identifies a range of measures that can be implemented to encourage the adoption of electric and plug-in hybrid vehicles.</p>	<p>The SA framework should include objectives to <b>support sustainable transport</b>, particularly in relation to recharging points for electric cars/vehicles</p>
<p><i>National Transport Strategy</i> (Transport Scotland, 2016)</p>	<p>The National Transport Strategy</p>	<p>The SA framework</p>

Source	Key objectives	Implications/comments
	<p>presents a long-term vision for transport policies in Scotland, and to promote sustainable economic growth by providing a sustainable transport system.</p> <p>The Strategy presents an overarching framework, which sets out three strategic outcomes:</p> <ul style="list-style-type: none"> <li>• Improved journey times and connections</li> <li>• Reduced emissions</li> <li>• Improved quality, accessibility and affordability of transport (public transport and alternatives to fossil-fuel powered cars)</li> </ul>	<p>should include objectives to <b>reduce greenhouse gas emissions and support sustainable transport</b>, particularly in relation to recharging points for electric cars/vehicles</p>
<p><i>A Strategy for Leadership and Growth, the Future of our industry in our hands, Tourism Scotland 2020 (Scottish Tourism Alliance, 2012)</i></p>	<p>Growing Scotland's tourism assets into more rounded value added experiences, and developing assets in response to specific market opportunities.</p> <p>The Strategy seeks to address barriers to growth including:</p> <ul style="list-style-type: none"> <li>• Transport connectivity</li> <li>• Digital connectivity</li> <li>• Access to investment</li> </ul>	<p>The SA framework should include objectives to <b>support sustainable economic growth in relation to tourism</b>.</p>

Source	Key objectives	Implications/comments
<b>MATERIAL ASSETS – OTHER</b>		
<b>National (Legislation)</b>		
<p><i>The Town and Country Planning (safeguarding aerodromes, technical sites and military explosives storage areas) Direction 2002 (Department for Transport, 2013, updated in 2016)</i></p>	<p>The circular provides details of the system of safeguarding; lists the civil aerodromes which are officially safeguarded; and lists the local planning authority areas containing civil en-route technical sites for which separate official safeguarding maps have been issued.</p>	<p>The effects of extending PDR on safeguarded areas should be taken into account during the SA.</p>

## **Appendix 2 Baseline information**

## Environmental baseline information

### Biodiversity, flora and fauna

There are 252 Special Areas of Conservation (SACs), 153 Special Protection Areas (SPAs) and 51 Ramsar sites in Scotland<sup>108</sup>. Scotland also has 1,423 SSSIs, covering just under 1,011,000 hectares or 12.7% of Scotland's land area. The sites range in size from the very small, such as Bo'mains Meadow SSSI, at just under a hectare, to the vast Cairngorms SSSI, which extends to more than 29,000 hectares.

SNH reported that, at March 2018, 79.7% of natural features on protected nature sites in Scotland were found to be in favourable condition. This figure has decreased by 0.6% on the previously reporting year. The proportion of natural features on protected nature sites in favourable condition has however seen an increase from 71.4% from March 2005 when reporting began.<sup>109</sup> It is recognised that the biggest influence in terms of the proportion of protected nature sites which are in favourable condition lies in the actions of the responsible bodies, land owners and users of individual sites. Specific actions will be required to bring certain sites into favourable condition.

The Scottish Government has published Scotland's Biodiversity Route Map to 2020<sup>110</sup> which sets out the priority work needed to meet the international Aichi Biodiversity Targets<sup>111</sup> of restoring 15% of degraded ecosystems and improving the state of nature in Scotland. The report identified twelve priority projects to achieve these overall aims. These include: restoration of the peat lands; restoration of native woodland; restoration of freshwaters; securing economic and social benefits from, and investment in, natural capital; increasing the number of people experiencing and enjoying nature; improving schools' interactivity with learning outdoors; developing Scotland's *natural* health service; increasing the number of protected sites in good condition; conserving priority species; improving ecological connectivity; improving sustainable land management and increasing the environmental status of Scotland's seas.<sup>112</sup>

### Habitat creation

SNH has developed a Natural Capital Asset Index which gives an indication of changes across Scotland's ecosystems since the year 2000, with indicative back projections to

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<sup>108</sup> The Scottish Government, 2016. Key Scottish Environment Statistics 2016. Available at: <http://www.gov.scot/Publications/2016/10/7565/334171>

<sup>109</sup> The Scottish Government, 2018. National Indicator: Protected Nature Sites. Improve the condition of protected nature sites. Accessed July 2018. Available at: <http://www.gov.scot/About/Performance/scotPerforms/indicator/naturesites>

<sup>110</sup> The Scottish Government, 2015. Scotland's Biodiversity: A Route Map to 2020. Available at: <http://www.gov.scot/Resource/0048/00480289.pdf>

<sup>111</sup> Convention on Biological Diversity, 2011. Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets. Available at: <https://www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf>

<sup>112</sup> The Scottish Government, 2015. Scotland's Biodiversity: A Route Map to 2020. Available at: <http://www.gov.scot/Resource/0048/00480289.pdf>



1950<sup>113</sup>. 'Natural capital stocks' have largely stabilised or improved slightly following decades of decline up until the 1990s. Evidence accrued by SNH indicates that within lochs, rivers, woodland and coastal habitats, natural capital stocks have increased between 2000 and 2015. For example, there have been improvements in the quality of coastal bathing water and the ecological status of Scotland's lochs and rivers. For bogs, heathland and agricultural habitats, stocks have declined. The value of natural capital is recognised by SNH as forming a vital part of the Scottish economy as well as being of benefit to the wider wellbeing of the country's population. It crucially helps to provide food; plant materials; water; natural flood defences, and crop pollination by insects amongst a range of other benefits.<sup>114</sup>

## Peatland

Blanket bog is the most widespread semi-natural peatland type in Scotland. This is the most widespread semi-natural habitat of any kind in the country, extending to over 1.5 million hectares. Scotland supports around 15% of the world's total area of this habitat type given its considerable rarity internationally. Raised bogs and fens make up the other peatland types in Scotland and all of these peatland types are UK priority habitats and have action plans associated with them.

Flow Country of Caithness and Sutherland is the largest area of peatland in Scotland. Its total size is 400,000 ha of which 45,000 ha (36%) is designated as SSSI, SAC, Special Protection Area (SPA) or Ramsar site. In terms of designated habitats 51 SACs and 106 SSIs cover blanket bog; 26 SACs and 50 SSIs are located on raised bog land; and 22 SACs are set around alkaline fen. A large proportion of designated peatlands are in unfavourable condition (72 out of 188 (38%) upland (blanket) bogs, 47 out of 111 (42%) lowland raised bogs, and 39% of upland fens/marshes/swamps) as per reporting by SNH.

The construction of houses, roads, ports and other development in much of Scotland may impact on the viability of peatland habitats given that it can lead to the excavation or drainage of peatland or other carbon-rich soils. The carbon effects and other ecosystem impacts of development can be considered by planning authorities when assessing applications. Further pressures on such habitats such as use in horticulture, use for fuel, and use in the whisky industry vary in terms of their severity.<sup>115</sup>

Under Scotland's National Peatland Plan<sup>116</sup> the Scottish Government pledged finding of £8 million over the 2017-18 period to support peatland restoration. There is a

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<sup>113</sup> Scottish Natural Heritage, 2017. Scotland's Natural Capital Asset Index published. Accessed December 2017. Available at: <https://www.snhpresscentre.com/news/scotlands-natural-capital-asset-index-published-2>

<sup>114</sup> The Scottish Government, 2013. 2020 Challenge for Scotland's Biodiversity. Accessed December 2017. Available at: <http://www.gov.scot/Resource/0042/00425276.pdf>

<sup>115</sup> The Scottish Government, 2010. Executive Summary: Management of Carbon-Rich Soils – Overview and Discussion Paper. Accessed November 2017. Available at: <http://www.gov.scot/Resource/Doc/921/0109512.pdf>

<sup>116</sup> Scottish Natural Heritage, 2015. Scotland's National Peatland Plan. Accessed December 2017. Available at: <http://www.iucn-uk-peatlandprogramme.org/sites/www.iucn-uk-peatlandprogramme.org/files/Scottish%20National%20Peatland%20Plan.pdf>

commitment to providing sufficient finance to fund at least 20,000 hectares of peatland restoration per year from 2018/19. The draft Climate Change Plan<sup>117</sup> proposes 250,000 hectares of peatlands to be restored by 2032. Scotland's National Peatland Plan sets out a vision for Scotland's peatlands to be thriving habitats, sustaining a diverse ecosystem, sequestering carbon and supporting rural skills and employment by 2050. The Plan identifies that around 70% of Scottish blanket bog and 90% of Scottish raised bog area has been damaged to some degree<sup>118</sup>.

## **Snow sports**

Cairngorms, Glenshee and the Lecht ski centres are located within the Cairngorms National Park (NP). Within the Cairngorms National Park there are 59 SSSI, 15 Special Protection Areas (SPA), 23 Special Area of Conservation (SAC), 11 National Nature Reserve (NNR) and three Ramsar sites<sup>119</sup>. The Cairngorms National Park contains a wide variety of habitats, landforms, plant and animal species with the designated sites containing unique geomorphological and biological features many of which are scarce throughout the UK and Europe<sup>120</sup>. Roughly 49% of the Park has been recognised as being internationally important for nature and protected under European Law with over a quarter of rare and threatened species in the UK found here<sup>121</sup>.

The Glencoe Ski centre lies within the boundaries of the Glen Etive and Glen Fyne SPA which supports more than 4.2% of the UK's golden eagle (*Aquila chrysaetos*) population<sup>122</sup> while Nevis Range ski centre is situated in close proximity to the Parallel Roads of Lochaber SSSI, an area designated for its important landform and sediment<sup>123</sup>. The Nevis Range ski centre is also close to the Ben Nevis SSSI and Ben Nevis SAC, both sites designated for their important upland habitats and plant species.

## **Climate change, energy consumption and energy efficiency**

The Climate Change (Scotland) Act 2009 has set ambitious targets to reduce emissions in the country by 42% by 2020 and by 80% by 2050. The aims of the SEA Act have been reaffirmed through the Paris Agreement of 2015.

The average domestic electricity consumption per household by UK region was higher in Scotland at 4,353 kWh than any other region in the UK. The second highest region

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<sup>117</sup> The Scottish Government, 2017. Draft Climate Change Plan: The draft third report on policies and proposals 2017-2032. Available at: <http://www.gov.scot/Resource/0051/00513102.pdf>

<sup>118</sup> IUCN, 2017. Scottish Government sets peatlands on route to recovery. Accessed December 2017. Available at: <http://www.iucn-uk-peatlandprogramme.org/news-and-events/news/scottish-government-sets-peatlands-route-recovery>

<sup>119</sup> Cairngorms National Park Authority (2017) Local Development Plan 2020: Main Issues Report. Available at: <https://cairngorms.co.uk/wp-content/uploads/2017/11/EvidencePaperConservation.pdf>

<sup>120</sup> Scottish Natural Heritage (2018) Cairngorms SSSI Site Management Statement. Available at: <https://sitelink.nature.scot/site/288> [Accessed 06/12/18]

<sup>121</sup> Cairngorms National Park Authority (2015) Facts and Figures. Available at: <https://cairngorms.co.uk/discover-explore/facts-figures/>

<sup>122</sup> SNH. Glen Etive and Glen Fyne SPA. Available at: <https://sitelink.nature.scot/site/10113>

<sup>123</sup> SNH (2010) Parallel Road of Lochaber. Available at: <https://sitelink.nature.scot/site/1272>

was the East of England (4,328kWh). This considered electricity sales in Scotland have shown a 14.5% fall in the domestic market and a 9.4% fall in the non-domestic market between 2005 and 2015. The average domestic electricity consumption per household during the same period fell by 0.1%.

The proportion of electricity which is generated from fossil fuel sources has also fallen markedly during the period 2005 to 2015. Fossil fuels were used to produce 47.6% of electricity used in Scotland in 2005 and this figure had fallen to 22.0% by 2015.

In 2015 of the 64,584.5GWh generated from renewable sources in the UK, 19,012.2GWh were produced in Scotland. Wind energy (11,679.5GWh) and hydro energy (5,458.4GWh) accounted for the largest proportion of the overall energy generated from renewable sources in Scotland in that year.<sup>124</sup>

Transport, including International Aviation & Shipping (IA&S), accounted for 12.9 MtCO<sub>2</sub>e out of a total of 46.7 MtCO<sub>2</sub>e of emissions in Scotland. Transport accounts for 28% of Scotland’s total emissions. Road transport account for 72% of the total emissions recorded for all sectors of transport. Emissions from transport have fallen for six consecutive years and by 1.9 MtCO<sub>2</sub>e since the peak which was recorded in 2007.<sup>125</sup>

According to the UK Climate Change Risk Assessment 2017<sup>126</sup> there are a number of risks and opportunities arising from climate change for the UK which are outlined below.

Risks	Opportunities
The number of incidents of food poisoning, heat stress and heat related deaths may increase in summer.	Milder winters should reduce the costs of heating homes and other buildings, helping to alleviate fuel poverty and reducing the number of winter deaths from cold.
Domestic energy use may increase during summer months as refrigeration and air conditioning demand increases.	Domestic energy use may decrease in winter due to higher temperatures.
Wetter winters and more intense rainfall events throughout the year may result in a higher risk of flooding from rivers.	Warmer and drier summers may benefit the recreation and tourism economy.
More intense rainstorms may in some locations result in the amount of surface water runoff exceeding the capacity of drainage systems, consequently leading to	UK agriculture and forestry may be able to increase production with warmer weather and longer growing

<sup>124</sup> The Scottish Government, 2017. Scottish Energy Statistics. Accessed December 2017. Available at: <http://www.gov.scot/Topics/Statistics/Browse/Business/Energy>

<sup>125</sup> Scottish Transport, 2016. Carbon Account for Transport No. 8: 2016 Edition. Accessed December 2017. Available at: <https://www.transport.gov.scot/media/20413/140674.pdf>

<sup>126</sup> Committee on Climate Change, 2017. UK Climate Change Risk Assessment 2017 Evidence Report. Accessed December 2017. Available at: <https://www.theccc.org.uk/tackling-climate-change/preparing-for-climate-change/uk-climate-change-risk-assessment-2017/>

more frequent and severe localised flash flooding.	seasons.
More frequent storms and floods may cause increased damage to property and infrastructure, resulting in significant economic costs.	
Periods of drought in summer could lead to soil shrinking and subsidence, causing damage to buildings and transport networks. Drought may also impact negatively on agriculture, industry and biodiversity.	
Warmer and drier summers are likely to affect the quantity and quality of water supply, which will need careful management.	
The changing climate will impact on the behaviour and distribution of species, and may encourage the spread of invasive species.	

Land temperature changes for the UK average between 2005-2014 were 0.9°C warmer than 1961-1990 and similar pattern has been observed in Scotland. Annual rainfall for Scotland increased by 7% between 1961-90 and 1981-2010. In relation to the projected changes in climate for Scotland under a medium emissions (A1B) scenario, regional summer mean temperatures are projected to increase by between 0.9 – 4.5°C by the 2050s compared to a 1961-1990 baseline. Furthermore regional winter precipitation totals are projected to change by between -2% - +31% for the same scenario.<sup>127</sup>

## Renewable energy

The Renewables Action Plan<sup>128</sup> set out short term actions towards the delivery of 2020 targets for renewable energy. A target to deliver the equivalent of 100% of gross electricity consumption from renewables by 2020 has been set<sup>129</sup>. By 2016 the figure

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<sup>127</sup> Committee for Climate Change, 2017. UK Climate Change Risk Assessment 2017 Evidence – Summary for Scotland. Accessed [December 2017] at: <https://www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Scotland-National-Summary.pdf>

<sup>128</sup> Scottish Government. 2009. Renewables Action Plan. Accessed [November 2017] at: <http://www.gov.scot/Resource/Doc/278424/0083663.pdf>

<sup>129</sup> Scottish Government, 2011. 2020 Routemap for Renewable Energy in Scotland. Accessed [November 2017] at: <http://www.gov.scot/resource/doc/917/0118802.pdf>

for the gross electricity consumption from this source was 54.0%<sup>130</sup>. As at September 2016, Scotland had 8.3 GW of installed renewable electricity generation capacity, with an additional 12.8 GW of capacity either under construction or consented. Of the renewable energy projects in the planning system 6% are applications relating to solar PV. The capacity of operational community and locally owned solar PV and solar thermal renewable installations are 39MW and 14MW respectively. Wind and biomass schemes dominate the capacity from renewable sources within community and locally owned installations.<sup>131</sup>

## Energy storage

Energy storage can take many forms and at a non-domestic scale can for example consist of large scale hydro pumped storage which supplies electricity to the grid. In Scotland a range of developing technologies for energy storage are currently evolving as well as existing storage. This includes Cruachan Power station (pumped storage hydro scheme) which has been operational for around 50 years as well as the UK's first large-scale battery which is connected to the distribution network from Orkney. The Orkney system consists of a 2MW lithium-ion device that is connected to the Island's Active Network Management System. Storage batteries such as this one can be used to balance supply and demand from the grid by holding electrical energy in the form of chemical energy which can then be converted back into electrical energy when demand requires.

Scotland currently has two pumped hydro storage systems at Cruachan power station which has a capacity of 440 MW and Foyers which has a capacity of 300 MW. These systems make use of electricity to pump water from a lower to a higher reservoir where it can be stored and then released when required to generate electricity as a conventional hydroelectric power station would. Other systems which may allow for the storage of energy in the country include flywheel storage, supercapacitors, compressed air energy storage and liquid air energy storage. Flywheel storage is being installed on the Isle of Eigg and Fair Isle to help improve the grid networks at these locations.

Renewable energy is highly correlated to weather conditions and thus largely determined by supply-related factors. Supply-side volatility can lead to irregularity in energy provision and seasonal effects are present in both hydro and wind power, with output tending to be lower during summer when it is usually dryer and less wind. Domestic and non-domestic electricity consumption in Scotland is also variable across the country. The highest domestic electricity consumption tends to be in rural areas (for example Kippen and Fintry, Stirling – 7,319kWh; Abroath Landward, Angus - 6,932 kWh; and East mainland, Orkney - 6,748kWh) while urban areas see lower average domestic electricity consumption (for example the five lowest electricity consumption levels which are between 2,337kWh and 2,527kWh are all in Glasgow). This urban-rural divide is not displayed when considering non-domestic energy consumption however with the areas which consume higher levels of energy confined to the more industrial areas of the country which are often found in urban locations. Energy storage

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<sup>130</sup> Energy Statistics for Scotland. Accessed [November 2017] at:

<http://www.gov.scot/Resource/0052/00525187.pdf>

<sup>131</sup> Scottish Government, 2017. Energy in Scotland 2017. Accessed [November 2017] at:

<http://www.gov.scot/Resource/0051/00514474.pdf>

may be a way to help address the range and variation of energy supply and demand in Scotland and thereby improve energy efficiency in the country.<sup>132</sup>

## Snow sports

As a result of climate change, temperatures in Scotland are expected to increase, resulting in hotter summers and milder winters<sup>133</sup>. The amount of snow cover and the length of the snow seasons in Scotland are projected to further decrease with the possibility of no snow cover below 900m by the 2080's<sup>134</sup>. Additionally, small temperature increases may have adverse effects on areas like the Cairngorms with snow turning to rain<sup>135</sup>.

Subsequently, future climate projections point towards a reduction in the conditions required to facilitate snow sports and snow sports related businesses however by adapting ski slopes for other sports there is potential for warmer summers to increase and encourage participation in outdoor recreational activities<sup>136</sup>

## Soil carbon

In Scotland in 2008 the net greenhouse gas emissions were 56.1 Mt of carbon dioxide (CO<sub>2</sub>) equivalent, or 15.3 Mt C. It is estimated that Scotland's soils contain 3,000 million tonnes (Mt) of carbon (C). Peatlands contain approximately 1,600 Mt C. The stock of carbon in Scotland's soils is equivalent to nearly 200 times the net annual greenhouse gas emissions for the country. A loss of only 1% of the carbon locked up in Scotland's peatland would equate to the total annual Scottish human-related emissions of greenhouse gases. The International Union for Conservation of Nature (IUCN) UK Peatland Commission of Inquiry report (2011) urged a speedy response to protect and restore Scotland's peatlands, and warned that delay would lead to far greater costs.<sup>137</sup>

The Greenhouse Inventory only partially records fluxes from soils and is primarily concerned with man-made changes (anthropogenic effects), however it is evident that losses from degraded soils could be significant relative to overall reported net greenhouse gas emissions. Once disturbed, the organic particles in peat are easily

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<sup>132</sup> The Scottish Government, 2016. Energy in Scotland 2016. Accessed [December 2017] at: <http://www.gov.scot/Resource/0049/00494812.pdf>

<sup>133</sup> Scottish Climate Change adaptation programme. Progress report 2018. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/report/2018/05/climate-ready-scotland-scottish-climate-change-adaptation-programme-fourth-annual/documents/00535998-pdf/00535998-pdf/govscot%3Adocument>

<sup>134</sup> Committee on Climate Change (2017) UK Climate Change Risk Assessment 2017: Summary for Scotland. Available at: <https://www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Scotland-National-Summary.pdf>

<sup>135</sup> Centre for Ecology and Hydrology (2016) Snow in Britain: the historical picture and future projections. Available at: <https://nerc.ukri.org/research/partnerships/ride/lwec/report-cards/watersource11/>

<sup>136</sup> Scottish Government (2009) <https://www2.gov.scot/resource/doc/295134/0091314.pdf>

<sup>137</sup> IUCN, 2011. UK Peatland Commission of Inquiry on Peatlands. IUCN Peatland Programme, Edinburgh. Accessed [December 2017] at: <http://www.iucn-uk-peatlandprogramme.org/commission/findings>



eroded by water and wind and oxidised to CO<sub>2</sub>. Losses of CO<sub>2</sub> to the environment from damaged peatlands is estimated to be as much as 10 tonnes CO<sub>2</sub> per ha per year. Some undisturbed peatlands can sequester approximately 250-300 kg (0.25-0.30 tonnes) C per ha per year.

Carbon-rich soils are relevant not only in terms of climate change mitigation but also climate change adaptation. The top layer of vegetation which is usually present at healthy peatland is protective against extremes of weather conditions. Peaty soils and bog habitats that are degraded are in general at much greater risk of damage as a result of prolonged drought. Potential for erosion is also an issue if heavy rainfall occurs.<sup>138</sup>

## **Water resources and flooding**

The Scottish Government oversees the implementation of the Flood Risk Management (Scotland) Act 2009 which established the requirement for Flood Risk Management Strategies and Local Flood Risk Management Plans to be produced. Each of Scotland's 14 Local Plan Districts has a Flood Risk Management Strategy published by the SEPA as Scotland's strategic flood risk management authority in collaboration with the 32 local authorities, Scottish Water and other organisations with a responsibility or interest in managing flooding. Flood Risk Management Plans have been developed in parallel to the Flood Risk Management Strategies and are set out to provide additional local detail on the funding and delivery timetable for actions between 2016 and 2021. Each strategy has identified potentially vulnerable areas within the individual districts. For each potentially vulnerable area the likely sources of flooding, summary of assets at risk of flooding and their value as well as the actions which are being taken to manage flood risk have been set out.<sup>139</sup>

Reporting to the Scottish Government demonstrated that below 8% of data zones considered as part of the corresponding study are classified as having an extremely high or acute vulnerability to flooding. These zones are mainly located within large Scottish cities, with Glasgow containing 191 such zones, Edinburgh - 82; Dundee - 44 and Aberdeen – 27. Over 4% of residential properties in Scotland (just over 108,000) are estimated to be exposed to any type of flooding and some of these dwellings are likely to have been constructed since January 2009. Coastal flooding and river flooding affected more properties in Scotland than surface water flooding in 2015 at the time of reporting. Falkirk, the Orkney Islands and West Dunbartonshire, and Stirling, the Scottish Borders, Perth and Kinross and Moray have the highest proportion of properties which are likely to be exposed by these sources of flooding respectively. The data zones identified as being extremely and acutely flood disadvantaged by flooding contain around 100,000 people at a national level.

In an analysis of indicators relating to social vulnerability to flooding in Scotland which considered 14 thematic domains (Age; Health; Income; Information use; Insurance;

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<sup>138</sup> The Scottish Government, 2010. Executive Summary: Management Of Carbon-Rich Soils – Overview And Discussion Paper. Accessed [November 2017] at:

<http://www.gov.scot/Resource/Doc/921/0109512.pdf>

<sup>139</sup> Scottish Environment Protection Agency, 2016. Flood Risk Management Strategies. Accessed [December 2017] at: <http://apps.sepa.org.uk/FRMStrategies>

Local knowledge; Social networks; Tenure; Mobility; Physical access; Crime; Access to services; Housing; and, Green space) it was demonstrated that social vulnerability in Scotland (to any type of flooding) tends to be concentrated in urban areas. The smaller urban areas contain a particularly high proportion of extremely and acutely disadvantaged neighbourhoods. As an overview 73% of the extremely or acutely vulnerable data zones were located in large urban areas and a further 23% were located in other urban areas. Remote small towns and remote rural areas were identified through the study as having potential issues in relation to social and physical isolation and mobility of people which are likely to be of concern if flooding events were to occur.<sup>140</sup>

A new approach to flood risk management was introduced through the Flood Risk Management (Scotland) Act 2009. The SEA Act gave SEPA and others significant new responsibilities. New approach to flood risk related to providing measures that reduce flood risk in a sustainable manner. Key to ensuring such a sustainable approach is taken is the appropriate management of sources and pathways of floodwaters by restoring and enhancing wetlands, rivers, peatlands and other natural features and characteristics. It will be appropriate for local authorities to promote the restoration of peatlands and other wetlands in some situations to adopt a sustainable approach to flood risk.<sup>141</sup>

## **Agriculture**

Agriculture is a key source of diffuse pollutants, potentially impacting the quality of our rivers, lochs, coastal and transitional waters. The use of chemicals in crop production (i.e. fertilisers, herbicides and pesticides), wastes from livestock production (i.e. faecal pathogens) and sediments (i.e. organics and metals) from land disturbances such as trampling, cultivation or forestry have the potential to enter water bodies, and adversely affect both water quality and biodiversity.

## **Snow sports**

Flooding issues near the five ski centres are largely concentrated near the base of the slopes. It is expected that the ski slopes themselves will not flood due to steep inclines however access routes, car parks and facilities located at the base of the ski slopes may be susceptible to flooding<sup>142</sup>.

According to SEPA flood maps, the area surrounding the Nevis Range ski resort has a high risk of both river and coastal flooding originating from the River Nevis and Loch Linnhe respectively. The ski centre is located in close proximity to the Fort William Potentially Vulnerable Area which is impacted by surface water flooding (63%), coastal

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<sup>140</sup> The Scottish Government, 2015. Mapping Flood Disadvantage in Scotland 2015. Accessed [December 2017] at: <http://www.gov.scot/Resource/0049/00490788.pdf>

<sup>141</sup> The Scottish Government, 2010. Executive Summary: Management Of Carbon-Rich Soils – Overview And Discussion Paper. Accessed [November 2017] at: <http://www.gov.scot/Resource/Doc/921/0109512.pdf>

<sup>142</sup> SEPA (2018) Flood Risk Management Maps. Available at: <http://map.sepa.org.uk/floodmap/map.htm>



flooding (27% and river flooding (10%)<sup>143</sup>. This flooding has the potential to restrict access to and from the ski centre via the A82.

Flash flooding may potentially occur in areas surrounding the ski centres caused by rapid snow melts.

## **Air quality**

The introduction of the Local Air Quality Management (LAQM) review and assessment process places a requirement on local authorities in Scotland to review and assess the air quality within their geographical areas. Through this process local authorities can identify exceedances of the UK Air Quality Strategy Objectives. Section 83(1) of the Environment Act 1995, Local Authorities have a duty to declare AQMAs at locations in which air quality objectives are not being met or are unlikely to be met. There are currently 37 AQMAs declared across 15 local authorities in Scotland.<sup>144</sup>

The main pollutants of current concern in Scotland are:

- Oxides of nitrogen (NO<sub>x</sub>);
- Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>);
- Sulphur dioxide (SO<sub>2</sub>);
- Non-methane volatile organic compounds (NMVOCs);
- Ground-level ozone (O<sub>3</sub>); and
- Ammonia (NH<sub>3</sub>).<sup>145</sup>

In Scotland just over one-sixth of Scotland's total PM<sub>10</sub> and over one-third of the total emissions of nitrogen oxides are generated as a result of transport with majority of these emissions attributed to road transport.<sup>146</sup> The level of emissions of NO<sub>x</sub> from road traffic (in particular petrol cars) has been gradually decreasing from 1998 to the present date. There was a decrease of NO<sub>x</sub> emissions from all transport sources from 67.0 thousand tonnes to 39.6 thousand tonnes from 2011 to 2014.

Decreases in emissions which would result in an adverse impact on air quality in the country can be attributed partly to tightening of engine emission standards in recent years. While the number of total miles travelled in the country has increased steadily

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<sup>143</sup> SEPA [http://apps.sepa.org.uk/FRMStrategies/pdf/pva/PVA\\_01\\_25\\_Full.pdf](http://apps.sepa.org.uk/FRMStrategies/pdf/pva/PVA_01_25_Full.pdf)

<sup>144</sup> Air Quality in Scotland Air Quality Management Areas. Accessed [November 2017] at: <http://www.scottishairquality.co.uk/laqm/aqma>

<sup>145</sup> Transport Scotland, 2017. Scottish Transport Statistics No 35: 2016 Edition. Accessed [December 2017] at: <https://www.transport.gov.scot/media/33814/sct01171871341.pdf>

<sup>146</sup> The Scottish Government, 2015. Cleaner Air For Scotland Accessed (November 2017) at: <http://www.gov.scot/Resource/0048/00488493.pdf>

between 2006 and 2014, the total number of journeys made by public transport has seen an overall decrease during this period. Nearly 80% of all public transport journeys during this period were made by bus and the remaining were made by train. The demand for such journeys has seen an increase in demand for journeys by train, however. Congestion also plays a role in the impacts of vehicular journeys on air quality in a given area. In 2016, 11.7% of car driver journeys were perceived to have been delayed due to traffic congestion, an increase from 9.7% in 2013, but below the 12.7% seen in 2006 and the peak of 14.4% seen in 2007.

Scotland's transport response to the requirement to improve air quality through mitigation has been set out in the National Transport Strategy<sup>147</sup>. The Strategy sets out that there is a requirement to reduce the need to travel, widen travel choices and drive more efficiently in Scotland to improve air quality and meet climate change targets as set out in the Climate Change (Scotland) Act 2009. The strategy will play a part in reducing air pollution in the country and is in line with the Cleaner Air for Scotland strategy.

### **Active travel related development**

The National Transport Strategy includes as one of its three key strategic outcomes improved quality, accessibility and affordability, to give choice of public transport, better quality services and value for money, or alternative to car. Active transport mainly by foot or by cycle will continue to play an important role in helping to meet this objective in Scotland. To help achieve this aim the Scottish Government has increased the budget for active travel since 2010 by just over 116%. The budget for active travel by government for 2016/17 was set at £32.2 million.

Journeys being made by cycle to commute have fluctuated at around 2% of all commuter journeys between 2006 and 2015. The figure was 2.2% for 2015. As an overall share of total traffic and passengers on Scotland's roads, cycles has seen an increase of 13.5% over the five year period ending in 2016. The first Cycling Action Plan for Scotland was published in 2010<sup>148</sup> and set an ambitious target of 10% of all journeys in the country being made by bike by 2020. Journeys made by foot were calculated as having a 24% modal share of all journeys made in Scotland in 2016. Over the same period 12% of commuters made use of this mode of travel on a daily or regular basis while 52% of school children did the same.<sup>149</sup>

At present there are over 2,300 miles of National Cycle Network across Scotland. The cycle and walking networks in the country saw an increase of 330 miles and 95 miles resurfaced or upgraded from April 2011 to April 2015. The Cycling Action Plan for Scotland identified that a further £18 million was to be invested on this infrastructure in 2016/17. In 2014, 121 million trips were made on the National Cycle Network which

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<sup>147</sup> Transport Scotland, 2016. National Transport Strategy. Accessed [November 2017] at: <https://www.transport.gov.scot/media/10310/transport-scotland-national-transport-strategy-january-2016-final-online.pdf>

<sup>148</sup> The Scottish Government, 2010. Cycling Action Plan for Scotland. Accessed [November 2017] at: <http://www.gov.scot/resource/doc/316212/0100657.pdf>

<sup>149</sup> Transport Scotland, 2017. Transport and Travel in Scotland 2016. Accessed [November 2017] at: <https://www.transport.gov.scot/media/39692/sct09170037961.pdf>

was an increase of 13% on 2013. Health benefits equating to a value of around £321 million were derived from the number of trips on the National Cycle Network during the same period. It is now estimated that 41% of the population live within 0.3 miles of the National Cycle Network.<sup>150</sup>

### **Low carbon travel**

Based on Scottish Household Survey results presented as part of a National Statistics publication for Scotland in 2016, 0.3% of the population in the country own an electric vehicle. Survey data presented in the same report suggests that the reason most people (67.8%) gave for considering buying an electric vehicle was due to the potential positive impact this decision could have on the environment. The reason the highest percentage of people gave in relation to reasons for why they wouldn't buy such a vehicle was the perceived limited distance that could be travelled on a charged battery (46.0%) followed very closely by the availability and convenience of charging points for electric vehicles (45.5%).<sup>151</sup>

### **Snow sports**

The highest emissions within the Cairngorms national park are localised within the main settlements of Aviemore, Ballater and Grantown-on-Spey and along the A9, the main route to Cairngorm, Glenshee and The Lecht Ski Centres<sup>152</sup>. Traffic levels along the A9 between Perth and Inverness are estimated to be 24,000 AADT and with levels increasing on an annual basis from 2013<sup>153</sup>.

The main route to both Glencoe and Nevis Range ski resorts is the A82, which acts as the main road connection from the Central Belt to the West Highlands and Islands<sup>154</sup>. Traffic flows along this route are highly seasonal with traffic intensifying in the summer months and some peaks occurring in the winter months which are linked to major events. Annual traffic counts near Torlundy and in close proximity to the Nevis Range ski resort, show increases in the summer months where the World Mountain Bike Championships are held.

There are no AQMA within the vicinity of the five ski centres with the closest being located in major settlements such as Inverness (one AQMA) and Aberdeen (three AQMA).

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<sup>150</sup> Transport Scotland, 2017. Cycling Action Plan for Scotland 2017-2020. Accessed [November 2017] at: <https://www.transport.gov.scot/media/10311/transport-scotland-policy-cycling-action-plan-for-scotland-january-2017.pdf>

<sup>151</sup> Transport Scotland, 2017. Transport and Travel in Scotland 2016. Accessed [December 2017] at: <https://www.transport.gov.scot/media/39692/sct09170037961.pdf>

<sup>152</sup> Cairngorms National Park Authority (2018) Cairngorms National Park Forest Strategy 2018 <https://cairngorms.co.uk/wp-content/uploads/2018/02/180208CairngormsForestStrategySEASEnvironmentalReport.pdf>

<sup>153</sup> Transport Scotland (2018) A9 Monitoring and Analysis Report. Available at: <http://a9road.info/uploads/publications/A9 - Data Monitoring Analysis Report - March 2018.pdf>

<sup>154</sup> The Highland Council (2018) Fort William Strategic Transport Study. Available at: [https://www.highland.gov.uk/info/178/local\\_and\\_statutory\\_development\\_plans/582/west\\_highland\\_and\\_islands\\_local\\_development\\_plan](https://www.highland.gov.uk/info/178/local_and_statutory_development_plans/582/west_highland_and_islands_local_development_plan)

## Soil

Scotland is dominated by four soil types: podzols, brown earths, gleys and organic peat soils. According to the Land Capability for Agriculture in Scotland, land can be classified into four categories which broadly indicate land agricultural capability<sup>155</sup>:

- Arable Agriculture (LCA classes 1-3.1) – covers 625, 800ha or 8% of Scotland's land area.
- Mixed Agriculture (LCA classes 3.2-4.2) – covers 1,541,100ha or 20% of Scotland's land area.
- Improved Grassland (LCA class 5.1-5.3) – covers 1,405,700ha or 18% of Scotland's land area.
- Rough Grazing (LCA classes 6.1-7) – covers 4,035,800ha or 51% of Scotland's land area.

## Peatland restoration

Scotland's peat soils cover more than 20% of the country and store around 1600 million tonnes of carbon. However, it is estimated that over 80% of our peatlands are degraded. Peatlands in good condition actively form peat, removing CO<sub>2</sub> from the atmosphere and storing carbon in the soil. Conversely, degraded peatlands may emit more CO<sub>2</sub> than they remove and become a net source of greenhouse gases (GHG). Peatland restoration has many other benefits including providing an internationally important habitat, improving water quality and reducing flood risk.

## Snow sports

The soils surrounding the five ski centres are largely comprised of peaty podzols and montane soils with the major soil subgroups being peaty gleyed podzols and sub-alpine podzols<sup>156</sup>. These soil types are largely associated with coarse grassland vegetation and coniferous woodlands with the natural regeneration of vegetation within these areas is slow. The use of upland areas for extensive livestock grazing, forestry activities and outdoor sports such as mountain biking and snow sports has resulted in a reduction of vegetation cover and subsequently exacerbating soil erosion.<sup>157</sup>

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<sup>155</sup> The James Hutton Institute, 2018. Land Capability for Agriculture in Scotland [online] Available at: <https://www.hutton.ac.uk/learning/exploringscotland/land-capability-agriculture-scotland>

<sup>156</sup> Scotland's Soils. National Soil Map of Scotland. Available at: [http://map.environment.gov.scot/Soil\\_maps/?layer=1](http://map.environment.gov.scot/Soil_maps/?layer=1) [Accessed 06/12/18]

<sup>157</sup> Cairngorms National Park Authority (2017) Cairngorms National Park Partnership Plan 2017 -2022. Appendix 2: Environmental Baseline Topic 4: Soil. Available at: <https://cairngorms.co.uk/wp-content/uploads/2017/04/170131SEAEEnvironmentalReportFinalNPPPWebFinalWeb02Appendix2Topic4Soil.pdf>

The Land Capability for Agriculture in Scotland classifies the land on the variety of crops which can be grown and their subsequent productivity<sup>158</sup>. According to the the Land Capability for Agriculture in Scotland, the soils surrounding the five ski centers are of low agricultural capability. LCA classifications range from LCA Class 6.2 to 7 at each of the sites which designate these soils as suitable only for Rough Grazing<sup>159</sup>.

## **Landscape and geodiversity**

Between 1994 and 1999 SNH, in partnership with local authorities and others, undertook a national landscape character assessment programme across the country including all of the main islands. The report identified 372 'landscape character types' and these were grouped between 18 natural heritage settings according to their association with a relevant form of socio-economic activity and on the basis of dominant land cover.

The 18 natural heritage settings are: urban greenspace; low arable; lowland grassland; upland grassland; crofting; lowland broadleaved; upland broadleaved; native pinewoods; coniferous plantation; peatland; heather moorland; montane; running waters; and, standing waters.

Due to the complexity and diversity of certain landscape types it is unsurprising that some could not be categorised within any of the landscape character types.<sup>160</sup> Due to advancements in technology and pressures for development and change, a review of the work previously undertaken is currently underway.

There are 40 National Scenic Areas in Scotland mainly in the more remote and mountainous areas of Scotland.<sup>161</sup> These areas cover a total of 13% of the total landmass of the country. These areas represent the best areas of the type of scenic beauty popularly associated with Scotland and for which it is renowned. National Scenic Areas have been recognised within the planning system since 1980. Special attention is to be paid by planning authorities to safeguarding or enhancing the character or appearance of such areas when exercising powers under the *Town and Country Planning (Scotland) Act 1997*.

At present there are two national parks in Scotland: Loch Lomond and The Trossachs and the Cairngorms. In total the two national parks in Scotland cover 5,665 square kilometres. The protection of these areas is central to rural economic development and

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<sup>158</sup> The James Hutton Institute (2018) Land Capability for Agriculture in Scotland. Available at: <https://www.hutton.ac.uk/learning/exploringscotland/land-capability-agriculture-scotland>

<sup>159</sup> Scotland's Soils. Land Capability for Agriculture. Available at: [http://map.environment.gov.scot/Soil\\_maps/?layer=5](http://map.environment.gov.scot/Soil_maps/?layer=5) [Accessed 06/12/018]

<sup>160</sup> Scottish Natural Heritage, 2000. Landscape Character Vignettes. Accessed [November 2017] at: <https://www.snh.scot/sites/default/files/2017-07/Publication%201999%20-%20SNH%20Commissioned%20Report%20F99NB07%20-%20Landscape%20Character%20Vignettes.pdf>

<sup>161</sup> The Scottish Government, 2008. National Scenic Areas of Scotland. Accessed [November 2017] at: <http://www.gov.scot/Resource/Doc/1051/0058088.pdf>

recreation, sustainability, and the conservation of their diverse natural habitats. A Strategic Review of Scotland's National Parks was undertaken in 2008. The review provided for more delegation of planning functions to the national parks.<sup>162</sup> The boundary of the Cairngorms National Park was extended into Perth and Kinross by the Modification Order laid before parliament in 2010. The NPF 3 through Chapter 4 recognises the importance of protecting National Scenic Areas and National Parks in Scotland as part of its natural environment and the high quality landscapes in the country.<sup>163</sup>

There are currently three geoparks designated in Scotland. These are North West Highlands Geopark, Geopark Shetland and Lochaber Geopark. Each area has a management group to promote the geopark and activities within that area. In total the geoparks cover about 10% of the country's land area. Geopark status recognises an area's outstanding geological heritage value and its benefit to local people through tourism and education. North West Highlands Geopark and Geopark Shetland have also been accredited as UNESCO Global Geoparks. These areas have the same level of status as World Heritage Sites and biosphere reserves.<sup>164</sup><sup>165</sup> Geological Conservation Review (GCR) sites contain features of national and international importance including rocks, minerals and fossils, landform features formed during Ice Age. There are nearly 900 GCR sites in Scotland. Most have statutory protection through designation as geological features in SSSIs.

Scotland's National Parks have been recognised for their importance in terms of their geodiversity value. 12.8% of the Cairngorms National Park as well as 1.5% of the Loch Lomond and The Trossachs National Park have GCR site status. There are over 850 features which have this status in Scotland. There are also a number of Local Geodiversity Sites within the National Park designations, with for example 89 proposed within the Cairngorms National Park. Many of the NNRs designated in Scotland contain significant geological and geomorphological interest with around 37% of NNR area in Scotland having GCR site status. SSSIs in Scotland also have geological value containing over 660 notified Earth science features.<sup>166</sup>

More remote areas of Scotland mostly to the north and west have largely semi-natural landscapes and have been altered only minimally by human activities and are thereby considered to demonstrate a wild character. A 2012 survey of the public perception of wildness in Scotland found that a large proportion of the public (including residents and

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<sup>162</sup> The Scottish Government, 2009. National Parks Strategic Review Recommendations. Accessed [November 2017] at: <http://www.gov.scot/Resource/Doc/281970/0085205.pdf>

<sup>163</sup> The Scottish Government, 2014. Scotland's Third National Planning Framework. Accessed [November 2017] at: <http://www.gov.scot/Resource/0045/00453683.pdf>

<sup>164</sup> NWHG, 2017. North West Highlands UNESCO Global Geopark Business Plan 2017-18. Accessed [December 2017] at: <http://www.nwhgeopark.com/wp-content/uploads/ThePlan.pdf>

<sup>165</sup> UK National Commission for UNESCO, 2016. Global Geoparks in the UK. Accessed [December 2017] at: <https://www.unesco.org.uk/wp-content/uploads/2016/09/Global-Geoparks-in-the-UK-FINAL.pdf.pdf>

<sup>166</sup> Gordon, J.E. & Barron, H.F for Scottish Natural Heritage, 2011. Scotland's geodiversity: Development of the basis for a national framework. Accessed [December 2017] at: [http://nora.nerc.ac.uk/id/eprint/19222/1/National\\_Geodiversity\\_Framework\\_417.pdf](http://nora.nerc.ac.uk/id/eprint/19222/1/National_Geodiversity_Framework_417.pdf)



organisation members) felt that it was very important that Scotland had wild areas.<sup>167</sup> 'Wild Land Area' (WLA) describes the most extensive areas of high wildness. It is not a statutory designation although it is considered to be nationally important. SNH identifies such areas as having the following physical attributes:

- A high degree of perceived naturalness.
- The lack of modern human artefacts or structures.
- Little evidence of contemporary land uses.
- Landform which is rugged or otherwise physically challenging.
- Remoteness and / or inaccessibility.

NPF3 recognises wild land as a nationally important asset and sets out that the wildest landscapes in Scotland should be afforded strong protections. In 2014 42 WLAs were identified by SNH following detailed analysis of where wildness is present in Scotland's landscapes. SNH are currently consulting upon guidance which would set out methodology and general principles for assessing the impact of development proposals on the WLAs which were previously identified.<sup>168</sup>

### **Digital communications**

A SNH report in 2002 considered the potential for impacts of mobile communications infrastructure on the landscape in the Highlands and Islands of Scotland and how this impact might be mitigated. At the time of report most mobile telecommunications sites (i.e. those that are not located in National Scenic Areas and masts less than 15m in height) had been developed under PDR, which meant that there was reduced requirements to take account of environmental factors which might be impacted upon. The report identified that this approach resulted in many mobile telecommunications installations having adverse impacts on the landscape of the Highlands and Islands.

From this starting position the SNH report highlighted that when selecting a site appropriate to development a radio base or undertaking any assessment work which is to support the selection of such a site, the following should be considered:

- the more simple and compact layouts will be more appropriate in terms of minimising impacts on the landscape;
- it will be appropriate to consider whether features can be concealed from significant viewpoints;

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<sup>167</sup> Loch Lomond & The Trossachs National Park Authority, Cairngorms National Park Authority & Scottish Natural Heritage, 2012. Public Perception Survey of Wildness in Scotland. Accessed [December 2017] at: <https://www.nature.scot/professional-advice/landscape-change/landscape-policy-and-guidance/landscape-policy-wild-land>

<sup>168</sup> Scottish Natural Heritage, 2017. Consultation on draft guidance: Assessing impacts on Wild Land Areas – technical guidance. Accessed [December 2017] at: <https://www.nature.scot/assessing-impacts-wild-land-technical-guidance-2017>

- an assessment of the relative advantages and disadvantages of mast sharing, site sharing and new site alternatives should be considered; and
- masts which would be developed within or at the edge of areas which possess qualities of ‘wildness’ should be avoided.<sup>169</sup>

## **Agriculture**

Some 80% of Scotland’s land mass is under agricultural production, and as such much of the Scottish landscape is shaped by farmland and farming practices in the country. More intensive practices have a tendency to be to the detriment of landscape character as well as valuable habitats. Plant diversity within cereal fields and field margins has suffered from a decline due to more efficient and intensive practices. The overall length of hedgerows in Scotland increased sevenfold between 1984 and 2007 due to agri-environment policy incentives. The continued use of traditional farming practices allows for the maintenance of unimproved, species-rich grasslands, one of the more valuable habitats in the country. Another important habitat is lowland heath – 20% of this habitat in Europe is located in the UK and 20% of the UK’s provision is within Scotland. Only 0.2% of Scotland is covered by lowland heath.<sup>170</sup> Grazing management of lowland heathlands can allow for its appropriate maintenance. Developments in agriculture, especially in the last hundred years, however, have led to the loss of many of the old farming practices that sustained heathlands historically.

## **Snow sports**

All five of the ski centres are situated within National Scenic Areas with legislation defining these to be areas “of outstanding scenic value in a national context”. Cairngorms, Glenshee and the Lecht are all situated within the Cairngorms National Scenic Area while Glencoe and the Nevis Range ski centres are located within the Ben Nevis and Glencoe National Scenic Area.

Three out of five of the ski centres are located within the Cairngorms National Park (Glenshee, Cairngorms and the Lecht). The Cairngorms National Park is one of two National Parks in Scotland and is the largest within the UK, spanning 4,528 sq. km. The protection of this area is central to rural economic development and recreation, sustainability, and the conservation of their diverse natural habitats.

Nearly half of the Park is considered “wild land”. “Wild land” describes the most extensive areas of high wildness and while it is not a statutory designation, these areas are considered to be of national importance. These areas are designated on the rugged, semi-natural landscapes and minimal signs of human influence including the

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<sup>169</sup> Scottish Natural Heritage, 2002. Siting and Design Guidelines for Mobile Telecommunications Developments in the Highlands and Islands. Accessed [December 2017] at: <https://www.nature.scot/snh-commissioned-report-f00aa508-siting-and-design-guidelines-mobile-telecommunications>

<sup>170</sup> Scottish Natural Heritage. Farmland and croftland. Accessed [December 2017] at: <https://www.snh.scot/habitats-and-ecosystems/habitat-types/farmland-and-croftland>



remoteness from transport links such as roads, railways and ferries as well as the visible lack of buildings, pylons and other modern infrastructure<sup>171</sup>.

The Cairngorms National Park also contains sites of geological importance with 12.8% of the Cairngorms National Park having Geological Conservation Review Status (GCR). GCR sites contain features of national and international importance including rocks, minerals and fossils, landform features formed during the Ice Age with most afforded statutory protection through designation as geological features in SSSIs. There are also a number of Local Geodiversity Sites within the National Park designations, with a total of 89 sites proposed within the Cairngorms National Park. These sites are designated on significant geological and geomorphological interest.

## Cultural heritage

The historic environment in Scotland is a valued asset attracting approximately 14.6 million visitors a year. Furthermore 89% of adults who responded to the Historic Environment Audit 2016 agreed that “it is important to me that heritage buildings and places are well looked after”.

The protection of the historic environment in Scotland is led by HES, and 90-95% of the historic environment in Scotland is undesignated. It is important to note that while the majority of historic sites are not formally designated assets, they provide important contextual information which helps us better understand designated sites<sup>172</sup>. Based on data recorded by HES in the Canmore database, as at March 2016, 317,000 (rounded to the nearest 1,000) undesignated archaeological sites and monuments were recorded (93%)<sup>173</sup>. The Association of Local Government Archaeological Officers estimate that, as at March 2016, there were 291,000 items recorded on the Sites and Monuments Records (SMR) and Historic Environment Record (HER).

There are six World Heritage Sites in Scotland at St. Kilda; Edinburgh Old Town and New Town; The Heart of Neolithic Orkney; New Lanark; The Antonine Wall; and, The Forth Bridge. At present there are a further 47,044 designated Listed Buildings, 8,131 Scheduled Monuments, 365 Gardens and Designed Landscapes, 39 nationally important battlefields in the country.<sup>174</sup> The breakdown of Listed Buildings in Scotland is as follows:

- 3,552 Category A Listed Buildings.

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<sup>171</sup> Scottish Natural Heritage. Landscape Policy: wild land. Available at <https://www.nature.scot/professional-advice/landscape-change/landscape-policy-and-guidance/landscape-policy-wild-land>

<sup>172</sup> Historic Environment Scotland, 2016. Scotland’s Historic Environment Audit 2016. Accessed [November 2017] at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=315b3f0d-631b-4a24-b12b-a6db00ba1696>

<sup>173</sup> Ibid.

<sup>174</sup> Historic Environment Scotland. Designations. Accessed [December 2017] at: <http://portal.historicenvironment.scot/designations>

- 23,382 Category B Listed Buildings.
- 20,110 Category C Listed Buildings.

There are currently 2,420 buildings on the buildings at risk register for Scotland.<sup>175</sup> Analysis of Category A Listed Buildings at risk within Scotland's four largest cities between 2009 and 2012 showed a variable performance in terms of preventing such properties falling in disrepair. Of the four cities within which analysis was undertaken, Edinburgh (from 30 in 2009 to 24 in 2012) and Aberdeen (from 22 in 2009 to 21 in 2012) demonstrated an improvement in terms of reducing the number of Category A Listed Buildings at risk. The number of Category A Listed Buildings at risk in Dundee and Glasgow increased over this period. The figure in Dundee increased from 16 to 71 and the figure in Glasgow increased from 35 to 47.<sup>176</sup>

Across the country there are 663 Conservation Areas. These areas are designated through the local plan process as permitted by the *Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997*. This is an important function to help preserve the character of areas of special architectural or historic interest.

Heritage assets are at risk from neglect, decay or development pressures. Traffic congestion, air quality, noise pollution and other problems may also affect the historic environment. Tourism, leisure and sport can improve understanding and enjoyment of the historic environment. However, increased visitor numbers can also lead to pressures e.g. visitors can cause damage to heritage sites by wearing down footpaths across sensitive features.

The historic environment in Scotland like that throughout the rest of the UK is facing the threat of climate change. Winter precipitation has increased by more than 70% in parts of northern Scotland when compared to figures recorded in the 1960s. Rising sea levels and increased storm events endanger historic landscapes, structures, buildings and archaeology in the coastal zone, while there is also potential for intense rainfall events to cause flooding in historic settlements and erosion of archaeological sites. Further threats include water penetration into masonry, increasing the risk of dampness, condensation, mould growth and accelerated decay of stonework and other materials. Furthermore changes in hydrology may result in vegetation patterns being affected to the detriment of the integrity and setting of designated sites, historic landscapes and archaeological remains. Internationally recognised sites such as parts of the Heart of Neolithic Orkney World Heritage Site are amongst those most at risk from issues relating to climate change.

Special consideration should be given to how the historic environment can best be preserved in the face of a changing climate; for example landscaping may offer opportunities for mitigating the impacts of wind driven rain. It will also be important to ensure traditional buildings are improved in terms of energy efficiency as to limit further

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<sup>175</sup> Buildings at Risk register for Scotland. Accessed [November 2017] at:

<https://www.buildingsatrisk.org.uk/>

<sup>176</sup> City of Edinburgh Council, 2012. National and Local Performance Framework for the Historic Environment. Accessed [December 2017] at:

[http://www.edinburgh.gov.uk/news/article/817/preserving\\_historic\\_buildings\\_for\\_future\\_generations](http://www.edinburgh.gov.uk/news/article/817/preserving_historic_buildings_for_future_generations)

contribution to climate change. Limiting the effects of climate change on a more strategic scale presently includes coastal erosion projects and about 10% of the £1.5m Archaeology Programme funding is spent on such endeavours.<sup>177178</sup>

## **Snow sports**

All five of the ski centres are close to Historic Environment Records which are created by or on behalf of Scottish local authorities, but are undesignated. It is important to note that while the majority of historic sites are not formally designated assets, they provide important contextual information which helps us better understand designated sites<sup>179</sup>

Glencoe ski centre is the only site which is situated in close proximity to sites of designated cultural heritage. Glencoe ski centre is located near the Blackrock Cottage listed building and the Blackrock Cottages – Ba Cottages, Military Road scheduled monument. Scheduled monuments are defined as sites of national importance with this designation recognised by law through the Ancient Monuments and Archaeological Areas Act 1979. The Blackrock Cottage is thought to be from the 18<sup>th</sup> Century and is a B listed building. Listed buildings are structures or buildings designated for their special architectural and historical interest with these sites protected under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997<sup>180</sup>.

## **Mineral resources**

### **Peatland extraction and use**

Peat is a mineral resource and extraction is undertaken for a variety of reasons:

- Compost production for horticulture (on predominantly lowland raised bogs).
- Crofters for their own use (fuel).
- Whisky industry for use during 'kilning'.

Information on the quantity and extent of peat extraction<sup>181</sup> identifies that about 5.5% of Scotland's blanket bogs show evidence of peat cutting. The amount of peat extracted commercially in Scotland has fluctuated around 440,000 m<sup>3</sup> per year for the last ten

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<sup>177</sup> Scottish Government, 2014. Climate Ready Scotland: Scottish Climate Change Adaptation Programme. Accessed [December 2017] at: <http://www.gov.scot/Resource/0045/00451392.pdf>

<sup>178</sup> Historic Scotland, 2012. A Climate Change Action Plan 2012-2017. Accessed [December 2017] at: <https://www.historicenvironment.scot/media/2611/climate-change-plan-2012.pdf>

<sup>179</sup> Historic Environment Scotland, 2016. Scotland's Historic Environment Audit 2016. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=315b3f0d-631b-4a24-b12b-a6db00ba1696>

<sup>180</sup> Historic Environment Scotland. Listing, scheduling and designations. Available at: <https://www.historicenvironment.scot/advice-and-support/listing-scheduling-and-designations/> [Accessed 10/12/18]

<sup>181</sup> Scottish Parliament, 2012. SPICe Briefing Peatlands and Climate change. Accessed [December 2017] at: [www.parliament.scot/ResearchBriefingsAndFactsheets/S4/SB\\_12-28.pdf](http://www.parliament.scot/ResearchBriefingsAndFactsheets/S4/SB_12-28.pdf)

years UK (National Statistics). In 2010, peat was extracted from 23 active sites, six of which are used as energy sources, for whisky and the rest for horticulture. About 20,000 tonnes of peat is cut for fuel in Scotland every year.

## Agriculture

Agricultural land is a key material asset. Soils, as a component of this, have already been discussed above. Agriculture is the dominant land use in Scotland, covering 6.2 million hectares, 80% of the land area. Most agricultural land is rough grazing, with 85% classified as Less Favoured Areas. Much land is given over to livestock, crops, fallow and set-aside represents only 10% of the total agriculture area.

## Waste

Scottish Government has set a target of 70% recycling and composting for all waste by 2025 through the Zero Waste Plan for Scotland. By 2025 the aim is to reduce the percentage of waste ending up in landfill to 5%.<sup>182</sup>

The total waste generated in Scotland from all sources in 2015 was 11.63 million tonnes which was an increase of 13.8% from 2014. This increase in waste produced in the country followed a 9.9% decrease the previous year. The amount of waste from all sources which was recycled in 2015 was 6.26 million tonnes, which is 823,666 million tonnes (15.1%) more waste recycled than in 2014.<sup>183</sup>

In 2016 the quantity of household waste generated in Scotland was 2.50 million tonnes which was an increase of 30,181 tonnes (1.2%) from 2015. The amount of household waste produced has increased for three years in a row up to 2016, however, the amount of household waste generated remains 107,779 tonnes (4.1%), less than that generated in 2011. In 2016, the household waste recycling rate was 45.2%, which was an increase of 1.0% from the previous year. Considered by local authority area Glasgow City (72.1%) and Na h-Eileanan Siar (63.0%) saw a particularly high rate of recycling while the rates of recycling in Dundee City (6.8%) and Renfrewshire (24.2%) were considerably lower than the national figure.<sup>184</sup>

At present the SEPA reports that there are 67 authorised landfill sites in Scotland. Of these sites 11 are non-operational. Greengairs Landfill in Greengairs Airdie is the largest of these sites with a total capacity for 35 million tonnes of waste and a remaining capacity of 13.62 million tonnes as at December 2015.<sup>185</sup> SEPA data also shows that

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<sup>182</sup> Scottish Government, 2010. Scotland's Zero Waste Plan. Accessed [December 2017] at: <http://www.gov.scot/Resource/0045/00458945.pdf>

<sup>183</sup> Scottish Environment Protection Agency, 2016. Waste from all sources – Summary data 2015. Accessed [December 2017] at <https://www.sepa.org.uk/media/287063/waste-from-all-sources-summary-data-2015.pdf>

<sup>184</sup> Scottish Environment Protection Agency, 2017. Household waste – Summary data 2016. Accessed [December 2017] at: <https://www.sepa.org.uk/media/320744/household-waste-summary-data-and-commentary-2016.pdf>

<sup>185</sup> Scottish Environment Protection Agency, 2015. Landfill Capacity Project 2015. Accessed [December 2017] at: <https://www.sepa.org.uk/environment/waste/waste-data/waste-data-reporting/waste-site-information/waste-sites-and-capacity-excel/>

there are a total of 1,192 waste sites across Scotland which are licensed to handle a range of waste products including household waste, commercial waste, industrial waste, special waste, special asbestos waste and inert waste.<sup>186</sup>

## Social baseline information

### Population

The population in Scotland was estimated to be 5,295,403 in the 2011 census. This was the highest population recorded for the country since records began and was a 4.6% rise since 2001. At this time there were more women (2,728,000 or 51.5%) than men (2,567,400 or 48.5%) in Scotland. This was the case for all council areas apart from the Shetland Islands<sup>187</sup>. The mid-year population projections for the country suggest that the population is continuing to grow with 5,404,700 residents recorded in the country as of 30<sup>th</sup> June 2017. This was an increase of 0.6% from 2015.

A net inward migration of 22,900 of people from overseas and 8,800 from other parts of the UK was recorded during the same year period although it is noted that inward migration from the rest of UK was higher than inward migration from overseas.

Although there has been a general trend for growth in population for Scotland as a whole, growth in population has been variable across different areas of the country. The cities of Edinburgh and Glasgow have seen the highest levels of population growth at 1.68% and 1.44% respectively over the report period which ended June 2016. Inverclyde and Na h-Eileanan an Siar displayed losses of population equating to 0.63% and 0.43% during the same period of time. The population density in the country is among the lowest in Europe. There is significant variation between the more densely populated areas in the Central Belt (incorporating Glasgow, Ayrshire, Falkirk, Edinburgh, Lothian and Fife) and areas such as the Highlands and the Western Isles.

Conversely, Scotland's Sparsely Populated Areas are experiencing population decline and could risk losing more than a quarter of their population by 2046 if current demographic trends are left unchanged, with adverse implications for the workforce, the economy and the capacity for demographic regeneration in SPAs. SPAs cover almost half (48.7%) of the area of Scotland, but contain only 2.6% of its population.

There is a recent trend for an overall increase in the proportion of people who are older in the country. Between 1996 and 2016 the age group which reported the highest percentage of growth was those aged between 75 and over (31%). Over the same

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<sup>186</sup> Scottish Environment Protection Agency, 2015. Waste sites and capacity report for Scotland 2015. Accessed [December 2017] at: <https://www.sepa.org.uk/environment/waste/waste-data/waste-data-reporting/waste-site-information/waste-sites-and-capacity-excel/>

<sup>187</sup> National Records of Scotland, 2017. Scotland's census. Accessed [November 2017] at: <http://www.scotlandscensus.gov.uk/ods-web/area.html>

period of time the number of people in Scotland aged 45 to 64 grew by 26% and the number of people aged 64 to 74 grew by 24%.<sup>188</sup>

## Housing

In March 2016 it was recorded that Scotland had a total of 2,567,000 dwellings. Of these 2,461,000 were occupied. The percentage of owner occupied dwellings was recorded as 57.7%. This was a decrease of 0.2% on the previous year. The proportion of owner occupation has decreased by 4.6% from December 1999. This was highest in East Renfrewshire (81.0%) and lowest in the cities of Dundee and Glasgow (both 44.0%).

The proportion of socially rented dwelling in Scotland is 23.1%. The renting of social housing from housing associations has grown from 5.7% in 1999 to 10.8% in 2016. Over the same period however the percentage of homes rented from local authorities fell from 25.3% to 12.3%. The city of Glasgow and Inverclyde has the highest percentage of socially rented dwellings from housing associations at 35% and 26% respectively while North Lanarkshire (24%) and West Dunbartonshire (24%) have the highest percentage of socially rented dwellings from local authorities.<sup>189</sup>

The average residential property price (including detached, semi-detached and terraced properties and flats) in Scotland for the period July 2017 to September 2017 was £177,978. This reflected a quarterly increase in average price of 4.1% and a yearly increase in average price of 4.5%. The highest average price for this period of time was recorded in the City of Edinburgh (£257,348) while the lowest average price was recorded in Na h-Eileanan Siar (£108,314).<sup>190</sup>

The current number of new build completions in Scotland has seen a decrease from the peak in second quarter of 2007 which was over 7,000 new homes. This noted the total number of new homes completed for all sectors for the year to end March 2017 was 17,078 which represents a 1% increase (251 homes) compared to the 16,827 completed in the previous year. This was the fourth consecutive annual increase and the highest annual number of completions since 2009-10. New homes completed by the private sector have seen decreases by 1% while new homes built within the social housing sector (Housing Association and Local Authority combined) increased by 13% to the year to end March 2017 compared to the previous year period.<sup>191</sup>

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<sup>188</sup> National Records of Scotland, 2017. Mid-Year Population Estimates Scotland, Mid-2016. Accessed [November 2017] at: <https://www.nrscotland.gov.uk/files//statistics/population-estimates/mid-year-2016/16mype-cahb.pdf>

<sup>189</sup> Scottish Government, 2017. Housing Statistics for Scotland - Stock by tenure. Accessed [November 2017] at: <http://www.gov.scot/Topics/Statistics/Browse/Housing-Regeneration/HSfS/KeyInfo>

<sup>190</sup> Registers of Scotland, 2017. Average Residential Property Prices in Scotland. Accessed [November 2017] at: <https://www.ros.gov.uk/property-data/property-statistics/quarterly-house-price-statistics>

<sup>191</sup> Scottish Government, 2017. Housing Statistics for Scotland Quarterly Update. Accessed [November 2017] at: <http://www.gov.scot/Resource/0052/00524278.pdf>



## Householder Permitted Development

The planning system in Scotland affords residents scope to undertake modest developments to their properties under PDR. As such there is no need to submit a planning application for development which falls within this category. It should be noted however that the owner of the property will still be responsible for complying with relevant planning regulations and that enforcement action may result if the development goes beyond the remit of permitted development.

PDR for the different types of development are described as falling within different “classes”. There are limitations and restrictions which most of these classes are subject to. Householder classes are grouped by the Scottish Government into the following categories:

- Enlarging a dwellinghouse.
- Improvements, additions or other alterations to a dwellinghouse that are not an enlargement.
- Other developments within the curtilage of a dwellinghouse.<sup>192</sup>

In February 2012 these rights were extended to a wider range of categories and therefore a lower number of householder developments required planning permission. The extension of permitted development partly explains the fall in householder planning applications submitted in 2012-13 when the total number recorded was 13,446.

The yearly number of householder applications during the five year period ending in 2016-17 was between the record low of 13,400 (in 2016-17) and 14,116 (in 2014-15). This reflects a marked decrease from the 18,195 and 16,460 applications received during the two years prior in 2010-11 and 2011-12 respectively. During the same time period the percentage of householder applications decided upon in less than two months saw a steady increase from 82.9% in 2010-11 to 87.1% in 2016-17. This was the highest percentage of applications which were decided upon during the required time period in the seven year recording period ending in 2016-17.<sup>193</sup>

## Social inclusion and deprivation

Deprivation is a multi-faceted and complex problem which influences, and is influenced by a number of different factors. The Scottish Index of Multiple Deprivation 2016 split the country into 6,976 small areas, called ‘data zones’, with roughly equal population and looked at indicators to measure the different sides of deprivation. The analysis showed that not all deprived people lived in a deprived area, in fact two out of three people who are income deprived do not live in deprived areas.

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<sup>192</sup> Scottish Government, 2012. Circular 1/2012 Guidance on Householder permitted development rights. Accessed [December 2017] at: <http://www.gov.scot/Resource/0050/00502132.pdf>

<sup>193</sup> Scottish Government, 2017. Annual and Quarterly Planning Performance Statistics, 2016/17. Accessed [December 2017] at: <http://www.gov.scot/Resource/0052/00522718.pdf>

There are no deprived data zones in the council areas of Shetland, Orkney and the Western Isles, however there are still people within these areas who experience deprivation. The areas which have deep-rooted deprivation and have been consistently among the 5% most deprived in Scotland since the Scottish Index of Multiple Deprivation 2004 are Greenock (Inverclyde), Paisley Ferguslie (Renfrewshire), Inverness Merkinch (Highland), Whitfield (Dundee City), Raploch (Stirling), Craigneuk Wishaw (North Lanarkshire), Altonhill (East Ayrshire), Parkhead West and Barrowfield, Barlanark, Central Easterhouse, Dalmarnock, Govan and Linthouse, Keppochhill and Wyndford (all Glasgow City).

Areas which display high levels of disparity have been highlighted in two ways through the Scottish Index of Multiple Deprivation 2016. The council areas of Glasgow City, Inverclyde, West Dunbartonshire, North Ayrshire and Dundee City all contained the higher numbers of data zones with deprivation, but also contained areas that are not deprived. Conversely Aberdeenshire, Aberdeen City, City of Edinburgh, East Dunbartonshire and East Renfrewshire all contained higher numbers of data zones without deprivation, but also some areas which are considered to be deprived.

Sport participation in Scotland is relatively high with 51% of adults and 68% participating in some form of sport in 2016. Factors such as socio-economic background and gender can influence participation in sports with sport participation levels lower amongst those in the 20 per cent most deprived areas of Scotland and women; particularly girls aged 13 – 15.

Disabled people in Scotland are also less active and less likely to participate in sports with 18% of adults with a condition resulting in major limitations and 34% of adults with a condition resulting in minor limitations participating in sports. Disabled individuals were also less likely to use leisure facilities<sup>194</sup>.

Other barriers to participation in sport include time constraints, shortage of suitable facilities nearby, expense and feeling self-conscious<sup>195</sup>. The rural location of the five ski centres, the dependency on weather conditions, skill levels and the high cost associated with skiing trips and equipment has the potential to exclude those who are less affluent and have less knowledge about the sport.

Research suggests that 44% of lapsed skiers (those who had not skied for 3 years or more) were unlikely to ski due to high expenses while age and fitness levels were also cited (25%). Other reasons included that it was seen as a “hassle” (2%)<sup>196</sup>.

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<sup>194</sup> SportsScotland (2016) Equality and Sport. Available at: <https://sportscotland.org.uk/media-imported/1886385/equality-and-sport-research-final-report.pdf>

<sup>195</sup> The Scottish Health Survey (2018) Chapter 7: Physical Activity. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/statistics-publication/2018/09/scottish-health-survey-2017-volume-1-main-report/documents/scottish-health-survey-2017-main-report/scottish-health-survey-2017-main-report/govscot%3Adocument>

<sup>196</sup> Ski Club of Great Britain (2018) Consumer Research. Available at: <https://www.skiclub.co.uk/about-the-ski-club/press-centre/consumer-research>



## Fuel poverty

Addressing fuel poverty is seen by the Scottish Government as crucial to making Scotland fairer. The Fairer Scotland Action Plan was published in 2016 to address the issue of tackling inequality. The latest statistics have indicated that almost 100,000 fewer households were in fuel poverty in 2015 compared to the previous year. Over £650 million has been allocated to addressing fuel poverty in Scotland since 2009 and a further half a billion pounds is to be made available over the next four years to tackle this issue and improve energy efficiency. This includes allocating £114 million in 2017-18. One million energy efficiency measures have already been delivered to over one million households since 2008 and these measures were installed either directly and funded by Scottish Government schemes or supported by the broader enabling environment created through the Scottish Government's Home Energy Efficiency Programmes for Scotland.<sup>197</sup>

## Health

In Scotland, as shown by information presented as part of the Scottish Index of Multiple Deprivation, the same areas that show income deprivation also show health deprivation. The areas which have the greatest local share of the 20% most deprived in terms of the health domain are Greater Glasgow and Clyde, Ayrshire and Arran, Lanarkshire, Fife and Tayside. These areas have also been shown to have the greatest local share of the 20% most deprived in terms of the income domain.<sup>198</sup>

While people within the most deprived parts of the country were recorded as drinking on less days on average (2.3 days) than those within the least deprived areas (2.9 days), the prevalence of smoking was wider within the most deprived areas (35%) when compared to the least deprived areas (11%). The two most deprived areas in Scotland were less likely to adhere to Moderate or Vigorous Physical Activity guidelines than those in the least deprived area. Furthermore, the proportion of children of a healthy weight was lowest in the two most deprived quintiles at 67% and 67% respectively. The proportion of children who were recorded as being of healthy weight in 2016 in Scotland as a whole was 70%.

Overall the proportion of adults drinking above the recommended maximum level of 14 units per week has fallen from 34% in 2003 to 25% in 2013. From this point the proportion of adults within this group has stayed at a similar level since with the figure recorded as 25% in 2014 and 26% in 2015 and 2016. Similarly the proportion of adults who do not drink alcohol has fallen from the higher figure of 16% in 2003 to 13% in 2013. The figure has remained constant from this time. Male drinkers were recorded as being twice as likely to drink above the recommended maximum of 14 units a week than female drinkers.

The proportion of adults who regularly meet the guidelines for Moderate or Vigorous Physical Activity in 2016 was recorded to be similar to the 2012 figure of 62-64%.

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<sup>197</sup> Scottish Government, 2017. Infrastructure Investment Plan 2015 Progress Report for 2016. Accessed [November 2017] at: <http://www.gov.scot/Resource/0051/00517062.pdf>

<sup>198</sup> Scottish Government, 2016. The Scottish Index of Multiple Deprivation 2016. Accessed [December 2017] at: <http://www.gov.scot/Resource/0050/00504809.pdf>

There continues to be a significant divide in Scotland between the proportion of men (69%) and women (59%) who are likely to meet Moderate or Vigorous Physical Activity guidelines. This divide is also present amongst children with 72% of girls physically active to meet guideline levels and 79% of boys meeting the guidelines. It is also noted that younger children were recorded as being more likely than older children to meet the physical activity guidelines.

Obesity prevalence in Scotland is recorded as being highest among those aged 65-74 (36%). The mean Body Mass Index (BMI) for the population increased from 27.1 to 27.7 from 2003 to 2016. A decline in the prevalence of the risk of obesity in children was recorded however between 2014 (17%) and 2016 (14%).<sup>199</sup>

Air pollution is estimated to reduce the average life expectancy of every person in the UK by six months, and costs the UK economy around £16 billion per year compared to the cost to society of smoking which is estimated to be £13.74 billion per year. The situation in Scotland is comparative to that within the UK as a whole with some of the country's cities considered to be of poor quality for human health.<sup>200</sup> Increased background levels of fine particulate matter (PM<sub>2.5</sub>) are believed to raise the overall risk of death and reduced life expectancy and in Scotland this equates to the cumulative equivalent of about 2,000 deaths per year across the whole population. Road traffic-related air pollution is considered to be one of the major sources of preventable air pollution affecting everyone's health. The impacts of poor air quality have a particularly adverse impact for children, older people and people who already suffer from heart and lung conditions. In response to the challenge air quality poses to the Scottish population, the Scottish government has pledged to replace the existing Scottish objectives for PM<sub>10</sub> and PM<sub>2.5</sub> levels with the World Health Organisation's (WHO) guideline values.<sup>201</sup>

As a whole comparing the entire population of Scotland with the UK, a lower life expectancy at birth is recorded in Scotland by 2.1 years for males and 1.8 years for females. In the longer term however life expectancy in the country has generally increased with females expected to live to 75.3 years in 1981 and 81.2 years in 2015 and males expected to live to 69.1 years in 1981 and 77.1 years in 2015.<sup>202</sup> Overall mortality rates in the country have seen a marked decrease by 27%, from 1,560 per 100,000 in 1994 to 1,136 per 100,000 in 2016. During this period death due to coronary heart disease has seen the greatest decline (66%, to 134 per 100,000), with a similarly high decline in the number of deaths due to cerebrovascular disease (including stroke) which was reduced by 60% to 85 per 100,000. Mortality rates due to respiratory

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<sup>199</sup> Scottish Government, 2017. The Scottish Health Survey 2016. Accessed [December 2017] at:

<http://www.gov.scot/Resource/0052/00525366.pdf>

<sup>200</sup> Defra, 2010. Valuing the Overall Impacts of Air Pollution. Accessed [December 2017] at:

<http://webarchive.nationalarchives.gov.uk/20130403213251/http://archive.defra.gov.uk/environment/quality/air/airquality/panels/igcb/documents/100303-aq-valuing-impacts.pdf>

<sup>201</sup> Scottish Government, 2015. Cleaner Air for Scotland. Accessed [December 2017] at:

<http://www.gov.scot/Resource/0048/00488493.pdf>

<sup>202</sup> National Records of Scotland, 2017. Life Tables for Scotland 2014-2016. Accessed [December 2017] at: <https://www.nrscotland.gov.uk/files//statistics/life-expectancy-at-scotland-level/nat-life-14-16/2014-2016-nat-life-tabs-report.pdf>

conditions and cancer also saw significant declines by 25%, to 149 per 100,000 and by 18%, to 311 per 100,000 respectively.<sup>203</sup>

The number of older people in Scotland is increasing which is trend being experienced across the UK. The number of people of pensionable age and over in the country is expected to increase from the 311 per 1,000 of working age recorded in 2015 to 397 in 2039. The number of people of a much older age has also seen a marked increase given that there were an estimated 910 centenarians (people aged 100 and over) in Scotland in 2014 which was a 78% increase from 2004.<sup>204</sup> As life expectancy and the number of older people (including those who live alone) increases in Scotland, the time spent in ill health is also rising given that incidences of health problems increases with age. Poverty and health inequality significantly affect older people in Scotland. Older people in disadvantaged areas are much more likely to be affected by issues such as heart disease, diabetes and cancers linked to smoking.

### **Snow sports**

Alpine skiing and snowboarding involve high velocities and impact forces. Subsequently, there is a need for appropriate levels of strength, endurance and coordination. Those aged 50 – 59 made up the largest percentage of skiers (30%) and there are more men (66%) who practice the sport compared to women (34%). Skiers tend to revisit their sport every year with 80% having skied at least once in each of the last three seasons. Further research shows that in those aged over and under 30 years old, 80% take part in general fitness activities and 37% participate in other sports to prepare for their skiing trips<sup>205</sup>.

### **Allotments and growing schemes**

The publication of Scottish Government's National Food and Drink Policy in 2009, established a commitment to supporting the increasing number of people who want to grow their own food in the country. Opportunities for socially inclusive, healthy exercise and growing fruit and vegetables for the local community can be provided through allotments and community growing schemes. Allotments and community growing spaces are one of the types of open space identified in *Planning Advice Note 65: Planning and Open Space* which establishes a demand-led approach for future provision of his type.

Interest in gardening and allotments has seen a rise over recent years with more people becoming aware of the social, environmental and health benefits to be gained from the cultivation of an allotment plot. For example in 1998, the waiting list for an allotment in

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<sup>203</sup> Scottish Government, 2017. Health of Scotland's population - Mortality Rates. Accessed [December 2017] at: <http://www.gov.scot/Topics/Statistics/Browse/Health/TrendMortalityRates>

<sup>204</sup> Scottish Government, 2017. Summary: Age Demographics. Accessed [December 2017] at: <http://www.gov.scot/Topics/People/Equality/Equalities/DataGrid/Age/AgePopMig>

<sup>205</sup> Ski Club of Great Britain (2016) Consumer Research. Available at: <https://www.skiclub.co.uk/-/media/ski-club-library/ski-club/consumer-research/skiclubgbconsumerresearch2016.ashx?la=en>

Edinburgh was 417 for 1,065 plots and by 2016, it has increased to 2,510 for just 1,488 Council operated plots.<sup>206</sup>

The legal definition of allotments in Scotland is enshrined in the *Allotments (Scotland) Acts 1890, 1922, and 1950*. An allotment is defined as a plot of land around 250 square metres within a community of other plots. Some existing sites in Scotland are well integrated into the local landscape with boundary hedges and trees, fruit trees, shrubs, coppices and shelter belts while other sites would benefit from advice on good design.<sup>207</sup>

## Crime

According to the Scottish Indices of Deprivation 2016, 12 of the top 20 data zones most impacted by crime are located within the three most populous cities of Scotland in Glasgow, Edinburgh and Aberdeen.<sup>208</sup>

The overall level of crime experienced in Scotland has decreased up to the reporting year 2014-15 by 34% from 2008-09 and by 16% from 2012-13. It is also notable that most people in Scotland are not victims of crime; in the reporting period 2014-15 14.5% of the population were victims of crime. Crime is however experienced disproportionately by specific groups within the community with 4.4% of adults experiencing 58% of all crime. Property crime was reported as being the most prevalent type of crime (73% of all crime reported) during the same year period.

Most crime in Scotland however continues to go unreported with only 38% of all crimes reported to the police in 2014-15. When crime has been reported in the country, 63% of people have said they are satisfied with how the police have handled their case. The perception of the rate of local crime in Scotland has not changed substantially in recent years - 75% of people believed that the local crime rate had stayed the same or reduced in 2014-15 which was the same figure for the reporting period 2012-13. At a national level, 54% of people believed that the national crime rate had stayed the same or reduced in 2014-15 which was an increase of 9% from 2012-13. The fear of crime among the population has seen a small decrease from the level recorded for the period 2012-13. The percentage of adults who reportedly felt safe when walking home in the dark had increased by 2% to 74% in 2014-15 from 2012-13.<sup>209</sup>

## Education, skills and training

The proportion of people in Scotland who have achieved qualifications of National Vocational Qualifications (NVQ) Level 4 or higher as of the end of the reporting period January 2016 to December 2016 is 43.7%. This is slightly higher than the proportion of

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<sup>206</sup> City of Edinburgh Council, 2017. The 3rd Allotments Strategy for the City of Edinburgh 2017 – 2027. Accessed [December 2017] at:

[http://www.edinburgh.gov.uk/downloads/file/9182/allotment\\_strategy\\_2017-2027](http://www.edinburgh.gov.uk/downloads/file/9182/allotment_strategy_2017-2027)

<sup>207</sup> Scottish Allotments and Gardens Society, 2013. Scotland's allotment site design guide. Accessed [December 2017] at: <http://www.sags.org.uk/docs/ScotlandAllotmentDesignGuide.pdf>

<sup>208</sup> Scottish Government, 2016. Scottish Index of Multiple Deprivation 2016. Accessed [December 2017] at: <http://www.gov.scot/Topics/Statistics/SIMD>

<sup>209</sup> Scottish Government, 2016. Scottish Crime and Justice Survey 2014/15: Main Findings. Accessed [December 2017] at: <http://www.gov.scot/Resource/0049/00496532.pdf>

people in the UK (38.0%) who have attained a similar level of qualification. Contrastingly, the proportion of those people in Scotland (9.9%) who have no qualifications is higher than people in the same group for the entirety of the UK which 8.3%<sup>210</sup>.

There has been a general upward trend in relation to the percentage of school leavers who attained one or more qualifications at Scottish Credit and Qualifications Framework (SCQF) Level 6 or above in Scotland from the mid-2000s. The percentage of pupils achieving this level of qualification or better was 60.2% in 2014-15, compared with 58.1% in 2013-14. Of all school leavers in 2014-15, 36.8% went on to higher education, 27.8% went into employment and 23.4% went on to other forms of further education. The percentage of school leavers achieving SCQF Level 5 or better in literacy has gradually increased from 2012-13 to 2014-15. In literacy the figure grew from 67.2% to 74.6% and in numeracy the figure grew from 56.6% to 62.7%.<sup>211</sup>

In June 2009, the Scottish Government announced £800 million of funding to support local authorities in taking forward a £1.25 billion programme for the rebuilding or refurbishment of approximately 55 new primary and secondary schools through to 2017/18. Due to current market conditions and efficiencies delivered by the Scottish Futures Trust, an extra 12 schools are to be built under the programme meaning that the total number delivered will be 67 by March 2018. The number of pupils in publicly funded schools in 2016 was 684,415 which was a rise from 680,007 in 2015.

There are fifteen universities based in Scotland, the Open University, and three other institutions of higher education. In 2014-15 these nineteen institutions were teaching 232,570 students, two-thirds of who were Scottish. The universities have five medical schools, three dental schools and two veterinary medicine schools with their total annual incomes ranging from £19.5 million to £841 million. The Scottish higher education sector contributed an estimated £7.2 billion to the Scottish economy in 2013-14, acting as major employers and generating investment by spending on their estate and facilities with students of the institutions spending money on living costs in their local areas.<sup>212</sup>

The percentage of Scottish graduates in positive destinations six months after completing their course was recorded as 71.3% in 2015-16. The proportion of those students who felt they were in a positive destination had fallen year on year to 63.5% up to 2010-11. The 2015-16 figure is 1.1% higher than the comparable figure for students graduating in 2014-15, indicating a maintaining performance. The figure for male and female students in 2015-16 differed by 6% with 70.7% of female students reportedly in

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<sup>210</sup> NOMIS. Labour Market Profile – Scotland. Accessed [December 2017] at:

<https://www.nomisweb.co.uk/reports/lmp/lor/2013265931/report.aspx#tabquals>

<sup>211</sup> Scottish Government, 2016. Summary statistics for attainment, leaver destinations and healthy living. Accessed [December 2017] at: <http://www.gov.scot/Resource/0050/00501962.pdf>

<sup>212</sup> Audit Scotland, 2016. Audit of higher education in Scottish universities. Accessed [December 2017] at: [http://www.audit-scotland.gov.uk/uploads/docs/report/2016/nr\\_160707\\_higher\\_education.pdf](http://www.audit-scotland.gov.uk/uploads/docs/report/2016/nr_160707_higher_education.pdf)



positive destinations 6 months after completing their course and the figure for male students recorded as 64.7%.<sup>213</sup>

### **Culture, tourism, leisure and recreation**

The tourism sector is of great importance to the Scottish economy. The total overnight and day visitor expenditure in Scotland was £9.7 billion in 2015. Spending by tourists in Scotland generates £12 billion of economic activity in the wider Scottish supply chain and contributes £6 billion to Scottish Gross Domestic Product (GDP). This represents just under 5% of total Scottish GDP. In 2015 there were 14,000 tourism related businesses in Scotland which accounted for 8% of all Scottish businesses. These businesses supported over 196,000 jobs which was approximately 9% of employment in Scotland.<sup>214</sup>

While the number of visits made by overseas visitors to Scotland rose by nearly 17% between 2005 (2.4 million) and 2016 (2.8 million), the number of domestic tourism visits made by Great Britain residents to Scotland has fallen by around 11% between 2006 (12.9 million) and 2016 (11.5 million). As such the combined total number of visits made to Scotland was down 9% on the 2006 total (15.6 million).

The Association of Leading Visitor Attractions (ALVA) announced an overall average increase of 7.2% for 2016 on 2015 visitor numbers to UK attractions. This included an increase of 15.6% for visitor numbers to attractions across Scotland. The most visited attraction in Scotland in 2016 was the National Museum of Scotland which had 1,810,948 visits and was the 15<sup>th</sup> most visited attraction in the UK. Edinburgh Castle was the 16<sup>th</sup> most visited attraction in the UK with 1,778,548 visits and was the most visited paid for attraction in Scotland. These attractions saw increases of 16% and 13% respectively on the previous year's numbers of visits. The Scottish National Gallery was the third most visited attraction in Scotland during this period and also saw a sizeable increase in visitor numbers equal to 12%.<sup>215</sup>

In general the more undeveloped landscapes of Scotland are considered to be of importance to visitors to the country. In 2005, 92% of visitors stated that scenery was important in their choice of Scotland as a holiday destination, the natural environment being important to 89% of visitors.<sup>216</sup>

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<sup>213</sup> Higher Education Statistics Agency, 2017. Percentage of graduates in positive destinations 6 months after graduating, 2002-03 to 2015-16. Accessed [December 2017] at: <http://www.gov.scot/About/Performance/scotPerforms/indicator/graduates>

<sup>214</sup> Transport Scotland, 2016. Trunk Road and Motorway Tourist Signing Guidance. Accessed [December 2017] at: <https://www.transport.gov.scot/media/10318/trbo-transport-scotland-trunk-road-and-motorway-tourist-signing-guidance-march-2016-v3.pdf>

<sup>215</sup> Association of Leading Visitor Attractions, 2017. Visits Made In 2016 To Visitor Attractions In Membership With ALVA. Accessed [December 2017] at: <http://www.alva.org.uk/>

<sup>216</sup> Scottish Government, 2008. The economic impacts of wind farms on Scottish tourism. Accessed [December 2017] at: <http://www.gov.scot/Resource/Doc/214910/0057316.pdf>

## Snow sports

Tourism is one of Scotland's largest business sectors, employing an estimated 206,000 people nationwide<sup>217</sup> and domestic tourism (those from Scotland and the rest of the UK) represent the largest market with a total of 11.7 million trips taken by GB residents in 2017<sup>218</sup>.

Adventure tourism, which includes snow sports, is a growing trend where individuals participate in more physically demanding activities. Adventure tourism is an expanding market with over 350,000 holiday trips to Scotland made by visitors undertaking adventure activities, including mountain biking, every year with the sector contributing an estimated £178 million per year to the Scottish economy in 2010<sup>219</sup>.

Snow sports are a mature adventure tourism attraction in Scotland with the first commercial ski area in Scotland opening at Glencoe in 1956<sup>220</sup>. Scottish ski resorts attract a significant number of visitors each year with the five Scottish ski resorts have an average of 200,000 skier visits per year. Nevis Range ski centre near Fort William attracted a total of 162,605 visitors in 2017 and is ranked one of the top five visitor attractions within the Highland region<sup>221</sup>. However, due to mild weather and poor snow, the 2016/2017 skiing season experienced a record low with an estimated 50,000 skier visits which is significantly lower than the yearly average<sup>222</sup>.

## Economic baseline information

### Economy and employment

The proportion of Scottish residents who are classified as economically active is reported to be 78.4% which is the same as for the wider UK area for the period ending September 2017. Unemployment for this period was slightly higher in the wider UK area (4.3%) than within Scotland (4.0%). The median weekly earnings for residents of Scotland (£547.70) in full time work was slightly lower than the UK figure of £550.40.<sup>223</sup>

The Annual Population Survey for the year period ending June 2017 showed that there is considerable variation in employment rates for those aged 16-64 across Scotland's

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<sup>217</sup> Scottish Government

<sup>218</sup> VisitScotland (2018) Scotland's Tourism Performance Summary Report 2017. Available at: <https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/tourism-in-scotland-2017-summary.pdf>

<sup>219</sup> SNH (2017) Valuing nature based tourism in Scotland. Available at: <https://www.nature.scot/sites/default/files/2017-06/B732000.pdf>

<sup>220</sup> <https://www.glencoemountain.co.uk/about-us/>

<sup>221</sup> The Highland Council (2018) Fort William Strategic Transport Study. Available at: [https://www.highland.gov.uk/info/178/local\\_and\\_statutory\\_development\\_plans/582/west\\_highland\\_and\\_islands\\_local\\_development\\_plan](https://www.highland.gov.uk/info/178/local_and_statutory_development_plans/582/west_highland_and_islands_local_development_plan)

<sup>222</sup> Vanat, L (2018) 2018 International Report on Snow and Mountain Tourism. Available at: <https://www.vanat.ch/RM-world-report-2018.pdf>

<sup>223</sup> NOMIS. Labour Market Profile – Scotland. Accessed [December 2017] at: <https://www.nomisweb.co.uk/reports/imp/gor/2013265931/report.aspx#tabquals>

local authorities. Orkney Islands (87.0%), Shetland Islands (86.2%) and Argyll & Bute (78.8%) displayed higher rates of employment while the lowest employment rates were seen in Dundee City (64.1%), North Ayrshire (64.4%) and Glasgow (67.1%). The 32 local authority areas of Scotland saw no statistically significant changes in employment rate for this period. As a whole Scotland's employment rate (73.4%) was lower than the employment rate for the UK (74.2%) as a whole. Over this year period the employment rate increased by 0.5% in Scotland and increased by 0.6% for the entirety of the UK.<sup>224</sup>

## Digital communications

Scottish Government is committed to a world-class, future proofed infrastructure that will deliver digital connectivity across the whole of Scotland by 2020 as set out through the Infrastructure Action Plan.<sup>225</sup> As well as seeking to encourage inward investment in digital technologies in Scotland the plan also seeks to improve access to digital technology including mobile and internet across the country for personal and business uses. Digital infrastructure should also be future-proofed allowing for connectivity for all devices.

There has been a steady increase in the percentage of premises in Scotland where next generation broadband access is available. The figure has risen from 41% in 2011 to 88% in 2016, and Scotland has a level of connectivity by next generation broadband which is comparative to other countries of Scotland's size. The gap in coverage between rural areas and the rest of Scotland has decreased over time however it remained at 37% in 2016. The gap between internet connectivity speeds at urban and rural locations has widened in recent years despite average speeds increasing across the country. Mobile phone coverage in the country is now relatively strong with 92% of premises now have outdoor 4G mobile coverage from at least one national MNO and 58% having outdoor coverage from all four 4G networks.<sup>226</sup>

The benefits for businesses in Scotland from the improvement of digital infrastructure in the country are likely to include reduced costs and enhanced revenues, the promotion of flexible and remote working, and important inclusion impacts, presenting opportunities for those located in remote locations. Reporting by the Organisation for Economic Co-operation and Development (OECD) of 25 OECD countries between 1996 and 2007 estimated that when broadband penetration increased by 10% a growth in GDP per capita growth of between 0.9 to 1.5% was experienced. Scottish Futures Trust has undertaken research which suggests that becoming a world leader in digitalisation could increase Scottish GDP by £13 billion by 2030.<sup>227</sup>

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<sup>224</sup> Scottish Government, 2017. Annual Population Survey, results for year to 30 June 2017 Accessed [December 2017] at: <http://www.gov.scot/Topics/Statistics/Browse/Labour-Market/Publications/APSJul16Jun17>

<sup>225</sup> Scottish Government, 2012. Scotland's Digital Future - Infrastructure Action Plan. Accessed [December 2017] at: <http://www.gov.scot/Resource/0038/00386525.pdf>

<sup>226</sup> Digital Scotland, 2017. Scotland's Digital Strategy Evidence Discussion Paper. Accessed [December 2017] at: <http://www.gov.scot/Resource/0051/00515576.pdf>

<sup>227</sup> Digital Scotland, 2017. Scotland's Digital Strategy Evidence Discussion Paper. Accessed [December 2017] at: <http://www.gov.scot/Resource/0051/00515576.pdf>



## Agriculture

The Total Income from Farming (TIFF) in Scotland in 2016 was recorded as £749 million. This is a national estimate of total income across all agricultural holding. The 2016 figure represented a 14% increase on the previous year's total and was the fourth highest total since 2000<sup>228</sup>. Estimates from the Scottish Government's annual Farm Business Survey however show that in 2015-16, the average FBI (Farm Business Income) which provides a sectorial insight into the incomes of farm businesses for eight different farm types was £12,600. This was the lowest figure over a six-year period. A decrease of 48% (£11,500) in real terms was recorded over the last year and a decrease of 75% (£38,200) in real terms was recorded since 2010-11.

A total of 68,500 people were employed in the agricultural industry at the end of 2012. The industry used 588,900 hectares for crops in June 2012 with many other areas of land supporting livestock. Barley accounted for the largest crop coverage area.<sup>229</sup> The area of organic farmland in Scotland fell four per cent in 2016, down to 122,000 hectares. This was the eighth consecutive fall in the area of organic land in the country. This trend is in opposition to steady growth of organic farmland in the EU. Most of the organic farmland (113,000 hectares or 93% of all organic farmland) in Scotland is identified as pasture (permanent and temporary grassland and rough grazing).<sup>230</sup>

## Town centres

Town centre locations are important elements of the economic and social fabric of Scotland with support for these locations forming a key part of the regeneration visions and outcomes. Town centres can provide a base for small business and jobs as well as offering a core for community life. The Town Centre Action Plan was launched by Scottish Government in November 2013 to set out short, medium and long terms actions to improve the successful functioning of such locations. The Town Centre First Principle which underpins the action plan was announced by the Minister for Local Government and Planning on 9 July. The principle sets out that:

*“Town centres are a key element of the economic, social and environmental fabric of Scotland’s towns; often at the core of community and economic life, offering spaces in which to live, meet and interact, do business, and access facilities and services. We must take collective responsibility to help town centres thrive sustainably, reinvent their function, and meet the needs of residents, businesses, and visitors for the 21st century.”*

It also requests that:

*“Government, local authorities, the wider public sector, businesses and communities put the health of town centres at the heart of proportionate and best value decision*

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<sup>228</sup> Rural and Environment Science and Analytical Services, 2016. Total Income From Farming. Accessed [December 2017] at: <http://www.gov.scot/Resource/0051/00513826.pdf>

<sup>229</sup> Scottish Government, 2013. Scottish Agricultural Statistics 2013. Accessed [December 2017] at: <http://www.gov.scot/Resource/0042/00429943.pdf>

<sup>230</sup> Scottish Government, 2017. Organic Farming in Scotland, 2016 Statistics. Accessed [December 2017] at: <http://www.gov.scot/Resource/0051/00518186.pdf>

*making, seeking to deliver the best local outcomes regarding investment and de-investment decisions, alignment of policies, targeting of available resources to priority town centre sites, and encouraging vibrancy, equality and diversity.”*

The Scottish Government and the Convention of Scottish Local Authorities awarded a total of £13.325m to 11 town centre projects from two rounds of Regeneration and Capital Grant Funding over 2014-2016. A community-led approach to regeneration initiatives was required to be undertaken for each of the projects.

The promotion of town centre living was supported through the Scottish Empty Homes Partnership which aimed to address the number of empty properties at town centre locations by bringing them back into use as affordable homes. It has helped to support over 1200 homes back into use as at 2015. The Town Centre Empty Homes Fund awarded funds of around £2.75 million to seven towns in December 2013, with six projects for affordable housing progressing at Cupar, Tillicoultry, Tranent, Crieff, Carnoustie and Kirkintilloch.

Further aims to be achieved through the action plan include the promotion of vibrant local economies (including powers for local authorities to establish Town Centre Investment Zones); accessible public services (including the improvements to bus services through the Bus Investment Fund and cycle, walking and public realm improvements); and digital infrastructure improvements (including combined public and private sector investment of around £410m to future proof fibre infrastructure).<sup>231232</sup>

## **Transport and accessibility**

There were 357 operational railway stations across Scotland for the reporting period 2016-2017. The busiest stations in the country during this period of time were Glasgow Central (32,060,134 total entries and exits), Edinburgh (22,582,342 total entries and exits), Glasgow Queen Street (14,682,214 total entries and exits), Paisley Gilmour Street (4,115,272 total entries and exits) and Aberdeen (3,058,268 entries and exits).<sup>233</sup> The number of journeys undertaken by rail in Scotland has seen sustained growth since 1995/96, increasing by 96% to 96.1 million journeys in 2014/15<sup>234</sup>

There is a total of 2,776km of rail track in Scotland and of this 711km (25.3%) is electrified. This is a significantly lower proportion than is electrified across Great Britain which was recorded as 34.0% for the year ended 2017<sup>235</sup>. The electrification programme in Scotland has delivered the recent Airdrie to Bathgate Railway and both

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<sup>231</sup> Scottish Government, 2013. Town Centre Action Plan. Accessed [December 2017] at: <http://www.gov.scot/Resource/0043/00437686.pdf>

<sup>232</sup> Scottish Government, 2016. Town Centre Action Plan – Two Years On. Accessed [December 2017] at: <http://www.gov.scot/Resource/0049/00494537.pdf>

<sup>233</sup> Office of Rail and Road, 2017. Estimates of Station Usage 2016-17. Accessed [December 2017] at: <http://orr.gov.uk/statistics/published-stats/station-usage-estimates>

<sup>234</sup> Network Rail, 2016. Scotland Route Study. Accessed [December 2017] at : <https://cdn.networkrail.co.uk/wp-content/uploads/2016/11/Scotland-Route-Study.pdf>

<sup>235</sup> Office for Rail and Road, 2017. Rail infrastructure, assets and environmental 2016-17 Annual Statistical Release. Accessed [December 2017] at: [http://orr.gov.uk/data/assets/pdf\\_file/0008/25838/rail-infrastructure-assets-environmental-2016-17.pdf](http://orr.gov.uk/data/assets/pdf_file/0008/25838/rail-infrastructure-assets-environmental-2016-17.pdf)

the Paisley Canal and Cumbernauld electrification projects. The next step in the government's electrification programme is at the Stirling/Alloa/Dunblane lines which are expected to be completed by December 2018. The electrification of the 75km Shotts Line between Holytown and Midcalder junctions is due for completion in March 2019.<sup>236</sup> Further recent improvements to the rail network in the country include improvements in the border regions with 67km of the new track laid and six new stations opened for the opening of the Scottish Borders railway in September 2015.<sup>237</sup>

Plans for High Speed Two (HS2) are well underway, with Phase 1 to Birmingham expected to be completed in 2026. The High Speed Rail Scotland Group has been established to develop and promote Scotland's case for inclusion in a UK-wide, high speed rail network. A broad options report on the potential for HS2 links to Scotland considered a number of potential routes for linking HS2 from Carlisle to Edinburgh and Glasgow. Demand for the service has been supported by modelling which indicated that by 2036 there will be around 163,000 trips per day between stations in Scotland and stations in England and Wales (including trips in both directions).<sup>238</sup> The potential for Transport Scotland to provide for a high speed rail route between Glasgow and Edinburgh are dependent upon a commitment to extend high speed rail to Scotland given the high cost of delivering such a high speed link as a standalone scheme.<sup>239</sup>

The number of people making use of bus services in Scotland has seen a recent decline with a 2% decrease in 2015-16 on the 2014-15 period and a 16% fall from a peak in 2007-08. Over the five year period ending in 2015-16 the number of journeys made by bus has decreased by 5%, the total length of vehicular journey has decreased by 5% and the bus fleet size by decreased by 11%. A large proportion of people in Scotland (46%) still make use of a bus at least once a month however, while the £671 million revenue accrued by bus operators in 2015-16 represented an increase of 2% on the previous year and an 8% increase over the previous 5 years.<sup>240</sup> Approximately £13 million over the previous five years has been spent by the Scottish Government to support bus operators bringing low emission buses into service.

The total distance of Scottish roads covers 56,092km. The trunk road and motorway network in Scotland is 3,507 km (2,179 miles) long, including slip roads and roundabouts and has a gross asset value of over £20.8 billion. These sections of road represent 6% of the total Scottish road network. 35% of all traffic and 60% of heavy

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<sup>236</sup> Transport Scotland. Electrification programme. Accessed [December 22017] at:

<https://www.transport.gov.scot/projects/electrification-programme/electrification-programme/>

<sup>237</sup> Office for Rail and Road, 2016. Rail infrastructure, assets and environmental 2015-16 Annual Statistical Release. Accessed [December 2017] at:

[http://orr.gov.uk/\\_data/assets/pdf\\_file/0014/23045/rail-infrastructure-assets-environmental-2015-16.pdf](http://orr.gov.uk/_data/assets/pdf_file/0014/23045/rail-infrastructure-assets-environmental-2015-16.pdf)

<sup>238</sup> Department for Transport, 2016. Broad options for upgraded and high speed railways to the North of England and Scotland. Accessed [December 2017] at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/506022/NES\\_Report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/506022/NES_Report.pdf)

<sup>239</sup> Transport Scotland, 2016. High Speed Rail Scotland Summary Report. Accessed [December 2017] at: <https://www.transport.gov.scot/media/1606/rail-high-speed-rail-scotland-summary-report-web-version-march-2016.pdf>

<sup>240</sup> Transport Scotland, 2017. Scottish Transport Statistics No 35: 2016 Edition. Accessed [December 2017] at: <https://www.transport.gov.scot/media/33814/sct01171871341.pdf>

goods vehicles in Scotland travel along this network.<sup>241</sup> Congestion on the road network of Scotland resulted in 11.7% of drivers being delayed which is reduction from the figure of 12.4% for the previous year. Reported congestion is highest in large urban areas, where 15.2% of all journeys are affected and lowest in remote rural areas, where only 3.8% of all journeys are affected by congestion.<sup>242</sup>

During the reporting period 2015-16, £2,015 million was spent by the Scottish Government and Transport Scotland and a further £900 million was spent by local authorities on transport. This included £664 million by the Scottish Government on trunk roads and £223million by local authorities on road maintenance.<sup>243</sup> Current transport projects under construction in Scotland include the M8, M73, and M74 Motorway Improvements, the Forth Replacement Crossing, the Aberdeen Western Peripheral Route and the £246 million Glasgow Subway Modernisation. The safe operation of Scotland's roads and railway network and the implementation of strategic road safety plans require around £400 million per year. The Infrastructure Investment Plan for Scotland also identifies that there is currently a backlog of structural maintenance schemes in the country which remains a challenge. Future schemes which the government has committed to and are highlighted in the plan include the dualling of the A9 between Perth and Inverness by 2025 and the A96 between Inverness and Aberdeen by 2030.

## Electric vehicles

In 2015 two thirds of commuters in Scotland said that they travelled to work by car or van. Over the last five years, there have been increases in car passenger numbers as well as those made by air, rail and cycle, while there has been a fall in bus and ferry passengers. Car ownership has also been increasing in the country. In Scotland, 70% of households have at least one car for private use while 27% have two or more cars for private use. In 2015, 268,000 new vehicles were registered in the country which was an increase of 2% on the previous year and the highest number of new registrations in a single year since 2007.<sup>244</sup>

As part of the second phase of 'Switched on Scotland' a further £8.2 million was announced by the Minister for Transport and the Islands in June 2017 to support the Low Carbon Transport Loan Fund. These loans are interest free with a repayment term of up to 6 years and will be available for electric motorbikes and scooters and plug-in heavy goods vehicles.<sup>245</sup>

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<sup>241</sup> Transport Scotland. The Trunk Road Network. Accessed [December 2017] at:

<https://www.transport.gov.scot/transport-network/roads/the-trunk-road-network/#45321>

<sup>242</sup> The Scottish Government, 2017. National Indicator: Traffic Congestion. Accessed [December 2017] at: <http://www.gov.scot/About/Performance/scotPerforms/indicator/congestion#Chart>

<sup>243</sup> Transport Scotland, 2017. Scottish Transport Statistics No 35: 2016 Edition. Accessed [December 2017] at: <https://www.transport.gov.scot/media/33814/sct01171871341.pdf>

<sup>244</sup> Transport Scotland, 2017. Scottish Transport Statistics No 35: 2016 Edition. Accessed [December 2017] at: <https://www.transport.gov.scot/media/33814/sct01171871341.pdf>

<sup>245</sup> Scottish Government, 2017. Additional Funding Announced as Electric Vehicle Plan Progresses. Accessed [December 2017] at: <https://www.transport.gov.scot/news/additional-funding-announced-as-electric-vehicle-plan-progresses/>

ChargePlace Scotland is a national network of electric vehicle charge points available across Scotland developed by the Scottish Government through grant funding of local authorities and other organisations. In August 2015, there were 694 charge points with a total of 1,373 connectors in the ChargePlace Scotland network and at the end of August 2016 this had increased to 870 charge points with a total of 1,772 connectors. This represents a rise of 25% and 29% respectively and does not include domestic charge points. Electric vehicle charging points in Scotland were used 26,119 times during August 2016, doubling the 12,939 times they were used in the same month a year earlier, and a nine times increase on the usage in August 2014 (2,885). Despite the overall increase in general usage of charging points, 25% of charge points were still not used at all during August 2016. However, the percentage of charging points which were not used at all was down from the 32%.<sup>246</sup>

## Snow sports

The snow sports sector is vital to the Scottish rural economy with the economic benefit valued at £30 million per year in 2010 (as per the ten year average) and has created employment for 634 people at a national level. More broadly speaking, tourism in rural Scotland represents a significant employment sector. Within the Cairngorms NP, 43% of jobs are related to the tourism sector<sup>247</sup> while the GVA performance of Highland and Aberdeenshire local authorities in the sustainable tourism sector grew by 30% and 156% respectively between 2009 to 2015<sup>248</sup>.

Snow sports tend to have higher levels of spend per person with visitors spending on average £22.85, more than double the amount of money spent by sightseers (£11.17) with those who participate in snow sports are largely comprised of those in higher socio-economic groups (ACB1) and older generations (55+) with more disposable income.<sup>249</sup>

The snow sports industry is seasonal and usually takes place from January – April but may occur outwith this time frame as a result of weather patterns and conditions<sup>250</sup>. Unpredictable snow cover is regarded as the most significant issue within the industry with these factors driving visitor numbers, profitability and revenue. Ultimately, these

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<sup>246</sup> RAC Foundation, 2016. Electric Vehicle Charge Point Usage in Scotland – August 2015 and 2016 update. Accessed [December 2017] at: [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/Scotland\\_EV\\_Network\\_Makwana\\_Nov\\_16.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/Scotland_EV_Network_Makwana_Nov_16.pdf)

<sup>247</sup> Cairngorms National Park Authority (2015) Cairngorms National Park Economic Strategy 2015 – 2018. Available at: <https://cairngorms.co.uk/wp-content/uploads/2015/10/151001CNPEconomicStrategyV1.pdf>

<sup>248</sup> Scottish Government (2018) Understanding the Scottish Rural Economy: research paper. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/research-publication/2018/02/understanding-scottish-rural-economy/documents/00531667-pdf/00531667-pdf/govscot%3Adocument>

<sup>249</sup> Ski Club of Great Britain (2018) Consumer Research. Available at: <https://www.skiclub.co.uk/about-the-ski-club/press-centre/consumer-research>

<sup>250</sup> Dundee City Council (2016) Trekking/Touring Snow sports on unprepared surfaces (Off piste). Available at: [https://www.dundee.gov.uk/sites/default/files/publications/trekking\\_touring\\_snowsports.pdf](https://www.dundee.gov.uk/sites/default/files/publications/trekking_touring_snowsports.pdf)



issues can result in short term planning and cash flow problems, creating a relatively fragile industry. However, due to recent diversification in terms of activities during the summer months (e.g. mountain biking and hillwalking) only one fifth of Scottish ski centres are open for less than six months<sup>251</sup>. Other expenditure is linked to the maintenance and upkeep of the skiing facilities with ski equipment facilities being outdated<sup>252</sup>.

While there has been investment within the industry, the Scottish snow sports market is at a competitive disadvantage compared to more established European snow sports regions such as Switzerland and Austria.

In winter months, many of the roads used to access the ski centres may be restricted or inaccessible due to adverse weather conditions. Both the A82 (main routes to Nevis Range and Glencoe ski centres) and the A9 (main route to Glenshee, the Lecht and Cairngorms ski centres) have a combined total of 11 snow gates located along the roads<sup>253</sup>.

Both the A82 and A9 are classed as major trunk roads by Transport Scotland, carrying an estimated 35% of all traffic and 60% of heavy goods vehicles<sup>254</sup>. The majority of the ski centres can be accessed through these trunk roads with the exception of Cairngorms ski centre which is accessed by the B970. A significant increase in the volume of traffic created by visitors to the ski centres could result in increased congestion. Additionally, congestion may also impact upon local residents and rural settlements.

There is limited public transport access to the ski centres with three out of five ski centres accessible by bus (Glencoe, Glenshee and Cairngorms). Travelling by rail would require connecting travel options with access by private car viewed as the most convenient option however several ski centres have suggested that visitor's car pool in order to take a more sustainable approach to travel

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<sup>251</sup> Highlands and Islands Enterprise (2015) Adventure Tourism in Scotland. Available at: <http://www.hie.co.uk/regional-information/economic-reports-and-research/archive/adventure-tourism-research-2015.html>

<sup>252</sup> Highlands and Islands Enterprise (2011) Scottish Snow sports Strategic Review. Available at: <http://www.hie.co.uk/regional-information/economic-reports-and-research/archive/scottish-snowsports-strategic-review.html>

<sup>253</sup> Transport Scotland (2018) Winter Service Plan. Available at: <https://www.transport.gov.scot/media/41050/nw-winter-service-plan-2017-18.pdf>

<sup>254</sup> Transport Scotland (2018) The Trunk Road Network. Available at: <https://www.transport.gov.scot/transport-network/roads/the-trunk-road-network/>

## Appendix 3 Meeting the requirements of the SEA Act

### Meeting the requirements of the SEA Act

Requirements of the SEA Act	Covered in this SA Report?
<b>Environmental Report</b>	
In relation to any qualifying plan or programme, the responsible authority shall secure the preparation of an Environmental Report. The report shall identify, describe and evaluate the likely significant effects on the environment of implementing— (a) the plan or programme; and (b) reasonable alternatives to the plan or programme, taking into account the objectives and the geographical scope of the plan or programme. (Section 14(1) and (2) and Schedule 3).	
1) An outline of the contents and main objectives of the plan or programme, and of its relationship (if any) with other qualifying plans and programmes.	<b>Chapter 4 and Appendix 1.</b>
2) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	<b>Chapter 4 and Appendix 2.</b>
3) The environmental characteristics of areas likely to be significantly affected.	<b>Chapter 4 and Appendix 2.</b>
4) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna (as last amended by Council Directive 97/62/EC).	<b>Chapter 4 and Appendix 2.</b>
5) The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental	<b>Chapter 4 and Appendix 1.</b>

Requirements of the SEA Act	Covered in this SA Report?
<p>considerations have been taken into account during its preparation.</p>	
<p>6) The likely significant effects on the environment, including—            (a) on issues such as (i) biodiversity; (ii) population; (iii) human health; (iv) fauna; (v) flora; (vi) soil; (vii) water; (viii) air; (ix) climatic factors; (x) material assets;            (xi) cultural heritage, including architectural and archaeological heritage; (xii) landscape; and (xiii) the inter-relationship between the issues referred to in heads (i) to (xii); (b) short, medium and long-term effects; (c) permanent and temporary effects; (d) positive and negative effects; and (e) secondary, cumulative and synergistic effects.</p>	<p><b>Chapters 5-20 and Appendix 6.</b></p>
<p>7) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.</p>	<p><b>Chapters 5-20 and Appendices 5 and 6.</b></p>
<p>8) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of expertise) encountered in compiling the required information.</p>	<p><b>Chapters 5-20 and Appendix 6.</b></p>
<p>9) A description of the measures envisaged concerning monitoring in accordance with section 19.</p>	<p><b>Chapter 22.</b></p>
<p>10) A non-technical summary of the information provided under paragraphs 1 to 9.</p>	<p><b>A non-technical summary has been prepared to accompany this SA Report.</b></p>
<p>The report shall include such of the information specified in schedule 3 as may reasonably be required, taking account of—            (a) current knowledge and methods of assessment of environmental matters;            (b) the contents of, and level of detail in, the plan or programme;</p>	<p><b>Addressed throughout this SA Report.</b></p>



Requirements of the SEA Act	Covered in this SA Report?
<p>(c) the stage of the plan or programme in the decision-making process; and  (d) the extent to which any matters to which the report relates would be more appropriately assessed at different levels in that process in order to avoid duplication of the assessment (Section 14 (3))</p>	
<p><b>Consultation</b></p>	
<p>Before deciding on—(a) the scope and level of detail of the information to be included in the Environmental Report to be prepared in accordance with section 14; and (b) the consultation period it intends to (i)specify under section 16(1)(b); and (ii)notify under section 16(2)(a)(iv), the responsible authority shall send to each consultation authority such sufficient details of the qualifying plan or programme as will enable the consultation authority to form a view on those matters.  (Section 15(1))</p>	<p><b>Consultation on the Scoping Report was undertaken from the 9<sup>th</sup> February 2018 to the 23<sup>rd</sup> March 2018.</b></p>
<p>As soon as reasonably practicable, and in any event within 14 days of the preparation of the Environmental Report, the responsible authority shall—  (a) send a copy of the report and the qualifying plan or programme to which it relates (“the relevant documents”) to the consultation authorities; and  (b) invite each consultation authority to express its opinion on the relevant documents within such period as the responsible authority may specify.  (2) The responsible authority shall also—  (a) within 14 days of the preparation of the Environmental Report, secure the publication of a notice—  (i) stating the title of the plan or programme to which it relates;  (ii) stating the address (which may include a website) at which a copy of the relevant documents may be inspected or from which a copy may be obtained;</p>	<p><b>Consultation is being undertaken on this SA Report and the Proposed Work Programme for a 12 week period between 5 November 2019 and 28 January 2020.</b></p>

Requirements of the SEA Act	Covered in this SA Report?
<p>(iii) inviting expressions of opinion on the relevant documents; and</p> <p>(iv) stating the address to which, and the period within which, opinions must be sent;</p> <p>(b) keep a copy of the relevant documents available at the authority's principal office for inspection by the public at all reasonable times and free of charge; and</p> <p>(c) display a copy of the relevant documents on the authority's website.</p> <p>(3) The periods referred to in subsections (1)(b) and (2)(a)(iv) must be of such length as will ensure that those to whom the invitation is extended are given an early and effective opportunity to express their opinion on the relevant documents.</p> <p>(Section 16(1), (2) and (3)).</p>	
<p><b>Taking the Environmental Report and the results of the consultations into account in decision-making (relevant extracts of Section 18)</b></p>	
<p>As soon as reasonably practicable after the adoption of a qualifying plan or programme, the responsible authority shall—</p> <p>(a) make available a copy of—</p> <p>(i) the plan or programme;</p> <p>(ii) the Environmental Report relating to it; and</p> <p>(iii) a statement containing the particulars specified in subsection (3),</p> <p>at the authority's principal office for inspection by the public at all reasonable times and free of charge.</p> <p>(Section 18(1)(a))</p>	<p><b>Requirement will be met at a later stage in the SA process.</b></p>
<p>As soon as reasonably practicable after the adoption of a qualifying plan or programme, the responsible authority shall inform the consultation authorities of</p>	<p><b>Requirement will be met at a later stage in the SA process.</b></p>

Requirements of the SEA Act	Covered in this SA Report?
<p>the adoption of the plan or programme and shall send them a copy of—</p> <p>(a) the plan or programme as adopted; and</p> <p>(b) the statement containing the particulars specified in subsection (3).</p> <p>(3) The particulars referred to in subsections (1)(a)(iii) and (b)(iii) and (2)(b) are—</p> <p>(a) how environmental considerations have been integrated into the plan or programme;</p> <p>(b) how the Environmental Report has been taken into account;</p> <p>(c) how the opinions expressed in response to the invitations mentioned in section 16 have been taken into account;</p> <p>(d) how the results of any relevant consultation under regulation 14 of the Environmental Assessment of Plans and Programmes Regulations 2004 (S.I. 2004/1633) have been taken into account;</p> <p>(e) the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives considered; and</p> <p>(f) the measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme.</p> <p>(4) Nothing in subsection (1)(b)(iii) shall require the responsible authority to provide a copy of any document free of charge; but where a charge is made, it shall be of a reasonable amount.</p> <p>(Section 18(1), (2), (3) and (4))</p>	
<b>Monitoring</b>	
<p>(1) The responsible authority shall monitor the significant environmental effects of the implementation of every qualifying plan or programme for which it has carried out an environmental assessment.</p> <p>(2) The responsible authority shall do so in a manner (which may comprise or</p>	<p><b>Requirement will be met at a later stage in the SA process.</b></p>

Requirements of the SEA Act	Covered in this SA Report?
<p>include arrangements established otherwise than for the express purpose of compliance with subsection (1)) which enables the authority to—</p> <ul style="list-style-type: none"> <li>(a) identify any unforeseen adverse effects at an early stage; and</li> <li>(b) undertake appropriate remedial action.</li> </ul> <p>(Section 19(1) and (2))</p>	

## **Appendix 4 Summary of potential permitted development rights changes assessed**

Chapter title	Table title	PDR options assessed
Digital communications infrastructure	New ground based masts	No change in PDR
		Introduce new lower height restriction in designated areas
		Introduce existing PDR in designated areas
		Extend permitted height outside designated areas
	Changes to existing ground based masts	No change in PDR
		Increase permitted height in designated and non-designated areas
		Increase permitted width in designated and non-designated areas
		Allow further distances for replacement masts in designated and non-designated areas
	Antenna systems on buildings (other antenna systems)	No change in PDR
		Extend existing PDR in designated areas
		Increase in number of antennas in designated and non-designated areas

Chapter title	Table title	PDR options assessed
		Increase the size of antennas in designated and non-designated areas
	Antenna systems on buildings (dish antennas)	No change in PDR
		Extend existing PDR in designated areas
		Increase in number of antennas in designated and non-designated areas
		Increase the size of antennas in designated and non-designated areas
	Small cell systems on buildings (dwellinghouses)	No change in PDR
		Extending existing PDR to Conservation Areas
	Small cell systems on buildings (buildings other than dwellinghouses)	No change in PDR
		Extending existing PDR to Conservation Areas
	Equipment housing cabinets (ground based)	No change in PDR
		Extend existing PDR to designated areas (for ground based equipment housing which is not ancillary to existing ground

Chapter title	Table title	PDR options assessed
		based masts, telegraph poles and overhead lines)
		Allow greater size/volume in designated and non-designated areas
	Equipment housing on buildings	No change in PDR
		Extend existing PDR to designated areas
		Allow greater size/volume in designated and non-designated areas
	Other apparatus on buildings	No change in PDR
		Extend existing PDR to designated areas
	Underground development	No change in PDR
		Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines, and ground based masts)
	New access tracks for ground based masts	No change in PDR
		Extend existing PDR to designated areas
		Allow increase length of track allowed under PDR in designated and non-designated areas



Chapter title	Table title	PDR options assessed
Town centre changes of use	Shops	Loss or gain of town centre shops
	Financial, professional and other services	Loss or gain of financial, professional and other services
	Food and drink	Loss or gain of town centre food and drink provision
	Business	Loss or gain of town centre business
	General industrial	Loss or gain of town centre general industrial activity
	Storage or distribution	Loss or gain of town centre storage or distribution activity
	Hotels or hostels	Loss or gain of town centre hostels or hotels activity
	Residential institutions	Loss or gain of town centre residential institutions
	Residential – houses and flats	Loss or gain of town centre houses and flats
	Non-residential institutions	Loss or gain of town centre non-residential institutions
	Assembly and leisure	Loss or gain of town centre assembly and leisure
	Betting shops and pay day pending	Loss or gain of town centre betting shops and pay day lending
	Hot food take-aways	Loss or gain of town centre hot food take-aways
Agricultural developments	Farm sheds	No change in PDR

Chapter title	Table title	PDR options assessed
		An increase in area beyond 465m <sup>2</sup> in all areas
		An increase in area beyond 465m <sup>2</sup> in all areas excluding flood risk areas
		Increase height beyond 12m in areas more than 3km from an aerodrome or technical site
		Increase in height beyond 3m in areas less than 3km from an aerodrome or technical site
		No requirement for prior notification/prior approval for farm sheds of any size
		No requirement for prior notification/prior approval for farm sheds below 465m <sup>2</sup>
		Relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur or the storage of slurry or sewage sludge
		PDR extended to development within 25m of the metalled portion of a trunk or classified road
	Polytunnels	No change in PDR
		PDR for up to a percentage of land holding area excluding flood risk areas

Chapter title	Table title	PDR options assessed
		PDR for up to a percentage of land holding area including flood risk areas
		Up to a percentage of land holding area and less than 200m to existing residential properties not connected with the farm
		Up to a percentage of land holding area and less than 25m from the metalled portion of a trunk or classified road
	Farm steadings	No change in PDR
		PDR for the conversion of agricultural buildings to dwellinghouses
		PDR for the conversion of agricultural buildings for flexible commercial use
Micro-renewables (domestic and non-domestic)	Free-standing wind turbine (domestic)	No change in PDR
		Extend existing PDR to Conservation Areas, World Heritage Sites, SSSIs, Sites of Archaeological Interest and within the curtilage of a Category A Listed Building
		Allow more than one turbine within the curtilage of a dwelling in all areas including where PDR are currently restricted
		Relax 100m distance to neighbouring property in all areas including where PDR are currently restricted

Chapter title	Table title	PDR options assessed
	Free-standing wind turbines (non-domestic)	No PDR
		Introducing PDR in non-designated areas
		Introducing PDR in European sites, National Scenic Areas, National Parks Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, SSSI, within the setting of a Category A Listed Building, within the setting of a Scheduled Monument
	Air source heat pumps (domestic)	No change in PDR
		Extend existing PDR to World Heritage Sites and within the curtilage of a Listed Building
		Relax current location restrictions on a dwelling and in the curtilage of a building in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas
		Increase the number of ASHP allowed within the curtilage of a building (particularly for flats/housing associations) in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas
	Air source heat pumps (non-domestic)	No PDR

Chapter title	Table title	PDR options assessed
		Introduce PDR for non-domestic ASHP in non-designated areas
		Introducing PDR in European sites, National Scenic Areas, National Parks Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, SSSI, within the setting of a Category A Listed Building, within the setting of a Scheduled Monument
	Domestic solar panels (on dwellinghouses)	No change to PDR
		Extending existing PDR into Conservation Areas
		Allow development to protrude more than 1 metre beyond the external surface of the wall, roof pane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs
		Allow development on balconies in Conservation Areas, Listed Buildings, and areas outside CAs and the curtilage of Listed Buildings
	Domestic solar panels (on flats)	No change in PDR
		Extending existing PDR to Conservation Areas
		Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas

Chapter title	Table title	PDR options assessed
		outside Conservation Areas
		Allow development on balconies in Conservation Areas, Listed Buildings and areas outside Conservation Areas and Listed Buildings
	Underground pipes	No change in PDR
		Extend existing PDR into World Heritage Sites, within the curtilage of a Listed Building, a site of archaeological interest, a historic garden and designed landscape
	Agricultural buildings (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	No change in PDR
		Allow schemes to generate more than 45/50 KW in areas outside AQMA
		Increase in size beyond 465 square metres in areas outside AQMA
		Remove restriction on height (within 3km from the perimeter of an aerodrome) in areas outside AQMA
		Remove restriction on height (more than 3km from the perimeter of an aerodrome) in areas outside AQMA

Chapter title	Table title	PDR options assessed
		Remove restriction on distance to a classified road in areas outside AQMAs
		Remove restriction on distance from protected building ('cordon sanitaire') in areas outside AQMAs
	Forestry buildings (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	No change in PDR
		Allow schemes to produce greater than 45/50 KW outside AQMA
		Remove restriction on height (within 3km from the perimeter of an aerodrome) in areas outside AQMAs
		Remove restriction on the number of flues allowed to be connected to biomass equipment in areas outside AQMAs
		Remove restrictions on diameter (new) of the flue in areas outside AQMAs
		Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs
		Remove restrictions on proximity to a classified road in areas outside AQMAs

Chapter title	Table title	PDR options assessed
	Industrial buildings (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)	No change in PDR
		Allow schemes to produce more than 50/45kW in areas outside AQMAs
		Remove restriction on height in relation to height of original building in areas outside AQMAs
		Remove restriction on footprint relative to size of original building in areas outside AQMAs
		Remove restriction on footprint relative to the provision of parking space in areas outside AQMAs
		Remove restriction on number of flues to be connected to biomass equipment in areas outside AQMAs
		Remove restrictions on diameter (new) of the flue in areas outside AQMAs
		Remove restrictions on diameter (replacement or alteration) of the flue in areas outside AQMAs
		Remove restrictions on proximity to any boundary of the curtilage of the premises outside AQMAs



Chapter title	Table title	PDR options assessed
	Flues for biomass heating systems	No change in PDR
		Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites
		Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas
	Flues for combined heat and power systems	No change in PDR
		Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites
		Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas
Non-domestic solar energy	Non-domestic solar panels installed on a pitched roof	No change in PDR
		Include World Heritage Sites to locations where PDR do not apply

Chapter title	Table title	PDR options assessed
		Remove restriction on development within 3km of an aerodrome or technical site
		Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced
		Remove the restriction on the dimensions which solar panels can protrude or project beyond the current edge of the roof or ridge
	Non-domestic solar panels installed on a flat roof	No change in PDR
		Include World Heritage Sites to locations where PDR do not apply
		Remove restriction on development within 3km of an aerodrome or technical site
		Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced
		Remove current restriction on PDR for flat roofs with or without a parapet wall and implement the following restrictions: Equipment not to exceed 1 metre from the roof (excluding chimneys or other roof features) Equipment not to be located on the roof closer to the edge of the roof than the height of the installed equipment

Chapter title	Table title	PDR options assessed
	Non-domestic solar panels installed on an external wall	No change in PDR
		Include World Heritage Sites to locations where PDR do not apply
		Remove restriction on development within 3km of an aerodrome or technical site
		Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced
		Allow a wall mounted array to wrap around a building
District heating and supporting infrastructure	District heating	No change in PDR
		Introducing PDR for pipe work and associated infrastructure for district heating in all areas, but not including plant or equipment used to generate the heat supplied via district heating
Energy storage (non-domestic)	Energy storage (non-domestic)	PDR for the installation, alteration or replacement of battery facilities for statutory undertakers for the generation, transmission or supply of electricity
		PDR for the installation, alteration or replacement of battery facilities at generating sites

Chapter title	Table title	PDR options assessed
		PDR for the installation, alteration or replacement of battery facilities at a distance from generating sites and equipment
		PDR for the installation, alteration or replacement of electric lines to connect battery storage to the electricity network (NB: this would be for connections within the site where generation and storage are co-located. Connections to the wider network or between generating sources and remote storage would be for Class 40 PDR or energy consent for power lines)
Energy storage (domestic)	Energy storage (domestic)	PDR for the installation, alteration or replacement of domestic energy storage facilities
		PDR for the installation, alteration or replacement of electric lines to connect storage to the electricity network. (NB: domestic connections will only be from the storage to the house/flats. Any connection to the wider energy network will be through the existing line to the house/flats.)
Development relating to active travel	PDR for route creation	Potential changes include extending the scope of PDR to include route surfacing, route creation, safe crossing points, other developments to support sustainable travel and docking stations for e-bikes
	PDR for route surfacing	
	PDR for safe crossing points	

Chapter title	Table title	PDR options assessed
	PDR for other developments to support sustainable travel	
	PDR for docking stations for e-bikes	
Habitat pond creation	PDR for habitat pond creation for pond creation for wildlife purposes on agricultural land (excluding stocking with fish)	PDR for pond creation for wildlife purposes on agricultural land (excluding stocking with fish)
Peatland restoration	Peatland restoration	Peatland restoration including activities such as blocking channels and ditches, stabilizing large areas of bare peat through mats or vegetation regeneration, scrub clearance or tree felling
Allotments and community growing schemes	PDR for change in use of land for allotments and community growing schemes	Introduce PDR for use of land for allotments and community growing where a change of use of land is required
	PDR for perimeter fencing for allotments and community growing schemes	No change in PDR
		Remove height restriction of 1m within 20m of a road
		Remove height restriction of 2m elsewhere
	PDR for sheds and composting toilets	Extend PDR for sheds (including structures housing composting toilets) on allotments and community growing

Chapter title	Table title	PDR options assessed
		schemes
	PDR for greenhouses and polytunnels	Extend PDR to greenhouses and polytunnels as permanent structures on allotments and community growing schemes
	PDR for communal huts or clubhouses	Extending PDR to communal huts and clubhouses as permanent structures
	PDR for car parking/vehicular and loading areas	Creation of new PDR for car parking for allotments and community growing schemes
		Creation of new PDR for access and loading areas for allotments and community growing schemes
	PDR for water and drainage systems	Creation of PDR for water and drainage systems on allotments and community growing schemes
	PDR for portable buildings and containers	Creation of PDR for buildings and containers for the purposes of the allotment or community growing schemes
Householder developments	Single storey ground floor extensions	No change in PDR
		Extending existing PDR for single storey ground floor extensions to Conservation Areas
		Extending existing PDR for single storey ground floor extensions to flatted properties
		Remove requirement for extensions to be at rear of property – PDR applying at side or front of property – excluding

Chapter title	Table title	PDR options assessed
		Conservation Areas / flatted properties
		Remove requirement for extensions to be at rear of property – PDR applying at side or front of property – all areas
		Remove the restriction on the height of the eaves – excluding Conservation Areas/ flatted properties
		Remove the restriction on the height of the eaves- all areas
		Remove restriction on footprint relative to size of original dwellinghouse – excluding Conservation Areas/flatted properties
		Remove restriction on footprint relative to size of original dwellinghouse – all areas
		Remove restriction on footprint relative to curtilage – excluding Conservation Areas/flatted properties
		Remove restriction on footprint relative to curtilage – all areas
		Remove restrictions on size within 1m of boundary – excluding Conservation Areas/flatted properties
		Remove restrictions on size within 1m of boundary – all areas

Chapter title	Table title	PDR options assessed
		Extending these increased PDR to all areas, including Conservation Areas
	Ground floor extensions of more than one storey	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to flatted properties
		Remove requirement for extensions to be at rear of property – PDR applying at side or front of property– excluding Conservation Areas/ flatted properties
		Remove requirement for extensions to be at rear of property – PDR applying at side or front of property
		Remove restriction on height – excluding Conservation Areas/ flatted properties
		Remove restriction on height– all areas
		Remove restriction on footprint relative to size of original dwellinghouse – excluding Conservation Areas/ flatted properties
		Remove restriction on footprint relative to size of original dwellinghouse– all areas



Chapter title	Table title	PDR options assessed
		Remove restriction on footprint relative to curtilage– excluding Conservation Areas/ flatted properties
		Remove restriction on footprint relative to curtilage– all areas
		Remove or reduce restrictions on size within 10m of boundary– excluding Conservation Areas/ flatted properties
		Remove or reduce restrictions on size within 10m of boundary– all areas
	Porch	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to flatted properties
		Remove restriction on the footprint of the porch– excluding Conservation Areas/ flatted properties
		Remove restriction on the footprint of the porch – all areas
		Remove restriction on the height of the porch– excluding Conservation Areas/ flatted properties
		Remove restriction on the height of the porch– all areas
		Remove minimum distance between porch and any boundary / road– excluding Conservation Areas/ flatted

Chapter title	Table title	PDR options assessed
		properties
		Remove minimum distance between porch and any boundary / road– all areas
	Roof enlargement	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to flatted properties
		Allow dormers on front and sides– excluding Conservation Areas/ flatted properties
		Allow dormers on front and sides– all areas
		Allow height enlargement higher than the existing dwelling house– excluding Conservation Areas/ flatted properties
		Allow height enlargement higher than the existing dwelling house– all areas
		Allow roof enlargement covering more than half of the roof– excluding Conservation Areas/ flatted properties
		Allow roof enlargement covering more than half of the roof– all areas
		Remove restriction on the distance between the enlargement and the edge of the roof– excluding

Chapter title	Table title	PDR options assessed
		Conservation Areas/ flatted properties
		Remove restriction on the distance between the enlargement and the edge of the roof– all areas
		Reduce or remove the requirement for at least 10m between enlargement and boundary– excluding Conservation Areas/ flatted properties
		Reduce or remove the requirement for at least 10m between enlargement and boundary– all areas
		Extending these increased PDR to all areas, including Conservation Areas
	Access ramps	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to flatted properties
		Allow ramps longer than 5m (total length of flights)– excluding Conservation Areas/ flatted properties
		Allow ramps longer than 5m (total length of flights)– all areas
		Allow ramps longer than 9m (total length of flights and landings)– excluding Conservation Areas/ flatted properties

Chapter title	Table title	PDR options assessed
		Allow ramps longer than 9m (total length of flights and landings)– all areas
		Allow height of the access ramp, including associated handrails to be greater than 1.5m– excluding Conservation Areas/ flatted properties
		Allow height of the access ramp, including associated handrails to be greater than 1.5m– all areas
		Allow platform height greater than 0.4m– excluding Conservation Areas/ flatted properties
		Allow platform height greater than 0.4m– all areas
	Improvements or alterations that are not enlargement	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to flatted properties
		Allow development to project more than 1 metre from wall or roof – excluding Conservation Areas/ flatted properties
		Allow development to project more than 1 metre from wall or roof – all areas
		Allow development of balconies, roof terraces or raised

Chapter title	Table title	PDR options assessed
		platforms– excluding Conservation Areas/ flatted properties
		Allow development of balconies, roof terraces or raised platforms – all areas
	Ancillary buildings	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to flatted properties– excluding Conservation Areas/ flatted properties
		Extend existing PDRs to flatted properties – all areas
		Remove restriction to rear curtilage– excluding Conservation Areas/ flatted properties
		Remove restriction to rear curtilage– all areas
		Remove requirement for at least 50% of curtilage remaining undeveloped– excluding Conservation Areas/ flatted properties
		Remove requirement for at least 50% of curtilage remaining undeveloped– all areas
		Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m– excluding Conservation Areas/ flatted properties

Chapter title	Table title	PDR options assessed
		Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m– all areas
	Any building, engineering, installation or other operation	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to flatted properties
		Allow in all parts of the curtilage– excluding Conservation Areas/ flatted properties
		Allow in all parts of the curtilage– all areas
		Allow structures higher than 3m– excluding Conservation Areas/ flatted properties
		Allow structures higher than 3m– all areas
		Allow development of more than 50% of curtilage– excluding Conservation Areas/ flatted properties
		Allow development of more than 50% of curtilage– all areas
	Hard surfaces	No Change to PDRs
		Extend existing PDRs to Conservation Areas

Chapter title	Table title	PDR options assessed
		Extend existing PDRs to flatted properties
		Removal of requirement for porous materials– excluding Conservation Areas/ flatted properties
		Removal of requirement for porous materials-all areas
	Decking and raised platforms	No Change to PDRs
		Increase the max size of decking in conservation areas or curtilage of listed buildings
		Extend existing PDRs to Conservation Areas, curtilage of listed buildings
		Extend existing PDRs to flatted properties
		Allow taller structures– excluding Conservation Areas/ flatted properties
		Allow taller structures-all areas
	Gates, fences or other enclosures	No Change to PDRs
		Extend existing PDRs to Conservation Areas
		Extend existing PDRs to the curtilage of Listed Buildings
		Extend existing PDRs to flatted properties

Chapter title	Table title	PDR options assessed
		Additional PDRs in all areas
		Additional PDRs in areas except Conservation Areas and flatted properties
	Appearance of flats	No change in PDR
		Extending existing PDR to Conservation Areas
		Allow development to project more than one metre from wall or roof– excluding Conservation Areas/ flatted properties
		Allow development to project more than one metre from wall or roof – all areas
		Allow development of balconies, roof terraces or raised platforms– excluding Conservation Areas/ flatted properties
		Allow development of balconies, roof terraces or raised platforms – all areas
Electric vehicle charging infrastructure	PDR for electrical outlets mounted on walls	No change in PDR
		An increase in the volume (over and above the currently permitted 0.5 cubic metres) of the electrical outlets in all areas
		An increase in the volume (over and above the currently permitted 0.5 cubic metres) of the electrical outlets in all



Chapter title	Table title	PDR options assessed
		areas, except where PDR do not currently apply
		Removal of the restriction on development within two metres of a road in all areas
	PDR for upstands with electrical outlets	No change in PDR
		An increase in the height (over and above the currently permitted 1.6 metres from the level of the surface currently used for parking) of the electrical outlets in all areas
		An increase in the height (over and above the currently permitted 1.6 metres from the level of the surface used for parking) of the electrical outlets in all areas, except where PDR do not currently apply
		Remove the restriction on development within two metres of a road in all areas
Defibrillator cabinets	PDR for defibrillator cabinets	No change in PDR
		Introduce PDR for defibrillator cabinets on buildings and existing structures except listed buildings or structures
		Introduce PDR for defibrillator cabinets on all buildings and existing structures
Snow sports	PDR for development to support	No change in PDR

Chapter title	Table title	PDR options assessed
	artificial snow production	
		Concrete platforms for fixed snow guns/fans plus towers
		Water pumping station/pump houses
		Generator houses
		Water storage reservoirs
		Underground water pipes and electricity cables
		Access tracks

## **Appendix 5 Statutory mechanisms for the protection of designated areas**

Type of area	Other control	EIA Regulations	Impacts which are not addressed through other controls	Summary
<p><b>Natura 2000 sites</b></p> <p><b>(Special Protection Areas and Special Areas of Conservation)</b></p>	<p>Regulation 60-63 of the Conservation (Natural Habitats &amp;c.) Regulations 1994 prevent any development which is likely to significantly affect a European site from benefitting from permitted development rights unless the planning authority have decided, after consulting SNH, that it would adversely affect the integrity of the site.</p> <p>If a development is capable of significantly affecting a European site the developer must first obtain approval from the relevant planning authority who must consult SNH.</p>	<p>Sensitive area: requires EIA screening for certain development types within scope of EIA Regulations.</p>	<p>Cumulative effects of development with negative EIA screening opinions.</p> <p>Individual and cumulative effect of development type which does not require EIA screening</p>	<p>Habitats regulations provide mechanism for control of <b>all types</b> of development with likely significant effects on a European site.</p>
<p><b>SSSI</b></p>	<p>Consent from SNH is required for operations requiring consent pertinent to that SSSI</p>	<p>Sensitive area: requires EIA screening for certain development types within scope of EIA Regulations.</p>	<p>Cumulative effects of development with negative EIA screening opinions</p> <p>Individual and cumulative effects of development which are not operations requiring consent and</p>	<p>Operations requiring consent and EIA Regulations provide control for <b>certain types</b> of development.</p>

			which do not require EIA screening.	
<b>National Park</b>		Sensitive area: requires EIA screening for certain development types within scope of EIA Regulations.	Cumulative effects of development with negative EIA screening opinions  Individual and cumulative effect of development type which does not require EIA screening	In the absence of applications for planning permission, and for developments which do not require EIA screening, there is <b>no specific statutory mechanism</b> for control of development within a national park.
<b>National Scenic Area</b>	Circular 9/1987 has a Scotland wide article 4 direction for certain developments in National Scenic Areas	Sensitive area: requires EIA screening for certain development types within scope of EIA Regulations.	Cumulative effects of development with negative EIA screening opinions or developments not listed within circular 9/1987.	Circular 9/1987 and EIA Regulations provide control for <b>certain types</b> of development.
<b>Scheduled Monument</b>	Most works that directly affect scheduled monuments require scheduled monument consent from HES	Sensitive area: requires EIA screening for certain development types within scope of EIA Regulations.	Setting of a scheduled monument	Other than for development directly affecting a scheduled monument, there is no specific statutory mechanism for development affecting the <b>setting</b> of a scheduled monument.
<b>Listed Building</b>	Listed building consent is required to demolish (all or part), alter or extend (internally or	Type and scale of development may require	Setting of a listed building	Other than for development directly affecting a listed building,

	externally) a listed building	EIA screening		there is no specific statutory mechanism for development affecting the <b>setting</b> of a listed building.
<b>Conservation areas</b>	<p>Conservation area consent applies only to the demolition of unlisted buildings in conservation areas.</p> <p>Individual conservation areas usually have directions applied removing certain permitted development rights</p>	Type and scale of development may require EIA screening	Individual and cumulative effect of development type which does not require EIA screening	Other than for demolition of unlisted buildings within conservation areas, in the absence of applications for planning permission, and for developments which do not required EIA screening, there is <b>no specific statutory mechanism</b> to secure control of development in Conservation Areas.
<b>Inventory of Gardens and Designed Landscapes</b>		Type and scale of development may require EIA	Individual and cumulative effect of development type which does not require EIA screening	In the absence of applications for planning permission there is <b>no specific</b> statutory mechanism for development in inventory listed gardens and designed landscapes.
<b>World Heritage Site</b>		Sensitive area: requires EIA screening for certain development types within	Cumulative effects of development with negative EIA screening	In the absence of applications for planning permission, there is <b>no</b>

		scope of EIA Regulations.	opinions  Individual and cumulative effect of development type which does not require EIA screening	<b>specific statutory mechanism</b> for development in World Heritage Sites.
<b>Historic battlefield</b>		Type and scale of development may require EIA screening	Individual and cumulative effect of development type which does not require EIA screening	In the absence of applications for planning permission, there is <b>no specific statutory mechanism</b> for development in historic battlefields
<b>All other areas</b>		Type and scale of development may require EIA screening	Individual and cumulative effect of development type which does not require EIA screening	

# Appendix 6 Detailed Sustainability Appraisal matrices

## Digital communications infrastructure

### New ground based masts

Assessment table 1 No change in PDR and introduce new lower height restriction in designated areas

	No change in PDR											Introduce new lower height restriction in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	+	+	0?	0?	0?	0?	0?	0?	+	0?	0?	0?	-?	0?	0?	0?	0?	0?	0?	-?	0?	0?	
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	



	No change in PDR											Introduce new lower height restriction in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	No change in PDR											Introduce new lower height restriction in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?	-?	-?	+	+	+	+	-?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-?	+	+	+	+	+	+	+	+	0	+	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	
To enhance landscape quality	-?	+	+	+	+	+	+	+	+	0	+	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	
<b>Material assets</b>																							

	No change in PDR											Introduce new lower height restriction in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?
To enhance material assets	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+	+	0	0	0	0	0	0	0	0	0	0	0
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??	-?/+??

	No change in PDR											Introduce new lower height restriction in designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To improve the health and living environment of people and communities including support for access, recreation and physical activity	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To support community cohesion and vitality	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To support access to education and training	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?/+++?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?

**Assessment Table 2: Introduce existing PDR in designated areas and Extend permitted height outside designated areas**

	Introduce existing PDR in designated areas	Extend permitted height outside designated areas
--	--	--

	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	-?	0?	0?	0?	0?	0?	0?	-?	0?	0?	0?	+	0?	0?	0?	0?	0?	0?	+	0?	0?	
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Water</b>																							

	Introduce existing PDR in designated areas											Extend permitted height outside designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																						
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																						
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	-?	-?	-?	-?	+	+	+	+	-?	0	+
To enhance, where appropriate, heritage	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?

	Introduce existing PDR in designated areas											Extend permitted height outside designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
assets and their settings and to improve the quality of the wider built environment																							
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	
To enhance landscape quality	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?
To enhance material assets	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++

	Introduce existing PDR in designated areas											Extend permitted height outside designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
growth																							
To support rural development	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support smarter resourcing of the planning system	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++
To improve the health and living environment of people and communities including support for access, recreation and physical activity	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++
To support community cohesion and vitality	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++
To support access to education and training	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++	-?/+++



## Justification of scores

New ground based masts	Justification of scores
SA Objectives	Narrative/justification
Biodiversity, flora and fauna	
To avoid adverse effects on all habitats and species	<p>The deployment of new ground based masts could result in adverse effects on this SA objective, resulting from loss or damage to habitats and species. The construction of new ground based masts could result in physical disturbance to local wildlife, particularly during the breeding season.</p> <p>Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for HRA. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.</p> <p><b>Existing PDR</b> do not apply in designated areas, including Natura sites. This ensures consideration of biodiversity issues in these areas through the planning process, resulting in <b>minor positive</b> effects.</p> <p><b>Introducing PDR in designated areas</b> and <b>introducing a lower height restriction in designated areas</b> will remove the need to apply for planning permission and increases the area over which potential effects may occur. As such, these proposed changes could result in <b>adverse</b> impacts on Natura sites and other biodiversity conservation areas such as SSSIs. These include negative effects resulting from physical disturbance associated with the construction of new ground based masts. These effects are judged to be <b>minor</b>, reflecting the small footprint of individual masts.</p> <p><b>Extending the permitted height outside designated areas</b> ensures consideration of biodiversity impacts through the planning process. Therefore, <b>minor positive</b> effects are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments.</p> <p>For each proposed change to PDR, <b>negligible</b> effects are identified in relation to non-designated and areas that are not designated for their biodiversity assets due to their lower sensitivity.</p> <p>It is important to note that the effects discussed above are <b>uncertain</b>, depending on potential pathways to designated sites or the biodiversity value of the area being developed.</p>
To enhance biodiversity	The development of new ground based masts does not necessarily enhance biodiversity, although telecoms masts are known to provide occasional nesting locations for some bird species.
Climatic factors	
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect <b>positive</b> effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	Taking the above into account, <b>existing PDR</b> and <b>each proposed change to PDR</b> for new ground based masts are judged to result in <b>minor positive</b> effects due to the limited size and footprint of individual masts. The significance of these effects is <b>uncertain</b> , as the future level and scale of development is unknown.
To support climate change adaptation	
Air	
To avoid significant adverse effects on air quality, particularly where air	The effects of an improved digital network include indirect <b>positive</b> effects of increased connectivity, reducing the need to travel – with associated positive effects

New ground based masts	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
quality is a known issue through the designation of AQMA	for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	The effects of <b>existing PDR</b> and <b>each proposed change to PDR</b> for new ground based masts are judged to be <b>minor</b> due to the limited size and footprint of individual new ground based masts. The significance of these effects is <b>uncertain</b> , as the future level and scale of development is uncertain.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<p>The construction of new ground based masts could result in sedimentation and soil sealing, and construction and maintenance could result in water borne pollution. As such, the effects of the construction of new ground based masts include adverse changes to water quality, flow and drainage patterns.</p> <p><b>Existing PDR</b> and <b>each proposed change to PDR</b> are likely to result in <b>negative</b> effects on the quality and quantity of watercourses and waterbodies. These effects are judged to be <b>minor</b>, depending on local geo-hydrological conditions and the siting of proposed development. For instance, potential adverse effects are greater effects in designated areas, which may be more sensitive to hydrological changes. Following from this, it is assumed that the significance of the impact will be less where developments are proposed away from watercourses and sensitive areas. Overall, an <b>uncertain minor negative</b> effect is identified.</p>
To avoid and reduce flood risk	It is assumed that new ground based masts will increase the area of impermeable surface resulting from the construction of the mast. However, the effects of <b>existing PDR</b> and <b>each proposed change for PDR</b> are judged to be <b>negligible</b> due to the limited scale and extent of development of new ground based masts, and their limited impact on flood risk.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The effects of <b>existing PDR</b> and <b>each proposed change to PDR</b> for new ground based masts include soil sealing resulting from the construction of the mast. However, these effects are judged to be <b>negligible</b> due to the limited scale and extent of development.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	The effects of <b>existing PDR</b> and <b>each proposed change to PDR</b> for new ground based masts are unlikely to impact on vacant and derelict land and buildings and are therefore judged to be <b>negligible</b> .
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>Effects of new ground based masts on cultural heritage include adverse visual effects on the setting of cultural heritage resources, relating to principal views and skylines. Greater impacts could occur in areas designated for their heritage assets and archaeological value.</p> <p><b>Existing PDR</b> for new ground based masts do not apply in designated areas including Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, the setting of Listed Buildings and the setting of a Scheduled Monument. This ensures consideration of cultural heritage issues through planning applications in these areas, resulting in <b>minor positive</b> effects. <b>Minor negative</b> effects are identified in relation to non-designated areas or areas that are not designated for their heritage assets, mainly due to their lower sensitivity, but reflecting the potential for impacts on cultural heritage from development.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p><b>Introducing PDR in designated areas</b> and <b>introducing a lower height restriction in designated areas</b> will remove the need to apply for planning permission and increases the area over which potential effects may occur. As a result, these proposed changes to PDR are likely to have an adverse effect on the cultural heritage resources and their settings. <b>Significant adverse</b> effects on setting are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments. Direct effects on the integrity of designated and undesignated resources could affect Conservation Areas, Historic Gardens and Designed Landscapes, and historic battlefields. Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime. <b>Minor negative</b> effects are</p>

New ground based masts	Justification of scores
SA Objectives	Narrative/justification
	<p>identified in relation to non-designated areas or areas that are not designated for their heritage assets, mainly due to their lower sensitivity.</p> <p><b>Extending the permitted height outside designated areas</b> is likely to have indirect positive effects on avoiding adverse effects on designated and heritage assets, by retaining the limitations on development in these areas and avoiding potential harm to these assets, because relaxations of the conditions under which planning permission is required would only apply to non-designated areas. This ensures consideration of cultural heritage issues through the planning process in these areas. Therefore, <b>minor positive</b> effects are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments. Furthermore, it is likely that extending PDR would result in potential impacts on undesignated historic buildings. This effect is considered to be <b>minor negative</b>.</p> <p><b>Neutral</b> effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
Landscape and geodiversity	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Landscape effects resulting from new ground based masts include the introduction of complex structures or unnatural shapes, including vertical features into the landscape. The construction of new ground based masts could impact upon important rocks, fossils, landforms, soils and land forming processes. In more rural landscapes, equipment and ground based masts may be seen over long distances. Furthermore, ground based masts can introduce features which provide a scale indicator which influences the sense of space in a landscape and introduce built features into a rural landscape which typically has lower levels of human influence. In sensitive landscapes such as National Scenic Areas or National Parks key areas where impacts would be greater include views from visitor attractions, scenic viewpoints and views from roads.</p>
To enhance landscape quality	<p><b>Existing PDR</b> do not apply in designated areas, including National Parks and National Scenic Areas. This ensures consideration of landscape issues in these areas through the planning system, resulting in <b>minor positive</b> effects. However, <b>adverse</b> effects may also occur in areas of wild land or rural areas, and at the edge of protected areas. These effects are likely to be small in scale due to the limited footprint of individual masts.</p> <p><b>Introducing PDR in designated areas</b> and <b>introducing a lower height restriction in designated areas</b> will remove the need to apply for planning permission and increases the area over which potential effects may occur. As such, these proposed changes are judged to have a <b>significant negative</b> effect on areas designated for their scenic value including National Scenic Areas, National Parks and other protected landscapes, because of potential direct impacts on the landscape qualities of these areas and their national significance. Each proposed change to PDR is expected to have a <b>minor negative</b> effect on non-designated areas or areas that are not designated for their landscape value due to their lower sensitivity.</p> <p><b>Extending the permitted height outside designated areas</b> is likely to have positive effects on avoiding adverse effects on designated landscapes, because relaxations of the conditions under which planning permission is required would only apply to non-designated areas. This ensures consideration of landscape issues through the planning process in these areas, resulting in <b>minor positive</b> effects in relation to National Parks and National Scenic Areas. <b>Minor negative</b> effects are identified in relation to non-designated areas or areas that are not designated for their landscapes, mainly due to their lower sensitivity.</p> <p><b>Neutral</b> effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p>

New ground based masts	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	It is anticipated that new ground based masts will result in soil sealing resulting from their construction, which, in turn, could have <b>minor negative</b> effects on this SA objective through a decrease in soil quality and integrity. On the other hand, new ground based masts will contribute <b>positively</b> to the enrolment of digital telecommunications networks in Scotland, resulting in lower rates of waste generation compared to paper-based communication. As such, the enhancement and expansion of mobile networks is expected to promote the prudent use of resources.
To enhance material assets	Taking this account, <b>existing PDR</b> and <b>each of the proposed changes to PDR</b> are judged to result in <b>mixed positive and negative</b> effects. Due to the likely limited scale and extent of development, these effects are judged to be <b>minor</b> . The significance of these effects is <b>uncertain</b> , as the future level and scale of development is greatly influenced by current regulations and statutory obligations. Under the Communications Code and Regulations, there is a statutory obligation on network operators to share existing installations where appropriate to minimise proliferation. As a result, it is difficult to predict the scale and extent of future development.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The deployment of new ground based masts is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. New ground based masts are likely to underpin Scotland's digital economy through new technological opportunities such as the rollout of 5G networks and other network improvements. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and improved communication for trade, shopping, entertainment and related services.</p> <p>Following from this, <b>existing PDR</b> are judged to have minor positive effects on this SA objective, reflecting the limited scale of development.</p> <p><b>Introducing existing PDR in designated areas</b> and <b>extending permitted height outside designated areas</b> may help to deliver and support the next generation of digital communication services, particularly to more remote and peripheral locations. Furthermore, extending PDR could potentially help to plug significant gaps in existing coverage (e.g. for tourist based settlements, or long distance road and rail). Therefore, <b>significant positive</b> effects are identified.</p> <p><b>Introducing a lower height restriction in designated areas</b> is unlikely to meet the needs of telecoms operators, because the terrain of most designated areas means that taller masts are likely to be required. Therefore, a <b>negligible</b> effect is identified.</p>
To support rural development	<b>Existing PDR</b> and <b>each of the proposed change to PDR</b> for changes to ground based masts may help to deliver and support the next generation of digital communication services, particularly to more remote and peripheral locations. This will result in <b>positive</b> effects on rural development. Due to the limited scale and extent of future development, these effects are judged to be <b>minor</b> . The significance of these effects is <b>uncertain</b> , as the future level and scale of development is unknown.
To support smarter resourcing of the planning system	<b>Existing PDR</b> result in a greater number of planning applications entering the planning system than would occur under <b>extending PDR</b> . However, the volume of applications is expected to be low, reflecting the limited scale of future development. The significance of this effect is <b>uncertain</b> due to a lack of data on the number of planning applications.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to	The deployment of new ground based masts is expected to result in mixed effects on local communities and human health for a number of reasons. Potential amenity impacts may arise from living next to a new ground based mast. For instance, there is the risk of visual clutter and adverse effects on enjoyment and use

New ground based masts	Justification of scores
SA Objectives	Narrative/justification
health and quality of life and reduce risks to health and quality of life	of neighbouring property. In addition, tall structures such as ground based masts may infringe protected obstacle limitation surfaces, interfere with communications, navigation and surveillance equipment or instrument flight procedures at an aerodrome or technical site. This could potentially constitute a risk to human health and safety.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	On the other hand, new ground based masts could also enhance opportunities for sustainable economic growth through increased digital connectivity. In the UK, telecommunication services play an essential role in providing household utilities. As well as being relied upon by households, mobile connectivity also underpins a wide range of public services and other crucial services such as emergency services, healthcare services and databases. As a result, increased digital communication plays an important role in supporting community vitality, education, training and education – particularly in more remote and rural areas.
To support community cohesion and vitality	
To support access to education and training	<p>Taking the above into account, <b>existing PDR</b>, introducing existing <b>PDR in designated areas and extending the permitted height outside designated areas</b> are expected to result in <b>mixed significant positive and minor negative</b> effects, due to the considerable benefits they provide in terms of providing digital connectivity and the potential minor negative effects that may arise as a result of increased visual clutter. The significance of the effects described above is <b>uncertain</b> depending on the nature of the wider landscape and proximity to sensitive receptors such as towns, settlements and residential buildings.</p> <p><b>Introducing a lower height restriction in designated areas</b> is unlikely to meet the needs of telecoms operators in terms of plugging strategic gaps in coverage, because the terrain of most designated areas means that taller masts are likely to be required. However, the potential for health and safety risks associated with ground based masts remain, resulting in <b>minor negative</b> effects.</p> <p>Overall, <b>uncertain mixed minor negative and mixed significant positive</b> effects are identified.</p>

Changes to existing ground based mast

Assessment table 1

	No change in PDR											Increase permitted height in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?

	No change in PDR											Increase permitted height in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
designation of AQMA																							
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their	0?	0?	0?	0?	+	+	+	+	0?	0	+	0?	0?	0?	0?	-	-	-	-	0?	0	-	-



	No change in PDR											Increase permitted height in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
settings																							
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+	+	+	+	0?	0	+	0?	0?	0?	0?	-?	-?	-?	-?	0?	0	-?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	+	+	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
To enhance landscape quality	0?	0?	+	+	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Economy</b>																							



	No change in PDR											Increase permitted height in designated and non-designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To support and enhance opportunities for sustainable economic growth	+++	++?	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++
To support rural development	+++	++?	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++
To support smarter resourcing of the planning system	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>																						
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?
To support community cohesion and vitality	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?
To support access to education and training	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?	+++/-?

Assessment table 2

	Increase permitted width in designated and non-designated areas											Allow further distances for replacement masts in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?

	Increase permitted width in designated and non-designated areas											Allow further distances for replacement masts in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
designation of AQMA																							
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated	0?	0?	0?	0?	-	-	-	-	0?	0	-	0?	0?	0?	0?	-	-	-	-	0?	0	-	-

	Increase permitted width in designated and non-designated areas											Allow further distances for replacement masts in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
heritage assets and their settings																							
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	-?	-?	-?	-?	0?	0	-?	0?	0?	0?	0?	-?	-?	-?	-?	0?	0	-?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
To enhance landscape quality	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	Increase permitted width in designated and non-designated areas											Allow further distances for replacement masts in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	+++	++?	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++
To support rural development	+++	++?	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++
To support smarter resourcing of the planning system	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To support community cohesion and vitality	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?
To support access to	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?	++?/-?

	Increase permitted width in designated and non-designated areas										Allow further distances for replacement masts in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
education and training																						

### Justification of scores

Changes to existing ground based mast	Justification of scores
SA Objectives	Narrative/justification
Biodiversity, flora and fauna	
To avoid adverse effects on all habitats and species	<p>It is assumed that <b>current PDR</b> and the <b>proposed changes to PDR</b> for changes to ground based masts are unlikely to result in direct impacts on biodiversity as the mast footprint is likely to be similar to that of existing masts. Loss or damage to habitats and species could occur during the replacement or alteration of existing masts, particularly during the breeding season. These adverse effects are judged to be very small, reflecting the low risk of these effects and the limited footprint of changes to ground based masts.</p> <p>It is important to note that there are <b>PDR</b> for a development which is likely to have a significant effect on the Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.</p> <p>Overall, a <b>negligible</b> effect is identified for this SA objective. These effects <b>uncertain</b>, depending on potential pathways to designated sites, the siting of proposed development and/or the biodiversity associated with that location.</p>
To enhance biodiversity	The development of new ground based masts does not enhance biodiversity, although telecoms masts are known to provide occasional nesting locations for some bird species. <b>Uncertain</b> effects are identified, because the significance of these effects depends on the siting of proposed development and the biodiversity associated with that location.
Climatic factors	

Changes to existing ground based mast	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect positive effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	Taking the above into account, the impacts associated with <b>existing PDR</b> and <b>each proposed change to PDR</b> for changes to ground based masts are judged to be minor, because the mast footprint is assumed to be similar to that for existing masts. However, the significance of these effects remains uncertain, as the scale of future development is unknown. Therefore, an <b>uncertain minor positive</b> effect is identified for this SA objective.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect <b>positive</b> effects of increased connectivity reducing the need to travel, with associated positive effects for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	Taking the above into account, the impacts associated with <b>existing PDR</b> and <b>each proposed change to PDR</b> for changes to ground based masts are judged to be minor, because the mast footprint is assumed to be similar to that of the original mast. However, the significance of these effects remains uncertain as the future scale of development is unknown. Therefore, an <b>uncertain minor positive</b> effect is identified for this SA objective.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<p>The effects of the replacement of ground based masts include adverse changes to water flow and drainage patterns, resulting from the construction of replacement masts.</p> <p>Therefore, <b>existing PDR</b> and <b>each proposed change to PDR</b> are likely to result in <b>negative</b> effects on the quality and quantity of watercourses and waterbodies. These effects are judged to be <b>minor</b>, depending on local geo-hydrological conditions and the siting of replacement masts. For instance, potential adverse effects are likely to be greater in designated areas, which may be more sensitive to hydrological changes. Following from this, it is assumed that the significance of the impact will be less where developments are proposed away from watercourses and sensitive areas. However, the effects are judged to remain minor due to the limited footprint of individual masts.</p> <p>Overall, an <b>uncertain minor negative</b> effect is identified in relation to all areas, whilst it is acknowledged that impacts are likely to be greater in biodiversity conservation areas.</p>
To avoid and reduce flood risk	The construction of replacement masts will increase the area of impermeable surface, resulting in potentially adverse effects on avoiding flood risk. However, these effects are judged to be <b>negligible</b> due to the limited footprint of individual masts.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The effects of <b>existing PDR</b> and <b>each proposed change to PDR</b> include soil sealing resulting from the construction of the replacement mast. However, these effects are judged to be <b>negligible</b> due to the limited footprint of individual masts.
To reduce vacant and derelict land/buildings and contaminated land	The effects of <b>existing PDR</b> and <b>each proposed change to PDR</b> for changes to ground based masts are unlikely to impact on vacant and derelict land and buildings and are therefore judged to be <b>negligible</b> .
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their	Effects of the replacement or alteration of existing ground based masts on cultural heritage include adverse effects on the setting of cultural heritage

Changes to existing ground based mast	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
settings	resources. Changes to ground based masts will result in direct effects on the integrity of designated and undesignated resources.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p><b>Existing PDR</b> do not currently apply in designated areas including Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, the setting of Listed Buildings and the setting of a Scheduled Monument – ensuring consideration of cultural heritage impacts through the planning process. Therefore, a <b>minor positive</b> effect is identified. A <b>neutral</b> effect is identified in relation to non-designated areas or designated areas out with these areas due to the lower sensitivity.</p> <p><b>Increasing the permitted height and increasing the permitted width in all areas</b> will remove the need to apply for planning permission and increases the area over which potential effects may occur. As a result, these proposed changes are likely to have an adverse effect on the cultural heritage resources and their settings, although these impacts are judged to be minor due to the limited footprint of individual masts. <b>Minor adverse</b> effects on setting are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments. Direct effects on the integrity of designated and undesignated resources could affect Conservation Areas, Historic Gardens and Designed Landscapes, and historic battlefields. Furthermore, it is likely that extending <b>PDR</b> would result in potential impacts on undesignated historic buildings and their settings. This effect is considered to be <b>minor negative</b>.</p> <p><b>Allowing further distances for replacement masts in all areas</b> is likely to result in <b>adverse</b> effects on cultural heritage assets and their settings if replacement masts are sited near/on buried archaeology. The significance of these effects remains <b>minor</b>, assuming the mast footprint is similar to that of the original mast. These impacts relate to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, and the setting of a Scheduled Monument. Furthermore, it is likely that extending PDR would result in potential impacts on undesignated historic buildings and their settings. This effect is considered to be <b>minor negative</b>.</p> <p><b>Neutral</b> effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Landscape effects resulting from changes to existing ground based masts include the introduction of complex structures or unnatural shapes, including vertical features into the landscape. The construction of replacement masts could result in impacts on important rocks, fossils, landforms, soils and land forming processes. Landscape impacts may also relate to wider impacts on the setting of cultural heritage resources. In more rural landscapes equipment may be seen over long distances. Replacement masts can introduce features which provide a scale indicator which influences the sense of space in a landscape and introduce built features into a rural landscape which typically has lower levels of human influence. In sensitive landscapes such as National Scenic Areas or National Parks key areas where impacts would be greater include views from visitor attractions, scenic viewpoints and views from roads.
To enhance landscape quality	<p><b>Existing PDR</b> do not currently apply in designated areas. This ensures consideration of landscape issues in these areas through the planning process, resulting in <b>minor positive</b> effects. However, effects may occur in areas of wild land or rural areas, and at the edge of protected areas. These effects are likely to be small in scale due to the limited footprint of individual masts. Overall, an <b>uncertain negligible</b> effect is identified.</p> <p><b>Each proposed change to PDR</b> will remove the need to apply for planning permission and each change increases the area over which potential effects may occur. As a result, the proposed changes to PDR are likely to have a <b>negative</b> effect on National Scenic Areas, National Parks and other protected landscapes because of potential direct impacts on the landscape qualities of these areas and their national significance. These effects are judged to be minor, assuming that the mast footprint is similar to that of the original mast. A <b>negligible</b> effect is identified in relation to non-designated areas or areas</p>



Changes to existing ground based mast	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>that are not designated for their landscape value due to their lower sensitivity.</p> <p><b>Neutral</b> effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	<b>Existing PDR</b> and <b>each of the proposed changes to PDR</b> for changes to ground based masts will contribute <b>positively</b> to the telecommunications network, resulting in lower rates of waste generation compared to paper-based communication. As such, the enhancement and expansion of mobile networks is expected to promote the prudent use of resources.
To enhance material assets	Due to the limited scale and extent of future ground based masts, these effects are judged to be <b>minor</b> .
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The deployment of new ground based masts is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. Ground based masts are likely to underpin Scotland's digital economy through new technological opportunities such as the rollout of 5G networks and other network improvements. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and increase the communication for transfer of business, shopping, entertainment and related services.</p>
To support rural development	<p>Taking this into account, <b>existing PDR</b> are judged to have minor positive effects on this SA objective, reflecting the limited scale of development.</p> <p><b>Increasing the permitted height in designated areas and non-designated areas</b> may help to deliver the next generation of digital communication services, particularly the latter alternative due to increased opportunities for developing taller masts which play a crucial role in the enhancement of digital communications networks. Furthermore, these alternatives could potentially contribute to plugging significant gaps in existing coverage (e.g. for tourist based settlements, or long distance road and rail). Therefore, <b>significant positive</b> effects are identified. The significance of these effects <b>uncertain</b>, mainly due to current regulations and associated statutory obligations. Under the Communications Code and Regulations, there is a statutory obligation on network operators to share existing installations where appropriate to minimise proliferation. In additions, there are established drivers to share existing masts, which in turn will trigger the requirement for replacement structures. Typically, a mast will need to be replaced where it is insufficiently high or robust to accommodate a new operator's apparatus.</p> <p><b>Increasing permitted width in designated and non-designated areas</b> and <b>allowing further distances for replacement masts in designated and non-designated areas</b> may help to deliver and support the next generation of digital communication services, particularly to more remote and peripheral locations. However, due to the limited effects of these alternatives on facilitating the development of taller masts, <b>minor positive</b> effects are identified. The significance of these effects <b>uncertain</b>, mainly due to current regulations and associated statutory obligations. Under the Communications Code and Regulations, there is a statutory obligation on network operators to share existing installations where appropriate to minimise proliferation. In additions, there are established drivers to share existing masts, which in turn will trigger the requirement for replacement structures. Typically, a mast will need to be replaced where it is insufficiently high or robust to accommodate a new operator's apparatus.</p>

Changes to existing ground based mast	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To support smarter resourcing of the planning system	<b>Existing PDR</b> result in a greater number of planning applications entering the planning system than would occur under <b>extending PDR</b> . However, the volume of applications is expected to be low, reflecting the limited scale and extent of future development. The significance of this effect is <b>uncertain</b> due to a lack of data on the number of planning applications.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	Changes to ground based masts will result in mixed effects on local communities and human health for the following reasons. Potential amenity impacts may arise from living next to a ground based mast. For instance, there is the risk of visual clutter and adverse effects on enjoyment and use of neighbouring property. In addition, tall structures such as ground based masts may infringe protected obstacle limitation surfaces, interfere with communications, navigation and surveillance equipment or instrument flight procedures at an aerodrome or technical site. This could potentially constitute a risk to human health and safety.
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	On the other hand, changes to ground based masts could also enhance opportunities for sustainable economic growth through increased digital connectivity. In the UK, telecommunication services play an essential role in providing household utilities. As well as being relied upon by households, mobile connectivity also underpins a wide range of public services and other crucial services such as emergency services, healthcare services and databases. As a result, increased digital communication plays an important role in supporting community vitality, education, training and education – particularly in more remote and rural areas.
To support access to education and training	<p><b>Increasing the permitted height in designated areas and non-designated areas</b> is expected to have mixed impacts on human health and the living environment of people. Principal adverse effects associated with changes to ground based masts include the risk of visual clutter and adverse effects on local amenity. Furthermore, tall structures such as ground based masts may infringe protected obstacle limitation surfaces, interfere with communications, navigation and surveillance equipment or instrument flight procedures at an aerodrome or technical site. This could potentially constitute a risk to human health and safety. Positive effects associated with ground based masts include the delivery of next generation of digital communication services that underpin crucial public services and health services, particularly to more remote and peripheral locations. Therefore, <b>mixed minor negative and significant positive</b> effects are identified.</p> <p><b>Increasing permitted width in designated and non-designated areas and allowing further distances for replacement masts in designated and non-designated areas</b> may help to deliver and support the next generation of digital communication services, particularly to more remote and peripheral locations. However, due to the limited effects of these alternatives on facilitating the development of taller masts, <b>mixed minor positive and minor negative</b> effects are identified.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the nature of the wider landscape and proximity to sensitive receptors such as towns, settlements and residential buildings.</p>

Antenna systems on buildings (dish antennas)

Assessment table 1

	No change in PDR											Extend existing PDR in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?

	No change in PDR											Extend existing PDR in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
issue through the designation of AQMA																							
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							

	No change in PDR											Extend existing PDR in designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?
<b>Landscape and geodiversity</b>																						
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	+	+	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?
To enhance landscape quality	0	0	+	+	0	0	0	0	0	0	0	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?
<b>Material assets</b>																						
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	No change in PDR											Extend existing PDR in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To enhance material assets	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+	++	++	++	++	++	++	++	++	++	++	++	++
To support rural development	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support smarter resourcing of the planning system	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	++?	++?	++?	++?	++?	++?	++?	++?	++?	++?	++?	++?
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To improve the health and living environment of people and communities including support for access, recreation and physical activity	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

	No change in PDR											Extend existing PDR in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To support community cohesion and vitality	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support access to education and training	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

**Assessment table 2**

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
on all habitats and species																							
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							



	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
To enhance, where appropriate, heritage	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
assets and their settings and to improve the quality of the wider built environment																							
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
To enhance landscape quality	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
growth																							
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To improve the health and living environment of people and communities including support for access, recreation and physical activity	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support community cohesion and vitality	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support access to education and training	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

## Justification of scores

Antenna systems on buildings (dish antennas)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	Adverse impacts could occur if development is sited insensitively, resulting in direct physical disturbance to local wildlife such as nesting birds. The risk of these impacts is judged to be very low; potential impacts on habitats and species are anticipated to be limited as antennas are often installed on lampposts and other street furniture within urban areas.
To enhance biodiversity	<p>Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR.</p> <p>Overall, a negligible effect is identified for this SA objective reflecting the small footprint of antenna systems and their installation on lampposts and other street furniture. However, this effect is uncertain depending on the location of the works, potential pathways to designated sites or the biodiversity value of the site.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect positive effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	These effects may occur under existing PDR and extending PDR, although they are judged to be minor due to the limited footprint of dish antenna systems. The significance of these effects is uncertain, as the scale of future development is unknown.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect positive effects of increased connectivity reducing the need to the travel, with associated positive effects for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	These effects may occur under existing PDR and extending PDR, although they are judged to be minor due to the limited footprint of dish antenna systems. The significance of these effects is uncertain, as the scale of future development is unknown.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of antenna systems will not directly influence the quality and quantity of watercourses and waterbodies due to their small footprint and their position on buildings and street furniture. Therefore, a negligible effect is identified.

Antenna systems on buildings (dish antennas)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid and reduce flood risk	It is assumed that the development of antenna systems will not directly influence flood risk due to their small size and their position on buildings and street furniture. Therefore, a negligible effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of antenna systems will not directly influence the quality of soil resources due to their small footprint and their position on buildings and street furniture. Therefore, a negligible effect is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land	The effects of existing PDR and each proposed change to PDR for antenna systems are unlikely to impact on vacant and derelict land and buildings and are therefore judged to be negligible.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of antenna systems on cultural heritage include adverse effects on heritage assets and their settings. Principally, there is the risk of visual clutter and potential physical damage to historic buildings and structures resulting from the installation of antennas.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Existing PDR currently do not apply in designated areas; however, PDR apply in designated areas if the alteration or replacement of the existing dish antennas and the antenna systems and the resulting apparatus do not exceed what was there already in terms of size and/or the number of items. Therefore, existing PDR ensure consideration of cultural heritage impacts through the planning process, resulting in minor positive effects in Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and within the setting of a Scheduled Monument.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. These effects include the increased risk of visual clutter and potential physical damage to historic buildings and structures depending on the techniques used for attaching the antenna to these structures. Therefore, significant negative effects are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, and the setting of a Scheduled Monument.</p> <p>For each alternative, it is likely that PDR for antenna systems would result in potential impacts on undesignated historic buildings and their settings, with increased potential for schemes that prominently impact on townscapes. This effect is considered to be minor negative.</p> <p>Neutral effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Landscape effects resulting from antenna systems mainly include visual clutter.
To enhance landscape quality	Existing PDR do not apply in designated areas including National Parks and National Scenic Areas. This ensures consideration of landscape and geodiversity impacts through the planning system in these areas, resulting in minor positive effects. However, adverse effects may also occur in areas of wild land or rural areas, and at the edge of protected areas. These effects are likely to be small in scale due to the limited footprint and size of individual

Antenna systems on buildings (dish antennas)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>masts. These effects are judged to be negligible due to the limited footprint of antenna systems.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. As a result, the proposed changes to PDR are likely to have a negative effect on National Scenic Areas, National Parks and other protected landscapes because of potential direct impacts on the landscape qualities of these areas and their national significance. These effects are judged to be minor due to the low footprint of individual systems. Each proposed change to PDR is expected to have a negligible effect on non-designated areas or areas that are not designated for their landscape value due to their lower sensitivity.</p> <p>Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	The deployment of dish antenna systems could have indirect positive effects on this SA objective through promoting digital opportunities, resulting in lower rates of waste generation compared to paper-based communication. Therefore, the use of dish antenna systems is likely to promote the prudent use of resources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To enhance material assets	These effects may occur under existing PDR and each proposed change to PDR, although they are judged to be minor due to the limited footprint of dish antenna systems. There is not yet much certainty about the extent to which antenna systems will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The deployment of antenna systems is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. Dish antenna systems are likely to underpin Scotland's digital economy through new technological opportunities such as the rollout of 5G networks and other network improvements, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and support business, shopping, entertainment and related services.</p> <p>These positive effects may occur under existing PDR. Although the scale of antenna systems is limited, they could have wider economic benefits due to the opportunities they provide for enhancing digital connectivity in urban areas. Therefore, a minor positive effect is identified.</p> <p>Each proposed change to PDR will increase the area over which potential effects may occur, resulting in greater positive effects. This is because antenna systems could support economic activity across large parts of city centres, where additional capacity is often needed. For instance, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre. Therefore, significant positive effects are identified.</p>
To support rural development	Existing PDR and each of the proposed changes to PDR for small cell systems may help to deliver and support the next generation of digital communication services. This will result in positive effects on rural development. Given that most future development of small cell systems is likely

Antenna systems on buildings (dish antennas)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	aimed at urban areas, these effects are judged to be minor.
To support smarter resourcing of the planning system	<p>Antenna systems will mostly be used in dense urban areas to add capacity, resulting in a high number of planning applications. As a result, there is the risk that the number of applications needed in city centres could swamp the planning system. Existing PDR avoid these risks outside Conservation Areas. However, large parts of city, town and village centres are likely to be designated Conservation Areas. PDR currently do not apply in Conservation Areas, resulting in minor negative effects.</p> <p>Extending existing PDR to Conservation Areas will relax the conditions under which development is classified as permitted development, extending PDR to Conservation Areas. If PDR are introduced in Conservation Areas, this would have positive effects on supporting smarter resourcing of the planning system. A significant positive effect is identified.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p>One of the principal impacts of antenna systems on this SA objective is the risk of visual clutter and adverse effects on enjoyment and use of neighbouring property. On the other hand, antenna systems could help to underpin the development of digital communications infrastructure, resulting in beneficial effects. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as a wide range of public services and more private services such as smart meters. As a result, increased digital communication plays an important role in supporting community vitality, education, training and education.</p> <p>Taking the above into account, existing PDR are judged to have mixed effects. Although the scale of antenna cell systems is limited, they play a crucial role in upgrading digital networks, particularly in urban areas. For example, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre. The risk of visual clutter is judged to be very minor, due to the limited scale of individual development. Therefore, significant positive effects are identified.</p> <p>Each of the proposed changes to PDR will relax the conditions under which permitted developments apply, resulting in greater positive effects. The risk of visual clutter remains very minor, reflecting the limited footprint of individual systems. Therefore, significant positive effects are identified.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	
To support access to education and training	

### Antenna systems on buildings (other antenna systems)

#### Assessment table 1

	No change in PDR	Extend existing PDR in designated areas
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	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							



	No change in PDR											Extend existing PDR in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
To enhance, where appropriate, heritage	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	

	No change in PDR											Extend existing PDR in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
assets and their settings and to improve the quality of the wider built environment																							
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	+?	+?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
To enhance landscape quality	0?	0?	+?	+?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To enhance material assets	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic	+	+	+	+	+	+	+	+	+	+	+	++	++	++	++	++	++	++	++	++	++	++	++

	No change in PDR											Extend existing PDR in designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
growth																							
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	-	-	-	-	-	-	-	-	-	-	-	++	++	++	++	++	++	++	++	++	++	++	++
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To improve the health and living environment of people and communities including support for access, recreation and physical activity	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support community cohesion and vitality	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support access to education and training	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

**Assessment table 2**

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
assets and their settings																							
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
To enhance landscape quality	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To improve the health and living environment of people and communities including support for access, recreation and physical activity	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support community cohesion and vitality	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

	Increase in number of antennas in designated and non-designated areas											Increase the size of antennas in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To support access to education and training	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

### Justification of scores

Antenna systems on buildings (other antenna systems)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	Potential impacts on habitats and species are anticipated to be limited as antennas are often installed on lampposts and other street furniture within urban areas. However, adverse impacts could occur if development is sited insensitively, resulting in direct physical disturbance to local wildlife such as nesting birds.
To enhance biodiversity	Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.  Overall, a negligible effect is identified for this SA objective, reflecting the small footprint of antenna systems and their installation on lampposts and other street furniture. However, this effect is uncertain depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area being developed.
<b>Climatic factors</b>	



Antenna systems on buildings (other antenna systems)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect positive effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	These effects may occur under existing PDR and extending PDR, although they are judged to be minor due to the limited footprint of antenna systems. The significance of these effects is uncertain, as the scale of future development is unknown.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect positive effects of increased connectivity reducing the need to travel, with associated positive effects for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	These effects may occur under existing PDR and extending PDR, although they are judged to be minor due to the limited footprint of antenna systems. The significance of these effects is uncertain, as the scale of future development is unknown.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of antenna systems will not directly influence the quality and quantity of watercourses and waterbodies due to their small footprint and their position on buildings and street furniture. Therefore, a negligible effect is identified.
To avoid and reduce flood risk	It is assumed that the development of antenna systems will not directly influence flood risk due to their small size and their position on buildings and street furniture. Therefore, a negligible effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of antenna systems will not directly influence the quality of soil resources due to their small footprint and their position on buildings and street furniture. Therefore, a negligible effect is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land	The effects of existing PDR and each proposed change to PDR for antenna systems are unlikely to impact on vacant and derelict land and buildings and are therefore judged to be negligible.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of antenna systems on cultural heritage include adverse effects on heritage assets and their settings. Principally, there is the risk of visual clutter and potential physical damage to historic buildings and structures resulting from the installation of antennas.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Existing PDR currently do not apply in designated areas; however, PDR apply in designated areas if the alteration or replacement of the existing dish antennas and the antenna systems and the resulting apparatus do not exceed what was there already in terms of size and/or the number of items. Therefore, existing PDR ensure consideration of cultural heritage impacts through the planning system in designated areas, resulting in minor positive effects in Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and within the setting of a Scheduled Monument.  Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. These effects include the increased risk of visual clutter and potential physical damage to historic buildings and structures depending on the techniques

Antenna systems on buildings (other antenna systems)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>used for attaching the antenna to these structures. Therefore, significant negative effects are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, and the setting of a Scheduled Monument.</p> <p>For each alternative, it is likely that PDR for antenna systems would result in potential impacts on undesignated historic buildings and their settings, with increased potential for schemes that prominently impact on townscapes. This effect is considered to be minor negative.</p> <p>Neutral effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Landscape effects resulting from antenna systems mainly include visual clutter.
To enhance landscape quality	<p>Existing PDR do not apply in designated areas including National Parks and National Scenic Areas. This ensures consideration of landscape and geodiversity impacts through the planning system, resulting in minor positive effects. However, adverse effects may also occur in areas of wild land or rural areas, and at the edge of protected areas. These effects are likely to be small in scale due to the limited footprint and size of individual masts. These effects are judged to be negligible due to the limited footprint of individual antenna systems.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. As a result, the proposed changes to PDR are likely to have a negative effect on National Scenic Areas, National Parks and other protected landscapes because of potential direct impacts on the landscape qualities of these areas and their national significance. These effects are judged to be minor due to the low footprint of individual systems. Each proposed change to PDR is expected to have a negligible effect on non-designated areas or areas that are not designated for their landscape value due to their lower sensitivity.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography. Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	The deployment of antenna systems could have indirect positive effects on this SA objective through promoting digital opportunities, resulting in lower rates of waste generation compared to non-digital, paper-based communication. This, in turn, would promote the prudent use of resources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To enhance material assets	These effects may occur under existing PDR and extending PDR, although they are judged to be minor due to the limited footprint of antenna systems. There is not yet much certainty about the extent to which antenna systems will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
<b>Economy</b>	

Antenna systems on buildings (other antenna systems)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To support and enhance opportunities for sustainable economic growth	<p>The deployment of antenna systems is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. Antenna systems are likely to underpin Scotland's digital economy through new technological opportunities such as the rollout of 5G networks and other network improvements, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and support business, shopping, entertainment and related services.</p> <p>These positive effects may occur under existing PDR. Although the scale of antenna systems is limited, they could potentially have economic benefits due to the opportunities they provide for enhancing digital connectivity in urban areas. Therefore, a minor positive effect is identified.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission, also increasing the area over which potential effects may occur. Positive effects are identified because antenna systems could support economic activity across large parts of city centres, where additional capacity is often needed. For instance, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre. Therefore, significant positive effects are identified.</p> <p>Antenna systems will mostly be used in dense urban areas to add capacity, resulting in a high number of planning applications. As a result, there is the risk that there will be a larger number of applications needed in city centres. Existing PDR avoid these risks outside Conservation Areas. However, large parts of city, town and village centres are likely to be designated Conservation Areas. PDR currently do not apply in Conservation Areas, resulting in minor negative effects.</p> <p>Extending existing PDR to Conservation Areas will relax the conditions under which development is classified as permitted development, extending PDR to Conservation Areas. If PDR are introduced in Conservation Areas, this would have positive effects on supporting smarter resourcing of the planning system. A significant positive effect is identified.</p>
To support rural development	
To support smarter resourcing of the planning system	
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p>One of the principal impacts of antenna systems on this SA objective is the risk of visual clutter and adverse effects on enjoyment and use of neighbouring property. On the other hand, antenna systems could help to underpin the development of digital communications infrastructure, resulting in beneficial effects. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as a wide range of public services and more private services such as smart meters. As a result, increased digital communication plays an important role in supporting community vitality, education, training and education.</p> <p>Taking the above into account, existing PDR are judged to have mixed effects. Although the scale of antenna cell systems is limited, they play a crucial role in upgrading digital networks, particularly in urban areas. For example, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre. The risk of visual clutter is judged to be very minor, due to the limited scale of individual development. Therefore, significant positive effects are identified.</p> <p>Each of the proposed changes to PDR will relax the conditions under which permitted developments apply, resulting in greater positive effects. The risk of visual clutter remains very minor, reflecting the limited footprint of individual systems. Therefore, significant positive effects are identified</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	
To support access to education and training	

**Small cell systems on buildings (dwellinghouses)**

**Assessment table**

	No change in PDR											Extend existing PDR to Conservation Areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>																							
To avoid significant adverse effects on	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	No change in PDR											Extend existing PDR to Conservation Areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
air quality, particularly where air quality is a known issue through the designation of AQMA																							
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	No change in PDR											Extend existing PDR to Conservation Areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
agricultural land																							
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?	-?	-?	+	-?	-?	-?	-?	0	-?	-?	-?	-?	-?	--?	-?	-?	-?	-?	0	-?	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+	-?	-?	-?	0?	0	-?	0?	0?	0?	0?	-?	-?	-?	-?	0?	0	-?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	

	No change in PDR											Extend existing PDR to Conservation Areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
and all landscapes																							
To enhance landscape quality	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support rural development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	No change in PDR											Extend existing PDR to Conservation Areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
planning system																							
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Justification of scores

Small cell systems on buildings (dwellinghouses)	Justification of scores
SA Objectives	Narrative/justification
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that small cell systems will mostly be used in dense urban areas to add capacity. Therefore, the potential impacts on habitats and species are anticipated to be limited. In addition, small cell systems are likely to be deployed in rural areas to provide tactical coverage to small communities.
To enhance biodiversity	<p>Adverse impacts could occur if small cell systems are sited to result in direct impacts on local wildlife such as nesting birds, although the risk of these impacts is judged to be very low.</p> <p>Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.</p> <p>Overall, a <b>negligible</b> effect is identified for this SA objective in relation to current PDR and the proposed changes to PDR. However, this effect is <b>uncertain</b> depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area being developed.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect positive effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to the travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	These positive effects may occur under <b>existing PDR</b> and <b>extending existing PDR to Conservations Areas</b> . However, it is unlikely that extending PDR would support the further deployment of small cell systems, because small cell systems are most likely to be deployed in areas where commercial buildings are more prevalent than private residences. As a result, the use of domestic properties for the deployment of small cell systems is judged to be very low. Therefore, <b>negligible</b> effects are identified.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect positive effects of increased connectivity reducing the need to travel, with associated positive effects for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	These positive effects may occur under <b>existing PDR</b> and <b>extending existing PDR to Conservations Areas</b> . However, it is unlikely that extending PDR would support the further deployment of small cell systems, because small cell systems are most likely to be deployed in areas where commercial buildings are more prevalent than private residences. As a result, the use of domestic properties for the deployment of small cell systems is judged to be very low. Therefore, <b>negligible</b> effects are identified.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of small cell systems will not directly influence the quality and quantity of watercourses and waterbodies due to their small footprint and their position on buildings. Therefore, a <b>negligible effect</b> is identified.
To avoid and reduce flood risk	It is assumed that the development of small cell systems will not directly influence flood risk due to their small size and their position on buildings. Therefore, a <b>negligible effect</b> is identified.

Small cell systems on buildings (dwellinghouses)	Justification of scores
SA Objectives	Narrative/justification
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of small cell systems will not directly influence the quality of soil resources due to their small size and their position on buildings. Therefore, a <b>negligible</b> effect is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land	The effects of <b>existing PDR</b> and <b>each proposed change to PDR</b> for small cell systems masts are unlikely to impact on vacant and derelict land and buildings and are therefore judged to be <b>negligible</b> .
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of small cell systems on cultural heritage include adverse effects on heritage assets and their settings. Principally, there is the risk of visual clutter and potential physical damage to historic buildings and structures resulting from the installation of small cell systems. These impacts are judged to be very low, due to the limited scale of development.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p><b>Existing PDR</b> for small cell systems are subject to additional restrictions, ensuring consideration of cultural heritage impacts through the planning process within Conservation Areas. Therefore, a <b>minor positive</b> effect is identified in relation to Conservation Areas. The installation of four small antennas is permitted under existing <b>PDR</b> in all areas outwith Conservation Areas, potentially resulting in visual impacts on cultural heritage assets and their settings. Therefore, <b>minor negative</b> effects are identified in relation to Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of a Scheduled Monument and non-designated areas due to potential impacts on historic structures.</p> <p><b>Extending existing PDR to Conservation Areas</b> will increase the area over which potential effects may occur. As a result, the proposed change to PDR is likely to have an adverse effect on cultural heritage resources and their settings. As such, <b>minor negative</b> effects are identified in relation to Conservation Areas, reflecting the limited scale of future development. Minor adverse effects are also identified in relation to Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of a Scheduled Monument, as PDR for up to four antennas apply in these areas – resulting in potential visual impacts.</p> <p>For both proposed alternatives, it is likely that PDR for small cell systems would result in potential impacts on undesignated historic buildings and their settings. This effect is considered to be <b>minor negative</b>.</p> <p><b>Neutral</b> effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Landscape effects resulting from small cell systems mainly include visual clutter.
To enhance landscape quality	It is judged that <b>existing PDR</b> and <b>extending existing PDR to Conservations Areas</b> could have <b>negative</b> effects on landscape quality, resulting from visual impacts caused by the proliferation of small cell systems and other apparatus in an area. These effects are judged to be <b>minor</b> , because small cell systems will mostly be used in dense urban areas to add capacity and along roadsides to provide connectivity to connected vehicles. Furthermore, the potential future use of domestic properties for the deployment of small cell systems is judged to be very low because small cell systems are more likely to be deployed in areas where commercial buildings are more prevalent than private residences. <b>Negligible</b> effects are identified in relation to

Small cell systems on buildings (dwellinghouses)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>non-designated areas or areas that are not designated for their landscape value and/or heritage assets, mainly due to their lower sensitivity.</p> <p><b>Neutral</b> effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effect is <b>uncertain</b> depending on the nature/sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	The deployment of small cell systems could have indirect <b>positive</b> effects on this SA objective through promoting digital opportunities, resulting in lower rates of waste generation compared to paper-based communication. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To enhance material assets	These positive effects may occur under <b>existing PDR</b> and <b>extending existing PDR to Conservations Areas</b> . However, it is unlikely that extending PDR would support the further deployment of small cell systems, because small cell systems are most likely to be deployed in areas where commercial buildings are more prevalent than private residences. As a result, the use of domestic properties for the deployment of small cell systems is judged to be very low. Therefore, <b>negligible</b> effects are identified.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The deployment of small cell systems is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. Small cell systems are likely to underpin Scotland's digital economy through new technological opportunities such as the rollout of 5G networks and other network improvements, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and support business, shopping, entertainment and related services.
To support rural development	These positive effects may occur under <b>existing PDR</b> and <b>extending existing PDR to Conservations Areas</b> . However, it is unlikely that extending PDR would support the further deployment of small cell systems, because small cell systems are most likely to be deployed in areas where commercial buildings are more prevalent than private residences. As a result, the use of domestic properties for the deployment of small cell systems is judged to be very low. Therefore, <b>negligible</b> effects are identified.
To support smarter resourcing of the planning system	Based on the assumption that extending PDR would not bring significant benefits to the further deployment of small cell systems, potential effects on supporting smarter resourcing of the planning systems are judged to be <b>negligible</b> .
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	One of the principal impacts of small cell systems on this SA objective is the risk of visual clutter and adverse effects on enjoyment and use of neighbouring property. On the other hand, small cell systems could help to underpin the development of digital communications infrastructure, resulting in beneficial effects.
To improve the health and living environment of people and communities including support for access, recreation and physical activity	These mixed effects may occur under <b>existing PDR</b> and <b>extending existing PDR to Conservations Areas</b> . However, it is unlikely that extending PDR would support the further deployment of small cell systems, because small cell systems are most likely to be deployed in areas where commercial

Small cell systems on buildings (dwellinghouses)	Justification of scores
SA Objectives	Narrative/justification
	buildings are more prevalent than private residences. As a result, the use of domestic properties for the deployment of small cell systems is judged to be very low. Therefore, <b>negligible</b> effects are identified.
To support community cohesion and vitality	Telecommunication services play an important role in people's lives as essential household utilities. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as a wide range of public services and more private services such as smart meters. As a result, increased digital communication plays an important role in supporting community vitality, education, training and education – particularly in more remote and rural areas.
To support access to education and training	These positive effects may occur under <b>existing PDR</b> and <b>extending existing PDR to Conservations Areas</b> . However, it is unlikely that extending PDR would support the further deployment of small cell systems, because small cell systems are most likely to be deployed in areas where commercial buildings are more prevalent than private residences. As a result, the use of domestic properties for the deployment of small cell systems is judged to be very low. Therefore, <b>negligible</b> effects are identified.

**Small cell systems on buildings (buildings other than dwellinghouses)**

**Assessment table**

	No change in PDR											Extend existing PDR to Conservation Areas	
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	All other areas	Conservation Areas
<b>Biodiversity, flora and fauna</b>													
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>													
To avoid increasing greenhouse gas emissions	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To support actions which contribute to targets for reducing greenhouse gas emissions	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To support climate change adaptation	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Air</b>													

	No change in PDR											Extend existing PDR to Conservation Areas	
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	All other areas	Conservation Areas
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To improve air quality	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Water</b>													
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>													
To protect and avoid adverse effects on valuable	0	0	0	0	0	0	0	0	0	0	0	0	0

	No change in PDR											Extend existing PDR to Conservation Areas	
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	All other areas	Conservation Areas
soil resources, including carbon soils and best & most versatile agricultural land													
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>													
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?	-?	-?	+	-?	-?	-?	0	0	-?	0?	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	-?	-?	-?	-?	+	-?	-?	-?	0	0	-?	0?	-?
<b>Landscape and geodiversity</b>													

	No change in PDR											Extend existing PDR to Conservation Areas	
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	All other areas	Conservation Areas
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	-?	-?	0?	0?	0?	0?	0?	0?	0?	-?	0?
To enhance landscape quality	0?	0?	-?	-?	0?	0?	0?	0?	0?	0?	0?	-?	0?
<b>Material assets</b>													
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance material assets	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Economy</b>													
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+	++	++



	No change in PDR											Extend existing PDR to Conservation Areas	
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	All other areas	Conservation Areas
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	0	0	0	0	-	0	0	0	0	0	0	0	++
<b>Social, population and human health</b>													
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+/-	+/-	+/-	+/-	+	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
To improve the health and living environment of people and communities including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	+	+	+	+	+	+	+	+	+	+	+	+	+
To support access to education and	+	+	+	+	+	+	+	+	+	+	+	+	+

	No change in PDR											Extend existing PDR to Conservation Areas	
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	All other areas	Conservation Areas
training													

### Justification of scores

Small cell systems on buildings (buildings other than dwellinghouses)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that small cell systems will mostly be used in dense urban areas to add capacity. Therefore, the potential impacts on habitats and species are anticipated to be limited. In addition, small cell systems are likely to be deployed in rural areas to provide tactical coverage to small communities. Adverse impacts could occur if small cell systems are sited to result in direct impacts on local wildlife such as nesting birds, although the risk of these impacts is judged to be very low.
To enhance biodiversity	Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.  Overall, a negligible effect is identified for this SA objective in relation to existing PDR and the proposed changes to PDR. However, this effect is uncertain depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area being developed.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect positive effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas	

Small cell systems on buildings (buildings other than dwellinghouses)	Justification of scores
SA Objectives	Narrative/justification
emissions  To support climate change adaptation	Taking the above into account, existing PDR and extending existing PDR to Conservation Areas are judged to be minor due to the limited footprint of small cell systems. The significance of these effects is uncertain, because small cell systems are not widely used in the UK and there is not yet much certainty as to how they will be deployed in the future. Small cell systems are only deployed where they are needed, with as much sharing between mobile operators as possible – making it difficult to determine the scale of future development. Therefore, uncertain negligible effects are identified for this SA objective.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect positive effects of increased connectivity reducing the need to travel, with associated positive effects for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	The effects of existing PDR and extending existing PDR to Conservation Areas are judged to be minor due to the limited footprint of small cell systems. The significance of these effects is uncertain as small cell systems are not widely used in the UK and there is not yet much certainty as to how they will be deployed in the future. Small cell systems are only deployed where they are needed, with as much sharing between mobile operators as possible – making it difficult to establish the scale of future development. Therefore, uncertain negligible effects are identified for this SA objective.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of small cell systems will not directly influence the quality and quantity of watercourses and waterbodies due to their small footprint and their position on buildings. Therefore, a negligible effect is identified.
To avoid and reduce flood risk	It is assumed that the development of small cell systems will not directly influence flood risk due to their small size and their position on buildings. Therefore, a negligible effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of small cell systems will not directly influence the quality of soil resources due to their small footprint and their position on buildings. Therefore, a negligible effect is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land	The effects of existing PDR and each proposed change to PDR for small cell systems are unlikely to impact on vacant and derelict land and buildings and are therefore judged to be negligible.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of small cell systems on cultural heritage include adverse effects on heritage assets and their settings. Principally, there is the risk of visual clutter and potential physical damage to historic buildings and structures resulting from the installation of small cell systems.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Existing PDR for small cell systems in Conservation Areas are subject to additional restrictions, ensuring consideration of cultural heritage impacts through the planning process within Conservation Areas. Therefore, a minor positive effect is identified in relation to Conservation Areas. In areas outwith Conservation Areas, there are currently no restrictions on the number of small cell systems permitted on buildings other than a dwelling. Therefore, minor negative but uncertain effects are identified in relation to Historic Gardens and Designed Landscapes, historic battlefields, World

<b>Small cell systems on buildings (buildings other than dwellinghouses)</b>	<b>Justification of scores</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>Heritage Sites and the setting of a Scheduled Monument.</p> <p>Extending existing PDR to Conservation Areas will increase the area over which potential effects may occur. Minor negative effects are identified in relation to Conservation Areas due to the impacts of visual clutter on historic townscapes. Furthermore, adverse impacts on structures could occur depending on the method of attachment. In areas outwith Conservation Areas, there are currently no restrictions on the number of small cell systems permitted on buildings other than a dwelling. Therefore, minor negative effects are also identified in relation to Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of a Scheduled Monument.</p> <p>For both proposed alternatives, it is likely that PDR for small cell systems would result in potential impacts on undesignated historic buildings and their settings, with increased potential for schemes that prominently impact on townscapes. This effect is considered to be minor negative.</p> <p>Neutral effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Landscape effects resulting from small cell systems mainly include visual clutter.</p>
To enhance landscape quality	<p>It is judged that existing PDR and extending existing PDR to Conservation Areas could have negative effects on landscape quality, resulting from visual impacts caused by the proliferation of small cell systems and other apparatus in an area. These effects are judged to be minor, because small cell systems will mostly be used in dense urban areas to add capacity and along roadsides to provide connectivity to connected vehicles. Negligible effects are identified in relation to non-designated areas or areas that are not designated for their landscape value and/or heritage assets, mainly due to their lower sensitivity.</p> <p>Neutral effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effect is uncertain depending on the nature/sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	<p>The deployment of small cell systems could have indirect positive effects on this SA objective through promoting digital opportunities, resulting in lower rates of waste generation compared to non-digital, paper-based communication. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.</p>
To enhance material assets	<p>These effects may occur under existing PDR and extending existing PDR to Conservation Areas, although they are judged to be minor due to the limited scale and extent of small cell systems. Small cell systems are not widely used in the UK and there is not yet much certainty as to how they will be</p>

Small cell systems on buildings (buildings other than dwellinghouses)	Justification of scores
SA Objectives	Narrative/justification
	deployed in the future. Therefore, uncertain negligible effects are identified for this SA objective.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The deployment of small cell systems is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. Small cell systems are likely to underpin Scotland's digital economy through new technological opportunities such as the rollout of 5G networks and other network improvements, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and support business, shopping, entertainment and related services.</p> <p>Taking the above into account, positive effects are identified for existing PDR. Although the scale of small cell systems is limited, they could have considerable economic benefits due to the opportunities they provide for plugging strategic gaps in coverage – particularly in urban areas. Therefore, a minor positive effect is identified.</p> <p>Extending existing PDR to Conservation Areas will increase the area where PDR apply, resulting in greater positive effects. This is because small cell systems could support economic activity across large parts of city centres, where additional capacity is often needed. For example, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre – resulting in considerable economic benefits. Therefore, significant positive effects are identified.</p>
To support rural development	Existing PDR and each of the proposed changes to PDR for small cell systems may help to deliver and support the next generation of digital communication services. This will result in positive effects on rural development. Given that most future development of small cell systems is likely aimed at urban areas, these effects are judged to be minor.
To support smarter resourcing of the planning system	<p>Small cell systems will mostly be used in dense urban areas to add capacity, resulting in a high number of planning applications for small cell systems. As a result, there is the risk that a high number of applications may be needed in city centres. Existing PDR avoid these risks outside Conservation Areas. However, large parts of city, town and village centres are likely to be designated Conservation Areas. PDR currently do not apply in Conservation Areas, resulting in a greater number of planning applications in these areas. However the overall impact for changes in PDR for this development type are identified as negligible.</p> <p>If PDR are introduced in Conservation Areas, this would have positive effects by reducing the number of planning applications entering the planning system. A significant positive effect is identified.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	One of the principal impacts of small cell systems on this SA objective is the risk of visual clutter and adverse effects on enjoyment and use of neighbouring property. On the other hand, small cell systems could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities. Telecommunication services play an important role in people's lives as essential household utilities. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as a wide range of public services and more private services such as smart meters. As a result, increased digital communication plays an important role in supporting community vitality, education, training
To improve the health and living environment of people and communities including support for access, recreation and physical activity	

<b>Small cell systems on buildings (buildings other than dwellinghouses)</b>	<b>Justification of scores</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
To support community cohesion and vitality	and education.
To support access to education and training	<p>Taking the above into account, existing PDR are judged to have mixed effects. Although the scale of small cell systems is limited, they play a crucial role in upgrading digital networks, particularly in urban areas. For example, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre. The risk of visual clutter is judged to be very minor, due to the limited scale of individual development. Therefore, significant positive effects (including a negligible effect in relation to visual clutter) are identified.</p> <p>Extending existing PDR to Conservation Areas will remove the requirement for planning permission in Conservation Areas, resulting in greater positive effects. The risk of visual clutter remains minor. Therefore, mixed significant positive effects are identified.</p>

Equipment housing cabinets (ground-based)

Assessment table 1

	No change in PDR											Extend existing PDR to designated areas (for ground based equipment housing which is not ancillary to ground based masts, telegraph poles and overhead lines)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>																							
To avoid significant adverse effects	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?

	No change in PDR											Extend existing PDR to designated areas (for ground based equipment housing which is not ancillary to ground based masts, telegraph poles and overhead lines)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
on air quality, particularly where air quality is a known issue through the designation of AQMA																							
To improve air quality	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



	No change in PDR											Extend existing PDR to designated areas (for ground based equipment housing which is not ancillary to ground based masts, telegraph poles and overhead lines)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	+	+	0?	0?	0?	0?	0?	0	0?	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	

	No change in PDR											Extend existing PDR to designated areas (for ground based equipment housing which is not ancillary to ground based masts, telegraph poles and overhead lines)										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To enhance landscape quality	0?	0?	+	+	0?	0?	0?	0?	0	0?	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	
<b>Material assets</b>																						
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Economy</b>																						
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	++	++	++	++	++	++	++	++	++	++	++	
To support rural development	+	+	+	+	+	+	+	+	+	+	++	++	++	++	++	++	++	++	++	++	++	
To support smarter resourcing of the planning system	0	0	0	0	-	0	0	0	0	0	0	++	++	++	++	++	++	++	++	++	++	
<b>Social, population and human health</b>																						

	No change in PDR											Extend existing PDR to designated areas (for ground based equipment housing which is not ancillary to ground based masts, telegraph poles and overhead lines)										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support access to education and training	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Assessment Table 2

	Allow greater size/volume in designated and non-designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To improve air quality	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0

	Allow greater size/volume in designated and non-designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?
To enhance landscape quality	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+

	Allow greater size/volume in designated and non-designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To enhance material assets	+?	+?	+?	+	+	+	+	+	+	+	+
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	++	++	++	++	++	++	++	++	++	++	++
To support rural development	++	++	++	++	++	++	++	++	++	++	++
To support smarter resourcing of the planning system	0	0	0	0	++	0	0	0	0	0	0
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	+	+	+	+	+	+	+	+	+	+	++
To support access to education and training	+	+	+	+	+	+	+	+	+	+	++

### Justification of scores

Equipment housing cabinets (ground based)	Justification of scores
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SA Objectives	Narrative/justification
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	The construction of ground-based equipment housing cabinets is unlikely to have direct impacts on habitats and species. In relation to an existing operational site, such apparatus is likely to have a small environmental impact. Adverse impacts could occur, resulting from direct physical disturbance to local wildlife such as nesting birds.
To enhance biodiversity	<p>Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.</p> <p>Following from this, a negligible effect is identified for this SA objective, reflecting the small footprint of equipment housing cabinets and their role as ancillary apparatus to existing operational sites. However, this effect is uncertain depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area being developed.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect positive effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	Taking the above into account, existing PDR and each proposed change to PDR are judged to be minor due to the limited footprint of ground-based equipment housing. However, there is not yet much certainty as to how they will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect positive effects of increased connectivity reducing the need to the travel, with associated positive effects for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	The effects of existing PDR and each proposed change to PDR are judged to be minor due to the limited footprint of ground-based equipment housing. However, there is not yet much certainty as to how they will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of ground-based equipment housing will not directly influence the quality and quantity of watercourses and waterbodies due to their small footprint. Therefore, a negligible effect is identified.
To avoid and reduce flood risk	It is assumed that the development of ground-based equipment housing will not directly influence flood risk due to their small size and their position within the curtilage of dwellings. Therefore, a negligible effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of ground-based equipment will not directly influence the quality of soil resources due to their limited footprint. Therefore, a negligible effect is identified for this SA objective.

Equipment housing cabinets (ground based)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To reduce vacant and derelict land/buildings and contaminated land	It is assumed that the development of small cell systems will not directly contribute towards reducing vacant land and buildings due to their limited footprint. Therefore, a negligible effect is identified for this SA objective.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of equipment housing cabinets on cultural heritage include adverse effects on heritage assets and their settings. Principally, there is the risk of visual clutter.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Under existing PDR, additional restrictions apply in designated areas i.e. PDR apply if the alteration or replacement of ground-based equipment housing would not be larger than what exists, is in substantially the same location and does not increase the numbers of items of apparatus. Therefore, the additional restrictions imposed on PDR for equipment housing cabinets ensure consideration of cultural heritage impacts through the planning process in designated areas. As such, minor positive effects are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites, and the setting of a Scheduled Monument. Negligible effects are also identified in relation to non-designated areas or areas that are not designated for their heritage assets, mainly due to their lower sensitivity.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. Each proposed change to PDR is likely to have an adverse effect on cultural heritage resources and their settings, particularly if equipment housing is sited in a sensitive location i.e. Conservation Area within an urban area. The potential for significant negative effects on setting are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments. Direct effects on the integrity of designated and undesignated resources could affect Conservation Areas, Historic Gardens and Designed Landscapes, and historic battlefields. It is likely that extending PDR for equipment housing would result in potential impacts on undesignated historic buildings and their settings. This effect is considered to be minor negative.</p> <p>Neutral effects are identified for Listed Buildings in relation to each alternative, because direct effects on these resources would be identified and addressed through the existing consent regime.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Landscape effects resulting from ground-based equipment housing mainly include visual clutter.
To enhance landscape quality	<p>Existing PDR do not apply in designated areas including National Parks and National Scenic Areas. This ensures consideration of landscape and diversity impacts through the planning process in these areas, resulting in minor positive effects.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. As a result, the proposed changes to PDR are likely to have an adverse effect on National Scenic Areas, National Parks and other protected landscapes because of potential direct impacts on the landscape qualities of these areas and their national significance. It is judged that there is the potential for significant negative effects, reflecting the considerable size of equipment housing in relation to sensitive areas. For example, an equipment housing cabinet of just under 30 cubic metres (just under half the volume of a shipping container), which is currently classified as permitted development, could have the potential to have significant negative effects on landscape quality. Minor negative effects have been identified in relation to non-designated areas.</p> <p>The significance of these effects is uncertain depending on the nature/sensitivity of the surrounding landscape and the siting/scale of proposed</p>



Equipment housing cabinets (ground based)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>development.</p> <p>Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	The development of ground-based equipment housing could have indirect positive effects on this SA objective through promoting digital opportunities, resulting in lower rates of waste generation compared to traditional communication systems e.g. paper-based communication. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To enhance material assets	These effects may occur under existing PDR and extending PDR, although they are judged to be minor due to the limited scale and extent of ground-based equipment housing. However, there is not yet much certainty as to how ground-based equipment housing will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The deployment of equipment housing cabinets is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. As ancillary apparatus, ground-based equipment housing is likely to underpin Scotland's digital economy through improvements to coverage, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and increase the communication for transfer of business, shopping, entertainment and related services.
To support rural development	<p>These positive effects may occur under existing PDR. Although the scale of antenna systems is limited, they could have the potential to generate economic benefits. As ancillary apparatus, equipment housing and other associated IT equipment plays an important part in the provision of digital connectivity. Therefore, minor positive effects are identified.</p> <p>Each proposed change to PDR will increase the area over which potential effects may occur, resulting in greater positive effects. This is because equipment housing is a crucial part of telecoms systems which support economic activity. For instance, extending PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre, as additional capacity is generally needed in urban areas due to the high number of users, additionally enhanced digital communications services can also be particularly important in rural areas– resulting in the potential for significant positive effects.</p>
To support smarter resourcing of the planning system	<p>It is assumed that equipment housing will mostly be associated with apparatus used in dense urban areas to add capacity, resulting in a high number of planning applications. As a result, there is the risk that there would be a high number of applications needed in city centres. Existing PDR avoid these risks outside designated areas. However, large parts of city, town and village centres are likely to be designated Conservation Areas. PDR currently do not apply in Conservation Areas and other designated areas, resulting in minor negative effects.</p> <p>Each proposed change to PDR will relax the conditions under which development is classified as permitted development, extending PDR to designated areas including Conservation Areas. This would have significant positive effects on supporting smarter resourcing of the planning system.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and	One of the principal impacts of equipment housing cabinets on this SA objective is the risk of visual clutter and adverse effects on enjoyment and use of

Equipment housing cabinets (ground based)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
quality of life	<p>neighbouring property. On the other hand, equipment housing could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities. Telecommunication services play an important role in people's lives as essential household utilities. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as a wide range of public services and more private services such as smart meters. As a result, increased digital communication plays an important role in supporting community vitality, education, training and education.</p> <p>Taking the above into account, existing PDR are judged to have mixed effects. Although the scale of ground based equipment housing is limited, they play an important role in upgrading digital networks, particularly in urban areas. For example, PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre. The risk of visual clutter is judged to be minor in relation to local amenity and enjoyment of neighbouring properties. Therefore, minor positive effects (but with a negligible effect in relation to visual clutter) are identified.</p> <p>Each proposed change to PDR will relax the conditions under which permitted developments apply, resulting in further positive effects. The risk of visual clutter remains very minor. Therefore, it is judged that extending PDR could have the potential to have minor positive effects on this SA objective.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	
To support access to education and training	

## Equipment housing on buildings

### Assessment table

	No change in PDR											Extend existing PDR to designated areas											Allow greater size/volume in designated and non-designated areas																
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument						
<b>Biodiversity, flora and fauna</b>																																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?

	No change in PDR											Extend existing PDR to designated areas											Allow greater size/volume in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																																		
To avoid increasing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>																																		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To improve air quality	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Water</b>																																		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																																		

	No change in PDR											Extend existing PDR to designated areas											Allow greater size/volume in designated and non-designated areas										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designed landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																																	
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	0?	0?	0?	+?	+?	+?	+?	0?	0	+?	-?	-?	-?	-?	--?	--?	--?	--?	-?	-?	--?	-?	-?	-?	-?	--?	--?	--?	-?	0	--?	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+?	+?	+?	+?	0?	0	+?	-?	-?	-?	-?	--?	--?	--?	--?	-?	-?	--?	-?	-?	-?	--?	--?	--?	-?	0	--?		
<b>Landscape and geodiversity</b>																																	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0?	0?	+?	+?	0?	0?	0?	0?	0?	0	0?	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	-?	-?	-?	--?	--?	-?	-?	-?	-?	0	-?
To enhance landscape quality	0?	0?	+?	+?	0?	0?	0?	0?	0?	0	0?	-?	-?	--?	--?	-?	-?	-?	-?	-?	0	-?	-?	-?	-?	--?	--?	-?	-?	-?	-?	0	-?
<b>Material assets</b>																																	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To enhance material assets	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?



SA Objectives	Narrative/justification
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	The construction of equipment housing on buildings is unlikely to have direct impacts on habitats and species. In relation to an existing operational site, such apparatus is likely to have a small environmental impact. Adverse impacts could occur if development is sited insensitively, resulting in direct physical disturbance to local wildlife such as nesting birds.
To enhance biodiversity	<p>Where there are PDR for a development which is likely to have a significant effect on the Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.</p> <p>Following from this, a negligible effect is identified for this SA objective, reflecting the small footprint of equipment housing and their role as ancillary apparatus to existing operational sites. However, this effect is uncertain depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area being developed.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect positive effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	Taking the above into account, existing PDR and each proposed change to PDR are judged to be minor due to the limited footprint of equipment housing. However, there is not yet much certainty as to how they will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect positive effects of increased connectivity reducing the need to travel, with associated positive effects for air quality.
To improve air quality	The effects of existing PDR and each proposed change to PDR are judged to be minor due to the limited footprint of equipment housing. However, there is not yet much certainty as to how they will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of equipment housing will not directly influence the quality and quantity of watercourses and waterbodies due to their small footprint. Therefore, a negligible effect is identified.
To avoid and reduce flood risk	It is assumed that the development of equipment housing will not directly influence flood risk due to their small size. Therefore, a negligible effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of equipment housing will not directly influence the quality of soil resources due to their limited footprint. Therefore, a negligible effect is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land	It is assumed that the development of equipment housing will not directly contribute towards reducing vacant land and buildings due to their limited footprint. Therefore, a negligible effect is identified for this SA objective.

Equipment housing on buildings	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of equipment housing on cultural heritage include adverse effects on heritage assets and their settings. Principally, there is the risk of visual clutter and potential physical damage to historic buildings and structures resulting from the installation of equipment housing.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Under existing PDR, additional restrictions apply in designated areas i.e. PDR apply if the alteration or replacement of equipment housing would not be larger than what exists, is in substantially the same location and does not increase the numbers of items of apparatus. Therefore, the additional restrictions imposed on PDR for equipment housing ensure consideration of cultural heritage impacts through the planning process in designated areas, resulting in minor positive effects. Negligible effects are also identified in relation to non-designated areas or areas that are not designated for their heritage assets, mainly due to their lower sensitivity.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. Each proposed change to PDR is likely to have an adverse effect on cultural heritage resources and their settings, particularly if equipment housing is sited in a sensitive location i.e. Conservation Area within an urban area. Significant adverse effects on setting resulting from equipment housing on buildings are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments and Listed Buildings. Direct effects on the integrity of designated and undesignated resources could affect Conservation Areas, Historic Gardens and Designed Landscapes, and historic battlefields. It is likely that extending PDR for equipment housing would result in potential impacts on undesignated historic buildings and their settings. This effect is considered to be minor negative.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Landscape effects resulting from equipment housing mainly include visual clutter.
To enhance landscape quality	<p>Existing PDR do not apply in designated areas including National Parks and National Scenic Areas. This ensures consideration of landscape and geodiversity impacts through the planning system in these areas, resulting in minor positive effects. However, adverse effects may also occur in areas of wild land or rural areas, and at the edge of protected areas. These effects are likely to be small in scale due to the limited footprint and size of equipment housing. These effects are judged to be negligible due to the limited footprint of equipment housing.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which potential effects may occur. As a result, the proposed changes to PDR are likely to have an adverse effect on National Scenic Areas, National Parks and other protected landscapes because of potential direct impacts on the landscape qualities of these areas and their national significance. It is judged that there is the potential for significant negative effects, reflecting the considerable size of equipment housing in relation to sensitive areas. For example, an equipment housing of just under 30 cubic metres (just under half the volume of a shipping container), which is currently classified as permitted development, could have the potential to have significant negative effects on landscape quality. Minor negative effects have been identified in relation to non-designated areas. However, based on the assumption that most developments will look to utilise existing sites, this would reduce this effect and minor negative but uncertain effects are identified depending on the nature/sensitivity of the surrounding landscape and the siting/scale of proposed development.</p> <p>Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime.</p>
<b>Material assets</b>	



Equipment housing on buildings	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	The development of equipment housing on buildings could have indirect positive effects on this SA objective through promoting digital opportunities, resulting in lower rates of waste generation compared to paper-based communication.
To enhance material assets	These effects may occur under existing PDR and extending PDR, although they are judged to be minor due to the limited scale and extent of equipment housing. However, there is not yet much certainty about the extent to which equipment housing will be deployed in the future. Therefore, uncertain minor positive effects are identified for this SA objective.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The deployment of equipment housing on buildings is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. As ancillary apparatus, equipment housing is likely to underpin Scotland's digital economy through improvements to coverage, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and support business, shopping, entertainment and related services.
To support rural development	<p>These positive effects may occur under existing PDR. Although the scale of equipment housing on buildings is limited, they could have the potential to generate economic benefits as ancillary apparatus, equipment housing and other associated IT equipment plays an important part in the provision of digital connectivity. Therefore, minor positive effects are identified. Effects in rural areas are uncertain due to the associated greater benefits in urban areas.</p> <p>Each proposed change to PDR will increase the area over which potential effects may occur, resulting in additional positive effects. This is because equipment housing on buildings is a crucial part of telecoms systems which support economic activity. For instance, extending PDR in Conservation Areas in large cities such as Edinburgh could support economic activity across large parts of the city centre, as additional capacity is generally needed in urban areas due to the high number of users – resulting in the potential for significant positive effects. Effects in rural areas are uncertain due to the associated greater benefits in urban areas.</p>
To support smarter resourcing of the planning system	<p>It is assumed that equipment housing will mostly be associated with apparatus used in dense urban areas to add capacity, resulting in a high number of planning applications. As a result, there is the risk that there could be a greater number of applications needed in city centres with associated impacts on the planning system. Existing PDR avoid these risks outside designated areas. However, large parts of city, town and village centres are likely to be designated Conservation Areas. PDR currently do not apply in Conservation Areas and other designated areas, resulting in minor negative effects.</p> <p>Each proposed change to PDR will reduce the number of planning applications in designated areas and non-designated areas including Conservation Areas. This would have significant positive effects on supporting smarter resourcing of the planning system.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	One of the principal impacts of equipment housing on this SA objective is the risk of visual clutter and adverse effects on enjoyment and use of neighbouring property. On the other hand, equipment housing could help to underpin digital connectivity, resulting in beneficial effects on quality of life and local communities. Telecommunication services play an important role in people's lives as essential household utilities. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as a wide range of public services and more private services such as smart meters. As a result, increased digital communication plays an important role in supporting community vitality, education, training and education.
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	Taking the above into account, existing PDR are judged to have mixed effects. Although the scale of individual equipment housing is limited, they play a



Equipment housing on buildings	Justification of scores
SA Objectives	Narrative/justification
To support access to education and training	<p>crucial role in upgrading digital networks, particularly in urban areas. For example, PDR in CAs in large cities such as Edinburgh could support economic activity across large parts of the city centre. The risk of visual clutter is judged to be minor in relation to local amenity and enjoyment of neighbouring properties. Therefore, minor positive effects (including a negligible effect in relation to visual clutter) are identified.</p> <p>Each proposed change to PDR will relax the conditions under which permitted developments apply, resulting in greater positive effects. The risk of visual clutter remains very minor. Therefore, it is judged that extending PDR could have the potential to have significant positive effects on this SA objective.</p>

Other apparatus on buildings

Assessment table

	No change in PDR											Extend existing PDR into designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To enhance biodiversity	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>																							

	No change in PDR											Extend existing PDR into designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To improve air quality	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	No change in PDR											Extend existing PDR into designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
best & most versatile agricultural land																							
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	0?	0?	0?	+	+	+	+	0?	0	+	0?	0?	0?	0?	-?	-?	-?	-?	0?	0	-?	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	0?	0?	0?	-?	-?	-?	-?	0?	0	-?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity	0?	0?	+	+	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	

	No change in PDR											Extend existing PDR into designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
and all landscapes																							
To enhance landscape quality	0?	0?	+	+	0?	0?	0?	0?	0?	0	0?	0?	0?	-?	-?	0?	0?	0?	0?	0?	0	0?	
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+

	No change in PDR											Extend existing PDR into designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
planning system																							
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To support community cohesion and vitality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support access to education and training	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

## Justification of scores

Other apparatus on buildings	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	The construction of ancillary apparatus is unlikely to have direct impacts on habitats and species. This is because ancillary apparatus is often associated with rooftop sites in urban areas, resulting in very small effects on local biodiversity. Adverse impacts could occur if development is sited insensitively, resulting in direct physical disturbance to local wildlife such as nesting birds. The risk of these impacts is judged to be very low.
To enhance biodiversity	<p>Where there are PDR for a development which is likely to have a significant effect on the Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.</p> <p>Overall, <b>negligible</b> effects have been identified for this SA objective. However, these effects are <b>uncertain</b> depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area being developed.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	An improved digital network provides indirect <b>positive</b> effects on avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	<p><b>Existing PDR and extending existing PDR into designated areas</b> are judged to be minor due to the limited footprint of apparatus such as fencing and ladders on buildings. The significance of these effects is <b>uncertain</b>, as the scale of future development is unknown.</p>
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The effects of an improved digital network include indirect <b>positive</b> effects of increased connectivity reducing the need to travel, with associated positive effects for air quality.
To improve air quality	The effects of <b>existing PDR and extending existing PDR into designated areas</b> are judged to be minor due to the limited footprint of ancillary apparatus. The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown. Therefore, <b>uncertain minor positive</b> effects are identified for this SA objective.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of ancillary on buildings will not directly influence the quality and quantity of watercourses and waterbodies due to their small footprint and their position on buildings. Therefore, a <b>negligible effect</b> is identified.
To avoid and reduce flood risk	It is assumed that the development of ancillary apparatus on buildings will not directly influence flood risk due to their small size and their position on buildings. Therefore, a <b>negligible effect</b> is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon	It is assumed that the development of other apparatus on buildings will not directly influence the quality of soil resources due to their limited footprint and

Other apparatus on buildings	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
soils and best & most versatile agricultural land	their position on buildings. Therefore, a <b>negligible effect</b> is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land	It is assumed that the development of small cell systems will not directly contribute towards reducing vacant land and buildings due to their limited footprint and their position on buildings. Therefore, a <b>negligible effect</b> is identified for this SA objective.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of ancillary apparatus on cultural heritage include adverse effects on heritage assets and their settings. Principally, there is the risk of visual clutter and potential physical damage to historic buildings and structures resulting from the installation of other apparatus.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Under <b>existing PDR</b>, additional restrictions apply in designated areas i.e. PDR apply if the alteration or replacement of the apparatus would be the same or smaller than the existing apparatus in terms of size, dimensions and condition. Therefore, the additional restrictions imposed on PDR ensure consideration of cultural heritage impacts through the planning process in designated areas, resulting in <b>minor positive</b> effects. <b>Neutral</b> effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime. <b>Negligible</b> effects are also identified in relation to non-designated areas or areas that are not designated for their heritage assets, mainly due to their lower sensitivity.</p> <p><b>Extending existing PDR into designated areas</b> will increase the area over which potential effects may occur. Extending PDR is likely to have an adverse effect on the cultural heritage resources and their settings, depending on the siting and design of the apparatus. For instance, negative effects could occur if unsympathetic fencing around a mast or cabinets is located in a Conservation Areas . Therefore, <b>minor adverse</b> effects on setting are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments. Direct effects on the integrity of designated and undesignated resources could affect Conservation Areas, Historic Gardens and Designed Landscapes, and historic battlefields. Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime. <b>Minor negative</b> effects are identified in relation to non-designated areas or areas that are not designated for their heritage assets, depending on the method of attachment.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Landscape effects resulting from other apparatus on buildings mainly include visual clutter.
To enhance landscape quality	<p><b>Existing PDR</b> do not currently apply in designated areas including National Parks and National Scenic Areas, ensuring consideration of landscape and geodiversity impacts through the planning process in these areas. However, effects may occur in areas of wild land or rural areas and at the edge of protected areas, because PDR currently apply outside designated areas. However, these effects are likely to be <b>negligible</b> due to the limited footprint of ancillary apparatus.</p> <p><b>Extending existing PDR into designated areas</b> could have <b>negative</b> effects on landscape quality in designated areas including National Parks and National Scenic Areas. Although ancillary apparatus is likely to be associated with digital infrastructure deployed in urban areas, adverse effects could still occur if the appearance of the apparatus is out of keeping with the area in question. Potential impacts on landscape quality are judged to be <b>minor</b>, reflecting the potential localised effects associated with other apparatus. <b>Negligible</b> effects are identified in relation to non-designated areas and areas that are not specifically designated for landscape value, due to their lower sensitivity. However, these effects are <b>uncertain</b> depending on the nature/sensitivity of the surrounding landscape and the siting of proposed development.</p>



Other apparatus on buildings	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	The significance of these effects is <b>uncertain</b> depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	The development of ancillary apparatus on buildings could have indirect <b>positive</b> effects on this SA objective through promoting digital opportunities, resulting in lower rates of waste generation compared to paper-based communication.
To enhance material assets	These effects may occur under <b>existing PDR</b> and <b>extending existing PDR into designated areas</b> , although they are judged to be <b>minor</b> due to the limited scale and extent of ancillary apparatus. The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The deployment of ancillary apparatus on buildings is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. Ancillary apparatus is likely to underpin Scotland's digital economy through improvements to coverage, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and support business, shopping, entertainment and related services.
To support rural development	These effects may occur under <b>existing PDR</b> and <b>extending existing PDR into designated areas</b> . They are judged to be <b>minor</b> , because of the indirect benefits other apparatus provides in relation to supporting the rollout of 5G networks. The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown.
To support smarter resourcing of the planning system	It is assumed that other apparatus will mostly be associated with the rollout of digital communication networks in dense urban areas to add capacity, resulting in a high number of planning applications. As a result, there is the risk that the number of applications needed in city centres could have a greater impact on the planning system. <b>Existing PDR</b> avoid these risks outside designated areas. However, large parts of city, town and village centres are likely to be designated Conservation Areas. PDR currently do not apply in Conservation Areas and other designated areas, resulting in <b>minor negative</b> effects.  <b>Each proposed change to PDR</b> will relax the conditions under which development is classified as permitted development, extending PDR to designated areas including Conservation Areas. This would have positive effects on supporting smarter resourcing of the planning system. As a result, it is judged that there is the potential for <b>minor positive</b> effects.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	One of the principal impacts of ancillary apparatus on buildings on this SA objective is the risk of visual intrusion and visual clutter. On the other hand, relaxations will allow operators to provide improved services from existing sites which could have the potential to support communities. A recent report by Ofcom confirms that consumers perceive telecommunication services as essential household utilities. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as emergency services, healthcare services and a wide range of public services. Support apparatus is an essential component of a radio base station, so without them a system cannot work and communities would receive no services.
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	Taking the above into account, these mixed effects may occur under <b>existing PDR</b> , although these effects are judged to be <b>minor</b> , reflecting the indirect

Other apparatus on buildings	Justification of scores
SA Objectives	Narrative/justification
To support access to education and training	<p>benefits other apparatus provides in relation to supporting the rollout of 5G networks. <b>Extending PDR to designated areas</b> increases the area over which the effects may occur, with the potential for greater effects. However, the effects are judged to remain <b>minor</b> due to the ancillary function other apparatus fulfils in relation to wider digital communication networks.</p> <p>Overall, <b>mixed minor negative and minor positive</b> effects are identified depending on the siting of the proposed development and the sensitivity of the wider environment. The significance of these effects is <b>uncertain</b>, as there is not yet much certainty as to how equipment housing will be deployed in the future.</p>

## Underground development

### Assessment table

	No change in PDR											Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines and ground based masts)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	-?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To enhance biodiversity	-?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
<b>Climatic factors</b>																							

	No change in PDR											Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines and ground based masts)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>																							

	No change in PDR											Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines and ground based masts)										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																						
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																						
To avoid adverse effects on	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?

	No change in PDR											Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines and ground based masts)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
designated and undesignated heritage assets and their settings																							
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	0?	0?	0?	+	+	+	+	0?	0	+	-?	-?	-?	-?	--?	--?	--?	--?	-?	0	--?	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>																							
To avoid adversely impacting on material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	No change in PDR											Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines and ground based masts)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
through the loss of resources such as soil or the generation of waste																							
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	No change in PDR											Extend existing PDR to designated areas (for underground development which is not ancillary to changes to existing telegraph poles, overhead lines and ground based masts)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
health and quality of life																							
To improve the health and living environment of people and communities including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support access to education and training	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

**Justification of scores**

Underground development	Justification of scores
SA Objectives	Narrative/justification
Biodiversity, flora and fauna	

Underground development	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid adverse effects on all habitats and species	It is assumed that underground development are unlikely to directly influence habitats and species due to their limited footprint. However, direct impacts could occur if underground development requires a trench to be dug over a long distance.
To enhance biodiversity	<p>Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites. In addition, PDR apply to European Sites or SSSI, the requirement for EIA would ensure the consideration of potential negative effects.</p> <p>Overall, a <b>minor negative effect</b> is identified for this SA objective. However, this effect is <b>uncertain</b> depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area being developed. <b>Minor positive</b> effects have been identified in relation to <b>existing PDR</b> in designated areas, as PDR currently do not apply in these areas – ensuring consideration of biodiversity impacts through the planning process in these areas.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Underground development provides indirect <b>positive</b> effects on this SA objective through the ancillary function underground feeder and power cables fulfil to digital communications infrastructure. In turn, an improved digital network provides indirect positive help towards avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change in the country.
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	Taking the above into account, <b>existing PDR</b> and <b>extending existing PDR to designated areas</b> are judged to be <b>minor</b> due to the limited footprint of underground development. The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Underground development provides indirect <b>positive</b> effects on this SA objective through the ancillary function underground feeder and power cables fulfil to digital communications infrastructure. In turn, an improved digital network promotes increased connectivity reducing the need to the travel, with associated positive effects for air quality.
To improve air quality	Taking the above into account, the effects of <b>existing PDR</b> and <b>extending existing PDR to designated areas</b> are judged to be <b>minor</b> due to the limited footprint of underground development. The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The effects of underground development include <b>adverse</b> changes to drainage patterns under <b>current PDR</b> and <b>extending existing PDR into designated areas</b> , although these effects are judged to be <b>minor</b> due to the localised scale and nature of impacts associated with underground development. However, these effects are <b>uncertain</b> given that the impacts strongly depend on the local geo-hydrological conditions, as well as the scale and extent of the proposed development.
To avoid and reduce flood risk	It is assumed that underground development will not directly influence flood risk. Therefore, a <b>negligible</b> effect is identified for this SA objective.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon	The effects of underground development include <b>adverse</b> changes to soil quality/composition resulting from physical disturbances caused by digging,



Underground development	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
soils and best & most versatile agricultural land	<p>although these effects are judged to be <b>minor</b>. However, these effects are <b>uncertain</b> given that the impacts strongly depend on the soil quality and composition of the site, as well as the scale and extent of the proposed development.</p> <p>If PDR apply to European Sites or SSSI, the requirement for EIA would ensure the consideration of potential negative effects.</p>
To reduce vacant and derelict land/buildings and contaminated land	It is assumed that underground development will not have a direct impact on reducing the amount of vacant and derelict land. Therefore, a <b>negligible effect</b> is identified for this SA objective for <b>existing PDR</b> and the <b>other individual proposed changes</b> .
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of underground development on this SA objective include adverse effects on heritage assets. Principally, there is the risk of direct physical impacts on buried archaeological assets. For instance, Conservation Areas, World Heritage Sites, and Historic Gardens and Designed Landscapes often contain important archaeological remains, particularly Conservation Areas in town centre locations. Historic battlefields are also known to contain archaeological evidence and remains, reflecting the historic significance and archaeological potential of these sites.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Existing PDR currently do not apply in designated areas, resulting in <b>minor positive</b> effects in terms of avoiding adverse effects on heritage assets and their settings. <b>Neutral</b> effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime. A <b>negligible</b> effect is identified in relation to non-designated areas or designated areas out with these areas due to their lower sensitivity, although there is the potential for impacts on undiscovered archaeological resources.</p> <p><b>Extending existing PDR into designated areas</b> will remove the need to apply for planning permission and increases the area over which potential effects may occur. Each proposed change to PDR is likely to have an adverse effect on the cultural heritage resources due to potential physical damage to below ground archaeology. Therefore, <b>significant adverse</b> effects are identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments. Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime. <b>Minor negative</b> effects are identified in relation to non-designated areas or areas that are not designated for their heritage assets, mainly due to their lower sensitivity.</p> <p>The significance of the effects described above is <b>uncertain</b> depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	It is anticipated that underground development will have limited visual impacts due to their small scale and will therefore not directly impact on protected landscapes, wild land, geodiversity and all other landscapes. Overall, a <b>negligible effect</b> is identified for this SA objective.
To enhance landscape quality	It is assumed that underground development will not enhance landscape quality, but will not have adverse impacts on landscape quality either. Therefore, a <b>negligible effect</b> is identified for this SA objective.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	<b>Existing PDR</b> and <b>extending existing PDR into designated areas</b> for underground pipes will indirectly support digital connectivity, because underground development fulfils an ancillary role to components of digital communications systems such as equipment cabinets and radio masts. Increased digital connectivity associated with enhanced telecoms infrastructure is expected to result in lower rates of waste generation compared to paper-based communication, promoting the prudent use of resources. Therefore, the effects on this SA objective are judged to be <b>minor positive</b> . The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown.
To enhance material assets	

Underground development	Justification of scores
SA Objectives	Narrative/justification
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	Underground development is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016.
To support rural development	Underground development is likely to underpin Scotland's digital economy through improvements to coverage, particularly in more remote and peripheral locations. These network upgrades could improve the abilities of businesses to operate effectively in attracting inward investment and increase the communication for transfer of information for business, shopping, entertainment and related services. Additionally the replacement of copper wires with fibre optic provides benefits in terms of speed and reliability.  These effects may occur under <b>existing PDR</b> and <b>extending existing PDR into designated areas</b> . They are judged to be <b>minor</b> , because of the indirect benefits underground development provides in relation to supporting the rollout of 5G networks. The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown.
To support smarter resourcing of the planning system	It is assumed that other apparatus will mostly be associated with the rollout of digital communication networks in dense urban areas to add capacity, resulting in a high number of planning applications. As a result, there is the risk that there could be a high number of applications needed in city centres could impact on the planning system. <b>Existing PDR</b> avoid these risks outside designated areas. However, large parts of city, town and village centres are likely to be designated Conservation Areas and PDR currently do not apply in Conservation Areas and other designated areas, resulting in <b>minor negative</b> effects.  <b>Each proposed change to PDR</b> will relax the conditions under which development is classified as permitted development, extending PDR to designated areas including Conservation Areas. This would have positive effects on supporting smarter resourcing of the planning system. As a result, it is judged that there is the potential for <b>minor positive</b> effects.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	A recent report by Ofcom states that consumers perceive telecommunication services as essential household utilities. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as emergency services, healthcare services and a wide range of public services. As ancillary development to mobile networks, underground development is expected to result in positive effects. As such, positive effects may occur under <b>existing PDR</b> , although these effects are judged to be <b>minor</b> . <b>Extending PDR to designated areas</b> increases the area over which the effects may occur, with the potential for greater effects. However, the effects remain <b>minor</b> due to the limited footprint of development. The significance of these effects is <b>uncertain</b> , as the scale of future development is unknown.
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	
To support access to education and training	Underground development as a component of expanding digital connectivity will contribute indirectly to community cohesion and vitality and access to education and training. Therefore a <b>minor negative effect</b> is identified for this SA objective.



	No change in PDR											Extend existing PDR to designated areas											Allow increased length of track in designated and non-designated areas											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To improve air quality	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Water</b>																																		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To avoid and reduce flood risk	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
<b>Soil</b>																																		
To protect and avoid adverse effects on	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?

	No change in PDR										Extend existing PDR to designated areas										Allow increased length of track in designated and non-designated areas													
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
valuable soil resources, including carbon soils and best & most versatile agricultural land																																		
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Cultural heritage</b>																																		
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	0?	0?	0?	+	+	+	+	0?	0	+	0?	0?	0?	0?	--?	--?	--?	--?	0?	0	--?	0?	0?	0?	0?	0?	--?	--?	--?	--?	0?	0	--?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built	0?	0?	0?	0?	+	+	+	+	0?	0	+	0?	0?	0?	0?	--?	--?	--?	--?	0?	0	--?	0?	0?	0?	0?	0?	--?	--?	--?	--?	0?	0	--?



	No change in PDR										Extend existing PDR to designated areas										Allow increased length of track in designated and non-designated areas													
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To support and enhance opportunities for sustainable economic growth	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support rural development	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
To support smarter resourcing of the planning system	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	
<b>Social, population and human health</b>																																		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?		
To improve the health and living environment of people and communities including support for access,	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?	+?/- ?		

	No change in PDR										Extend existing PDR to designated areas										Allow increased length of track in designated and non-designated areas													
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
recreation and physical activity																																		
To support community cohesion and vitality	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support access to education and training	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?

### Justification of scores

New access tracks for ground based masts	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	Access tracks are generally required in rural areas and located adjacent to a road, where the optimum coverage can be delivered from a hilltop or hillside. It is judged that the development of new access tracks could have negative effects on local biodiversity, particularly if new access tracks are located in sensitive areas particularly SSSIs and European Sites (SPAs and SACs). In addition, new access tracks could also interrupt surface water flows and habitats that depend on them.
To enhance biodiversity	Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites.  Existing PDR do not apply in designated areas. This ensures greater consideration of these issues of planning applications in these areas, resulting in minor positive effects. Adverse effects are identified, reflecting the continued erosion and fragmentation that may result from the construction of new



New access tracks for ground based masts	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>access tracks, however these are judged to be negligible.</p> <p>Extending existing PDR to designated areas and allowing increased length in all areas will remove the need to apply for planning permission and/or increases the area over which effects may occur. If the permitted length of tracks is increased, greater adverse effects may occur – potentially resulting in minor negative effects depending on the location of the works, potential pathways to designated sites or the biodiversity value of the area.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	New access tracks provide indirect positive effects on this SA objective through the ancillary function they fulfil to digital communications infrastructure. In turn, an improved digital network provides indirect positive help towards avoiding greenhouse gas emissions through increased connectivity, reducing the need to travel. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	However, new access tracks could potentially impact on high carbon soils found in many upland areas, resulting in the release of greenhouse gases that may result from the construction of the tracks. The significance of these effects is uncertain, as the scale of future development is unknown. However overall minor positive effects are identified in relation to this SA objective.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	New access tracks provide indirect positive effects on this SA objective through the ancillary function they fulfil to digital communications infrastructure. In turn, an improved digital network promotes increased connectivity reducing the need to travel, with associated positive effects for air quality. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on air quality.
To improve air quality	Given that the extension of current PDR relating to underground development would have a limited effect on this SA objective, the mixed effects associated with existing PDR and extending existing PDR to designated areas are judged to be minor. The significance of these effects is uncertain, as the scale of future development is unknown.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The effects of new access tracks include adverse changes to drainage patterns under current PDR and extending existing PDR into designated areas, although these effects are judged to be minor depending on the scale of development which comes forward. The significance of the effect also depends on the conditions at the relevant development sites.
To avoid and reduce flood risk	The construction of new access tracks could increase the area of impermeable surface, increasing local flood risk. A minor negative effect is identified, reflecting the limited footprint of access tracks. However, the significance of this effect is uncertain depending on the construction materials used, the micro-siting of the development and the sensitivity of the wider landscape.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p>The effects of new access tracks include adverse changes to soil quality/composition resulting from physical disturbances caused by digging, particularly in relation to more fragile soils such as upland soils. The potential effects on this SA objective are judged to be minor. However, the significance of these effects is uncertain as the impacts strongly depend on the soil quality and composition of the site, as well as the scale and extent of the proposed development.</p> <p>If PDR apply to European Sites or SSSI, the requirement for EIA would ensure the consideration of potential negative effects.</p>

New access tracks for ground based masts	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To reduce vacant and derelict land/buildings and contaminated land	It is assumed that access tracks will not have any relevance in relation to reducing the amount of vacant and derelict land. Therefore, a negligible effect is identified for this SA objective for existing PDR and the extending existing PDR into designated areas.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of new access tracks on this SA objective include adverse effects on heritage assets. Principally, there is the risk of visual impacts and direct impacts on buried archaeological assets.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Current PDR do not apply in designated areas. This ensures consideration of cultural heritage issues through planning applications in areas designated for their archaeological and historic importance, resulting in minor positive effects in terms of avoiding adverse effects on heritage assets and their settings. Furthermore the limited length of tracks permitted outside designated areas means that the scope for damage and loss to historic assets (above and below ground) and wider historic landscapes is limited. A neutral effect is identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime. A negligible effect is identified in relation to non-designated areas or designated areas out with these areas due to the lower sensitivity.</p> <p>Extending PDR to designated areas will increase the area over which potential effects may occur, with the potential for greater negative effects. As such, significant negative effects have been identified in relation to Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, World Heritage Sites and the setting of Scheduled Monuments due to the archaeological and historic importance of these areas. Minor negative effects are identified in relation to non-designated areas or areas that are not designated for their heritage assets.</p> <p>The impacts associated with allowing greater length in all areas would be proportionally greater, depending on the maximum length permitted. As such significant negative effects are identified in relation to both designated and non-designated areas, reflecting the potential for adverse impacts. For both options, neutral effects have been identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime. The significance of these effects is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development.</p> <p>For all options, neutral effects are identified for Listed Buildings,, because direct effects on these resources would be identified and addressed through the existing consent regime. The significance of the effects described above is uncertain depending on the sensitivity of the wider environment, as well as the siting/scale of proposed development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Effects of new access tracks include the risk of adverse visual impacts. Landscape effects from new access tracks include the introduction of unnatural shapes and features into the landscape. Construction could result in impacts on important rocks, fossils, landforms, soils and land forming processes. Landscape impacts may also relate to the wider impacts on the setting of cultural heritage resources. In more rural and open landscapes access tracks may be seen over long distances. New access tracks can introduce features which provide a scale indicator which influences the sense of space in a landscape and introduce built features into a rural landscape which typically has lower levels of human influence. In sensitive landscapes such as National Scenic Areas or National Parks key areas where impacts would be greater include views from visitor attractions, scenic viewpoints and views from roads.
To enhance landscape quality	<p>Existing PDR do not apply in designated areas. This ensures consideration of landscape and geodiversity impacts through the planning system in these areas, resulting in minor positive effects. However, effects may occur in areas of wild land or rural areas, and at the edge of protected areas, resulting in minor negative effects due to the lower sensitivity of these areas.</p> <p>Extending existing PDR to designated areas would increase the area over which potential effects may occur. Significant negative effects have been</p>

New access tracks for ground based masts	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>identified in relation to National Parks and National Scenic Areas, because of potential direct impacts on the landscape qualities of these areas and their national importance. Minor negative effects have been identified in relation to non-designated areas or areas that are not designated for their landscape value.</p> <p>The effects associated with allowing greater length in all areas are proportionally greater. As such, minor negative effects have been identified in relation to non-designated areas and significant negative effects have been identified for designated areas</p> <p>The significance of these effects is uncertain depending on the sensitivity of the surrounding landscape, siting/scale of proposed development and local factors such as the existing vegetation cover and topography. Neutral effects are identified for Listed Buildings, because direct effects on these resources would be identified and addressed through the existing consent regime.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	Existing PDR and extending existing PDR into designated areas for new access tracks will indirectly support digital connectivity, because access tracks fulfil an ancillary role to components of digital communications systems such as equipment cabinets and radio masts. Increased digital connectivity associated with enhanced telecoms infrastructure is expected to result in lower rates of waste generation compared to paper-based communication, promoting the prudent use of resources. Therefore, the effects on this SA objective are judged to be minor positive.
To enhance material assets	
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The construction of new access tracks is likely to have indirect positive effects on this SA objective through the provision of enhanced digital communication services for businesses, particularly in rural and peripheral areas. Digital communication infrastructure plays an important role in the UK economy. According to a recent report by Ofcom, the total UK communications revenues generated by telecoms, TV and radio amounted to just over £50bn in 2016. New access tracks are likely to underpin Scotland's digital economy through improvements to coverage, particularly in more remote and peripheral locations. These network upgrades, in turn, could improve the abilities of businesses to operate effectively in attracting inward investment and support business, shopping, entertainment and related services.
To support rural development	
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under each of the proposed changes to PDR. The volume of applications is expected to be low, reflecting the limited scale and extent of future development. The significance of this effect is uncertain due to a lack of data on the number of planning applications.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	One of the principal impacts of new access tracks on this SA objective is the risk of visual intrusion and landscape effects, particularly in rural and remote areas where new access tracks are likely to be deployed, with minor negative effects. On the other hand, relaxations of PDR for new access tracks will allow operators to provide improved services from existing sites which could have the potential to support local communities, with minor positive effects. A recent report by Ofcom confirms that consumers perceive telecommunication services as essential household utilities. As well as being relied upon by consumers and business, mobile connectivity also underpins other crucial services such as emergency services, healthcare services and a wide range of public services.
To improve the health and living environment of people and communities including support for access, recreation and physical activity	
To support community cohesion and vitality	
	These mixed effects may occur under existing PDR, although these effects are judged to be minor due to the limited footprint of underground

New access tracks for ground based masts	Justification of scores
SA Objectives	Narrative/justification
To support access to education and training	<p>development. Each proposed change to PDR increases the area over which the effects may occur, with the potential for greater effects. However, these effects are judged to remain minor due to the limited footprint of development. The significance of these effects is uncertain, as the scale of future development is unknown.</p> <p>As ancillary development to mobile networks, changes in PDR for access tracks have indirect minor positive effects on supporting community cohesion and vitality and supporting access to education and training.</p> <p>Overall, uncertain mixed minor negative and minor positive effects are identified depending on the siting of the proposed development and the sensitivity of the wider environment.</p>

## Town centre changes of use

### Shops

#### Assessment table and justification of scores

Shops	Loss of town centre shops	Gain of town centre shops
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Mixed effects depending on whether trade moves to out of town locations or is displaced by on-line retailing	Mixed effects – potential reductions if increase in shops supports town centre as focus for economic activity
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	Reductions in town centre activity could reduce vehicular emissions in some more polluted town centre locations but could increase emissions elsewhere	Increases in town centre activity could increase vehicular emissions in some more polluted town centre locations but could avoid emissions elsewhere
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect as a result of investment in new retail premises and possible positive effects on other town centre businesses
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacancies or changes in use of retail premises, particularly in historic town centres	Potential positive effects where existing retail premises are brought back into use. Neutral or possible negative effects where new retail premises are developed, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacancies or changes in use of retail premises, particularly in historic town centres	Potential positive effects where existing retail premises are brought back into use. Neutral or possible negative effects where new retail premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified

Shops	Loss of town centre shops	Gain of town centre shops
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and retail facilities and indirectly through knock on effects for footfall and town centre viability	Positive impact – directly through the provision of employment and retail facilities and indirectly through knock on effects for footfall and town centre viability
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Loss of town centre shops could reduce access, particularly for those dependent on public transport or walking. Disproportionate impact on elderly and those with poorer access to alternative on-line retailing.	Gains in town centre shops could improve access to retail facilities, particularly for those without access to private transport, the elderly and less mobile
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	Loss of town centre shops could reduce access, particularly for those dependent on public transport or walking. Disproportionate impact on elderly and those with poorer access to alternative on-line retailing.	Gains in town centre shops could improve access to retail facilities, particularly for those without access to private transport, the elderly and less mobile
To support community cohesion and vitality	Loss of shops could affect the vitality of the wider town centre with impacts on the role of centres in providing a focus for the wider community	New shops could enhance the vitality of the wider town centre and role of centres in providing a focus for the wider community
To support access to education and training	No effect identified	No effect identified

## Financial, professional and other services

### Assessment table and justification of scores

Financial, professional and other services	Loss of town centre financial, professional and other services	Gain of town centre financial, professional and other services
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Mixed effects depending on whether trade moves to out of town locations or is displaced by on-line services	Positive effects – potential reductions if increase in service provision supports town centre as focus for wider economic activity
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	Reductions in town centre activity could reduce vehicular emissions in some more polluted town centre locations, particularly if high street locations are replaced by on-line services	Increases in town centre activity could increase vehicular emissions in some more polluted town centre locations but would be lower than if services were provided in more peripheral locations
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect where town centre vacancies are reduced directly or as a result of increases in wider activity
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacancies or changes in use of premises previously occupied by services, particularly in historic town centres. Some traditional service (e.g. banks) activities have distinctive premises.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacancies or changes in use of premises previously occupied by services, particularly in historic town centres. Some traditional service (e.g. banks) activities have distinctive premises.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		



Financial, professional and other services	Loss of town centre financial, professional and other services	Gain of town centre financial, professional and other services
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and service provision and indirectly through knock on effects for footfall and town centre viability	Positive impact – directly through the provision of employment and services and indirectly through knock on effects for footfall and town centre viability
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Loss of town centre services could reduce access, particularly for those dependent on public transport or walking. Disproportionate impact on elderly and those with poorer access to alternative on-line services.	Gains in town centre shops could improve access to retail facilities, particularly for those without access to private transport, the elderly and less mobile
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	Loss of town centre services could reduce access, particularly for those dependent on public transport or walking. Disproportionate impact on elderly and those with poorer access to alternative on-line services.	Gains in town centre shops could improve access to retail facilities, particularly for those without access to private transport, the elderly and less mobile
To support community cohesion and vitality	Loss of services could affect the vitality of the wider town centre with impacts on the role of centres in providing a focus for the wider community	New services could enhance the vitality of the wider town centre and role of centres in providing a focus for the wider community
To support access to education and training	No effect identified	No effect identified



**Food and drink (including pubs)**

**Assessment table and justification of scores**

Food and drink	Loss of town centre food and drink provision	Gain of town centre food and drink provision
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	Increases in take-away provision could result in increases in litter, with minor negative impacts on species. Physical works to accommodate changes in use could disturb bird nesting or bat roosting sites, however these effects are covered by other legislation.
To enhance biodiversity	Loss of take-away provision could result in reductions in litter, with positive benefits for species	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Potential for increases in greenhouse gas emissions if food and drink provision moves to out of centre locations	Positive effects – potential reductions if increase in food and drink provision supports town centre as focus for wider economic activity
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	Reductions in town centre activity could reduce vehicular emissions in some more polluted town centre locations	Increases in town centre activity could increase vehicular emissions in some more polluted town centre locations but would be lower than if services were provided in more peripheral locations
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect where town centre vacancies are reduced directly or as a result of increases in wider activity
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacancies or changes in use of premises previously occupied by food and drink businesses, particularly in historic town centres.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres

Food and drink	Loss of town centre food and drink provision	Gain of town centre food and drink provision
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacancies or changes in use of premises previously occupied by food and drink businesses, particularly in historic town centres.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and food and drink provision and indirectly through knock on effects for footfall and town centre viability. This could be particularly significant where food and drink provision underpins town centres’ evening and night time economy. It could also affect town centres’ attractiveness as tourism and recreation destinations. This could have knock on effects on Scotland’s visitor economy.	Positive impact – directly through the new food and drink provision and indirectly through knock on effects for footfall and town centre viability, including during evening periods. It could also enhance town centres’ attractiveness as tourism and recreation destinations.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p>Loss of town centre services could reduce access, particularly for those dependent on public transport or walking.</p> <p>Loss of town centre food provision could reduce impacts associated with kitchen venting, storage and handling of food waste and food deliveries. This could have a positive effect on the living environment of neighbours.</p> <p>Reduced drink provision could result in reductions in night time noise and anti-social behaviour, with benefits for neighbours and the wider community.</p> <p>Loss of drinking establishments could result in important community focuses.</p> <p>Loss of take-away food provision could have positive effects on diet and health, and could result in an reduction in littering affecting people’s living environment.</p>	<p>Gains in town centre food and drink provision could improve access, particularly for those dependent on public transport or walking.</p> <p>Expanded food provision could require, for example, new kitchen extractor venting and facilities for storage and handling of food waste and additional food deliveries. This could impact on the living environment of neighbours.</p> <p>Expanded drink provision could result in increases in night time noise and anti-social behaviour, with impacts on the living environment of neighbours and the wider community.</p> <p>Expanded drink provision could help create a new focus for the community.</p> <p>Increases in take-away food provision could have negative effects on diet and health, and could result in an increase in littering affecting people’s living environment.</p>

Food and drink	Loss of town centre food and drink provision	Gain of town centre food and drink provision
<p>To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity</p>	<p>Loss of town centre services could reduce access, particularly for those dependent on public transport or walking.</p> <p>Loss of town centre food provision could reduce impacts associated with kitchen venting, storage and handling of food waste and food deliveries. This could have a positive effect on the living environment of neighbours.</p> <p>Reduced drink provision could result in reductions in night time noise and anti-social behaviour, with benefits for neighbours and the wider community.</p> <p>Loss of drinking establishments could result in important community focuses.</p> <p>Loss of take-away food provision could have positive effects on diet and health, and could result in an reduction in littering affecting people's living environment.</p>	<p>Gains in town centre food and drink provision could improve access, particularly for those dependent on public transport or walking.</p> <p>Expanded food provision could require, for example, new kitchen extractor venting and facilities for storage and handling of food waste and additional food deliveries. This could impact on the living environment of neighbours.</p> <p>Expanded drink provision could result in increases in night time noise and anti-social behaviour, with impacts on the living environment of neighbours and the wider community.</p> <p>Expanded drink provision could help create a new focus for the community.</p> <p>Increases in take-away food provision could have negative effects on diet and health, and could result in an increase in littering affecting people's living environment.</p>
<p>To support community cohesion and vitality</p>	<p>Loss of food and drink provision could affect the vitality of the wider town centre with impacts on the role of centres in providing a focus for the wider community. This would apply particularly to the loss of pubs.</p>	<p>New food and drink provision could enhance the vitality of the wider town centre and role of centres in providing a focus for the wider community. This applies particularly to new pubs.</p>
<p>To support access to education and training</p>	<p>No effect identified</p>	<p>No effect identified</p>

## Business

### Assessment table and justification of scores

Business	Loss of town centre business	Gain of town centre business
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Potential for increases in greenhouse gas emissions if business activity moves to out of centre locations	Positive effects – potential reductions if increase in business supports town centre as focus for wider economic activity
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	Reductions in town centre activity could reduce vehicular emissions in some more polluted town centre locations but could result in an overall increase in emissions	Increases in town centre activity could increase vehicular emissions in some more polluted town centre locations but would be lower overall than if businesses relocated to more peripheral locations
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect where town centre vacancies are reduced directly or as a result of increases in wider activity
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacancies or changes in use of premises previously occupied by businesses, particularly in historic town centres.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacancies or changes in use of premises previously occupied by businesses, particularly in historic town centres.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified

<b>Business</b>	<b>Loss of town centre business</b>	<b>Gain of town centre business</b>
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and indirectly through knock on effects for footfall and town centre viability. This could be particularly significant where businesses such as offices support services such as printing, catering and cleaning companies.	Positive impact – directly through new employment and indirectly through knock on effects for footfall and town centre viability, including additional trade for other town centre services.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Relocation of businesses from town centres to peripheral locations could have an impact on employees' commuting patterns and decisions about where to live. Opportunities for lunchtime and after work retail, cultural and eating/drinking activity would be reduced, with impacts on social interaction.	Relocation of businesses to town centres could create new opportunities for lunchtime and after work retail, cultural and eating/drinking activity, with benefits for social interaction.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	Relocation of businesses from town centres to peripheral locations could have an impact on employees' commuting patterns and decisions about where to live. Opportunities for lunchtime and after work retail, cultural and eating/drinking activity would be reduced, with impacts on social interaction.	Relocation of businesses to town centres could create new opportunities for lunchtime and after work retail, cultural and eating/drinking activity, with benefits for social interaction.
To support community cohesion and vitality	Loss of business activity could affect the vitality of the wider town centre with impacts on the role of centres in providing a focus for the wider community.	New businesses activity could enhance the vitality of the wider town centre and role of centres in providing a focus for the wider community. This applies particularly to new pubs.
To support access to education and training	Loss of business activity could reduce opportunities for training	New business activity could create opportunities for training

## General industrial

### Assessment table and justification of scores

General industrial	Loss of town centre general industrial activity	Gain of town centre general industrial activity
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Potential for reductions in greenhouse gas emissions dependent on whether industry relocates or is lost altogether	Potential increases in greenhouse gas emissions depending on the activity and suitability of the location (e.g. impact of town centre congestion on deliveries)
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	Reductions in town centre industrial activity could reduce emissions associated with industrial processes and transport. The net effect depends on whether industry relocates or is lost.	New industrial activity in town centre could increase emissions associated with industrial processes and transport. The net effect depends on whether industry is new or has relocated.
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	Possible risks to water quality as a result of vacant or derelict industrial premises.	Possible introduction of new risks to water quality.
To avoid and reduce flood risk	No effect identified	Possible increases in flood risk if new industrial premises result in a significant increase in run-off from roofs and hard surfaces
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for new industrial premises.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict industrial premises – loss of vernacular buildings and impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new industrial premises are developed, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict industrial premises – loss of vernacular buildings and impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new industrial premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		

General industrial	Loss of town centre general industrial activity	Gain of town centre general industrial activity
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and indirectly through knock on effects for footfall and town centre viability. This could be particularly significant where other town centre businesses are dependent on the industrial activity in question.	Positive impact – directly through new employment and indirectly through knock on effects for footfall and town centre viability, including additional trade for other town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The loss of general industrial activity from town centres could result in reductions in negative impacts on quality of life such as noise, air pollution, HGV movements and visual intrusion.	The accommodation of new general industrial businesses in town centres could result in negative impacts on quality of life as a result of possible increases in noise, air pollution, HGV movements and visual intrusion.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The loss of general industrial activity from town centres could result in reductions in negative impacts on quality of life such as noise, air pollution, HGV movements and visual intrusion.	The accommodation of new general industrial businesses in town centres could result in negative impacts on quality of life as a result of possible increases in noise, air pollution, HGV movements and visual intrusion.
To support community cohesion and vitality	Loss of industrial activity could affect the vitality of the wider town centre with impacts on the role of centres in providing a focus for the wider community. This is particularly the case where the industry in question has strong cultural and community associations with the town or city in question.	New industrial activity could enhance the vitality of the wider town centre and role of centres in providing a focus for the wider community. Much depends on the type of industry, its location and interaction with local community.
To support access to education and training	Loss of industrial activity could reduce opportunities for training	New industrial activity could create opportunities for training



## Storage or distribution

### Assessment table and justification of scores

Storage or distribution	Loss of town centre storage or distribution activity	Gain of town centre storage or distribution activity
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Potential for reductions in greenhouse gas emissions dependent on whether storage or distribution relocates to less congested locations	Potential increases in greenhouse gas emissions depending on the activity and suitability of the location (e.g. impact of town centre congestion on deliveries)
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	Reductions in town centre storage or distribution activity could reduce emissions associated with transport. The net effect depends on whether storage or distribution relocates or is lost.	New storage or distribution activity in town centre could increase emissions associated with transport.
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	Possible risks to water quality as a result of vacant or derelict storage or distribution premises.	No effect identified
To avoid and reduce flood risk	No effect identified	Possible increases in flood risk if new storage or distribution premises result in a significant increase in run-off from roofs and hard surfaces
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for new storage or distribution premises.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new storage or distribution premises are developed, particularly in historic town centres



Storage or distribution	Loss of town centre storage or distribution activity	Gain of town centre storage or distribution activity
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new storage or distribution premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and indirectly through knock on effects for footfall and town centre viability.	Positive impact – directly through new employment and indirectly through knock on effects for footfall and town centre viability, including additional trade for other town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The loss of general storage and distribution activity from town centres could result in reductions in negative impacts on quality of life such as noise, air pollution, HGV movements and visual intrusion.	The accommodation of new storage and distribution businesses in town centres could result in negative impacts on quality of life as a result of possible increases in noise, air pollution, HGV movements and visual intrusion.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The loss of general storage and distribution activity from town centres could result in reductions in negative impacts on quality of life such as noise, air pollution, HGV movements and visual intrusion.	The accommodation of new storage and distribution businesses in town centres could result in negative impacts on quality of life as a result of possible increases in noise, air pollution, HGV movements and visual intrusion.
To support community cohesion and vitality	Loss of storage and distribution activity could affect the vitality of the wider town centre with impacts on the role of centres in providing a focus for the wider community.	New storage and distribution activity could enhance the vitality of the wider town centre and role of centres in providing a focus for the wider community.
To support access to education and training	No effect identified	No effect identified

## Hotels or hostels

### Assessment table and justification of scores

Hotels or hostels	Loss of town centre hostels or hotels activity	Gain of town centre hostels or hotels activity
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Possible increases in greenhouse gas emissions if hotels and hostels relocate to out of centre locations	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	Locating hotels and hostels in town centres will support low carbon travel modes
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	No effect identified	No effect identified
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	Potential negative effects as an increase in residential units could result in an increase in vulnerability on grounds of flood risk.
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for hostels or hotels.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets. Particularly significant in historic centres and where hotels occupied distinctive buildings.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets. Particularly significant in historic centres and where hotels occupied distinctive buildings.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		

Hotels or hostels	Loss of town centre hostels or hotels activity	Gain of town centre hostels or hotels activity
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and indirectly through knock on effects for footfall and town centre viability. Potential knock on effects for Scotland’s visitor economy and businesses requiring hotel accommodation	Positive impact – directly through new employment and indirectly through knock on effects for footfall and town centre viability, including additional trade for other town centre businesses and support for the visitor economy.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The loss of hostels could have a negative impact on vulnerable and homeless people	New hostels could have benefits for vulnerable and homeless people
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The loss of hotels could reduce opportunities for recreation and physical activity (e.g. gyms and pools)	New hotels could increase opportunities for recreation and physical activity (e.g. gyms and pools)
To support community cohesion and vitality	The loss of hostels could have a and indirect negative impact on community cohesion as a consequence of increases in the number of vulnerable people living on the street.	No effect identified
To support access to education and training	Loss of hotels and hostels could reduce opportunities for training	New hotels and hostels could create opportunities for training

## Residential institutions

### Assessment table and justification of scores

Residential institutions	Loss of town centre residential institutions	Gain of town centre residential institutions
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	No effect identified	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	No effect identified	No effect identified
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	Potential negative effects as an increase in residential units could result in an increase in vulnerability on grounds of flood risk.
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Negative impact as a result of possible increases in vacant and derelict premises with knock on effects on other town centre businesses	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for residential institutions.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified

Residential institutions	Loss of town centre residential institutions	Gain of town centre residential institutions
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact – directly through the loss of employment and indirectly through knock on effects for footfall, other businesses and town centre viability.	Positive impact – directly through new employment and indirectly through knock on effects for footfall and town centre viability, including additional trade for other town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The loss of residential institutions could have a negative impact on vulnerable and homeless people	New residential institutions could have benefits for vulnerable and homeless people
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified	No effect identified
To support community cohesion and vitality	The loss of residential institutions could have an indirect negative impact on community cohesion as a consequence of increases in the number of vulnerable people living on the street.	No effect identified
To support access to education and training	Loss of residential institutions could reduce opportunities for training	New residential institutions could create opportunities for training

## Residential – houses and flats

### Assessment table and justification of scores

Residential - houses and flats	Loss of town centre houses and flats	Gain of town centre houses and flats
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	Reduction in opportunity for homes to be located close to employment, retail and entertainment with potential increases in greenhouse gas emissions.	Opportunity for homes to be located close to employment, retail and entertainment with potential reductions in greenhouse gas emissions
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Potential increases in air pollution due to greater distances between homes and employment, retail and entertainment	Potential reductions in air pollution due to short distances between homes and employment, retail and entertainment
To improve air quality	No effect identified	No effect identified
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	Potential negative effects as an increase in residential units could result in an increase in vulnerability on grounds of flood risk.
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for residential use.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
<b>Landscape and geodiversity</b>		

Residential - houses and flats	Loss of town centre houses and flats	Gain of town centre houses and flats
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact –through knock on effects for footfall, demand for town centre businesses and services and town centre viability.	Positive impact –through knock on effects for footfall and town centre viability, including additional trade for town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The loss of town centre homes could impact on those without access to private transport, the elderly and less mobile.	New housing in town centres may be designed to supply the higher end of the market so, without a specific requirement to provide affordable housing, housing need may not be met by new development.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified	No effect identified
To support community cohesion and vitality	The loss of town centre homes could have a significant impact on such areas' sense of community and vitality.	The contribution of new town centre homes to community cohesion and vitality will depend on factors such as design, location, tenure and affordability.
To support access to education and training	No effect identified	No effect identified



## Non-residential institutions

### Assessment table and justification of scores

Non-residential institutions	Loss of town centre non-residential institutions	Gain of town centre non-residential institutions
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	There could be increases in greenhouse gas emissions if non-residential institutions relocate to non-central locations	The development of non-residential institutions in town centre locations could help support low carbon travel modes.
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Possible reductions in town centre air pollution levels	Possible increases in town centre air pollution levels
To improve air quality	No effect identified	No effect identified
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for non –residential institutions.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified



Non-residential institutions	Loss of town centre non-residential institutions	Gain of town centre non-residential institutions
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact –through knock on effects for footfall, demand for town centre businesses and services and town centre viability.	Positive impact –through knock on effects for footfall and town centre viability, including additional trade for town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Depending on the institution in question, loss could reduce access to health, public services, government, education, cultural and training facilities, with a negative impact on people's quality of life.	Depending on the institution in question, new development could improve access to health, public services, government, education, cultural and training facilities, with a positive impact on people's quality of life.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified	No effect identified
To support community cohesion and vitality	No effect identified	No effect identified
To support access to education and training	Depending on the institution in question, loss could reduce access to education and training.	Depending on the institution in question, new development could improve access to education and training.

## Assembly and leisure (including theatres)

### Assessment table and justification of scores

Assembly and leisure	Loss of town centre assembly and leisure	Gain of town centre assembly and leisure
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	There could be increases in greenhouse gas emissions if assembly and leisure uses relocate to non-central locations	The development of assembly and leisure uses in town centre locations could help support low carbon travel modes.
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Possible reductions in town centre air pollution levels	Possible increases in town centre air pollution levels
To improve air quality	No effect identified	No effect identified
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for assembly and leisure.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified

Assembly and leisure	Loss of town centre assembly and leisure	Gain of town centre assembly and leisure
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact –through knock on effects for footfall, demand for town centre businesses and services and town centre viability.	Positive impact –through knock on effects for footfall and town centre viability, including additional trade for town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Loss could reduce access to cultural and entertainment, with a negative impact on people’s quality of life. Minor positive effects could result from reductions in noise pollution, late night disturbance and anti-social behaviour.	Depending on the institution in question, new development could improve access to cultural and entertainment, with a positive impact on people’s quality of life. Minor negative effects could result from increases in noise pollution, late night disturbance and anti-social behaviour.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified	No effect identified
To support community cohesion and vitality	Loss of cultural and entertainment facilities could have a negative effect on community vitality	New cultural and entertainment facilities could have a positive effect on community vitality
To support access to education and training	No effect identified	No effect identified

## Betting shops and pay day lending

### Assessment table and justification of scores

Betting shops and pay day lending	Loss of town centre betting shops and pay day lending	Gain of town centre betting shops and pay day lending
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	No effect identified
To enhance biodiversity	No effect identified	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	There could be increases in greenhouse gas emissions if betting shops and pay day lending uses relocate to non-central locations	The development of betting shops and pay day lending uses in town centre locations could help support low carbon travel modes.
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Possible reductions in town centre air pollution levels	Possible increases in town centre air pollution levels
To improve air quality	No effect identified	No effect identified
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for betting and payday loan shops.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified

Betting shops and pay day lending	Loss of town centre betting shops and pay day lending	Gain of town centre betting shops and pay day lending
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact –through knock on effects for footfall, demand for town centre businesses and services and town centre viability.	Positive impact –through knock on effects for footfall and town centre viability, including additional trade for town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Loss could reduce access to betting shops and pay day lending services. This could disproportionately impact particularly groups including those on low incomes. Positive effects could include reductions in problems such as betting addiction or easy access to unaffordable loans, though it is possible these activities would be diverted to less well policed on-line services.	New betting shops and pay day lending uses could increase problems such as betting addiction or easy access to unaffordable loans, though it would also provide access for a larger number of people without such impacts.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified	No effect identified
To support community cohesion and vitality	Loss of betting shops and pay day lending uses could have mixed effects on community cohesion and vitality	New betting shops and pay day lending uses could have mixed effects on community cohesion and vitality
To support access to education and training	No effect identified	No effect identified

## Hot food take-aways

### Assessment table and justification of scores

Hot food take-aways	Loss of town centre hot food take-aways	Gain of town centre hot food take-aways
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	No effect identified	Increases in take-away provision could result in increases in litter, with negative impacts on species
To enhance biodiversity	Loss of take-away provision could result in reductions in litter, with positive benefits for species	No effect identified
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	No effect identified	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified	No effect identified
To support climate change adaptation	No effect identified	No effect identified
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified	No effect identified
To improve air quality	No effect identified	No effect identified
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified	No effect identified
To avoid and reduce flood risk	No effect identified	No effect identified
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Potential positive effect as vacant and derelict premises can be used for uses for which there is demand.	Positive effect on soil, should redevelopment and remediation of vacant or contaminated sites take place, and depending on the suitability of vacant or derelict town centre premises for town centre hot food take-aways.
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Potential negative effects result in from vacant and derelict premises and the impact on setting of other assets.	Potential positive effects where vacant premises are brought back into use. Neutral or possible negative effects where new premises are developed or significant conversion works are required, particularly in historic town centres
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified	No effect identified
To enhance landscape quality	No effect identified	No effect identified
<b>Material assets</b>		

Hot food take-aways	Loss of town centre hot food take-aways	Gain of town centre hot food take-aways
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
To enhance material assets	Changes which affect the mix of town centre uses could have a negative effect on material assets	Positive effect as result of investment in premises
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	Negative impact –through knock on effects for footfall, demand for town centre businesses and services and town centre viability.	Positive impact –through knock on effects for footfall and town centre viability, including additional trade for town centre businesses.
To support rural development	No effect identified	No effect identified
To support smarter resourcing of the planning system	No effect identified	No effect identified
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p>Loss of town centre hot food take-aways could reduce access, particularly for those dependent on public transport or walking.</p> <p>Loss of town centre hot food take-aways could reduce impacts associated with kitchen venting, storage and handling of food waste and food deliveries. This could have a positive effect on the living environment of neighbours.</p> <p>Reduced drink provision could result in reductions in night time noise and anti-social behaviour, with benefits for neighbours and the wider community.</p> <p>Loss of take-away food provision could have positive effects on diet and health, and could result in an reduction in littering affecting people's living environment.</p>	<p>Gains in town centre hot food take-aways provision could improve access, particularly for those dependent on public transport or walking.</p> <p>Expanded food provision could require, for example, new kitchen extractor venting and facilities for storage and handling of food waste and additional food deliveries. This could impact on the living environment of neighbours.</p> <p>Expanded hot food take-aways provision could result in increases in night time noise and anti-social behaviour, with impacts on the living environment of neighbours and the wider community.</p> <p>Increases in take-away food provision could have negative effects on diet and health, and could result in an increase in littering affecting people's living environment.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified	No effect identified
To support community cohesion and vitality	Loss of hot food take-aways could have mixed effects on community cohesion and vitality	New hot food take-aways could have mixed effects on community cohesion and vitality
To support access to education and training	No effect identified	No effect identified

**Agricultural developments**

**Farm sheds**

**Assessment table**

		Increase in area		Increase in height		Changes to requirement for prior notification / prior approval		Distance to receptors	
	No change in PDR	Increase area beyond 465 square metres In all areas	Increase area beyond 465 square metres – excluding flood risk areas	Increase height beyond 12m in areas more than 3km from an aerodrome or technical site	Increase in height beyond 3m in areas less than 3km from an aerodrome or technical site	No requirement for prior notification / prior approval for farm sheds of any size	No requirement for prior notification / prior approval for farm sheds below 465m <sup>2</sup>	Relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur or the storage of slurry or sewage sludge	PDR extended to development within 25m of the metalled portion of a trunk or classified road
<b>Biodiversity, flora and fauna</b>									
To avoid adverse effects on all habitats and species	+	-	-	0	0	-	-	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>									
To avoid increasing greenhouse gas emissions	0	-?	-?	0	0	-?	-?	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0
To support climate change adaptation	0	+	+	+	+	+	+	0	0
<b>Air</b>									
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0



		Increase in area		Increase in height		Changes to requirement for prior notification / prior approval		Distance to receptors	
		No change in PDR	Increase area beyond 465 square metres In all areas	Increase area beyond 465 square metres – excluding flood risk areas	Increase height beyond 12m in areas more than 3km from an aerodrome or technical site	Increase in height beyond 3m in areas less than 3km from an aerodrome or technical site	No requirement for prior notification / prior approval for farm sheds of any size	No requirement for prior notification / prior approval for farm sheds below 465m <sup>2</sup>	Relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur or the storage of slurry or sewage sludge
To improve air quality	0	0	0	0	0	0	0	0	0
<b>Water</b>									
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+/-	-?	-?	-?	-?	-?	-?	0	-?
To avoid and reduce flood risk	+	--	-	0	0	-	-	0	0
<b>Soil</b>									
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+	-	-	0	0	-	-	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land									
<b>Cultural heritage</b>									
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	--	--	--	--	--	--	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0

		Increase in area		Increase in height		Changes to requirement for prior notification / prior approval		Distance to receptors	
		No change in PDR	Increase area beyond 465 square metres In all areas	Increase area beyond 465 square metres – excluding flood risk areas	Increase height beyond 12m in areas more than 3km from an aerodrome or technical site	Increase in height beyond 3m in areas less than 3km from an aerodrome or technical site	No requirement for prior notification / prior approval for farm sheds of any size	No requirement for prior notification / prior approval for farm sheds below 465m <sup>2</sup>	Relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur or the storage of slurry or sewage sludge
<b>Landscape and geodiversity</b>									
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+	--	--	--	--	--	--	-	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0
<b>Material assets</b>									
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	-	-	--	--	-	-	0	0
To enhance material assets	0	+	+	+	+	+	+	0	0
<b>Economy</b>									
To support and enhance opportunities for sustainable economic growth	+	++	++	++/-	++/-	++/-	+	+	+
To support rural development	0	++	++	++	++	++	+	+	+/-
To support smarter resourcing of the planning system	0	0?	0?	0?	0?	0?	0?	0	0
<b>Social, population and human health</b>									
To avoid adverse effects on health and quality of life and reduce risks to health	+	--	--	--	--	-	-	-	-

		Increase in area		Increase in height		Changes to requirement for prior notification / prior approval		Distance to receptors	
		Increase area beyond 465 square metres In all areas	Increase area beyond 465 square metres – excluding flood risk areas	Increase height beyond 12m in areas more than 3km from an aerodrome or technical site	Increase in height beyond 3m in areas less than 3km from an aerodrome or technical site	No requirement for prior notification / prior approval for farm sheds of any size	No requirement for prior notification / prior approval for farm sheds below 465m <sup>2</sup>	Relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur or the storage of slurry or sewage sludge	PDR extended to development within 25m of the metalled portion of a trunk or classified road
and quality of life and reduce risks to health and quality of life									
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0

### Justification of scores

Farm sheds	Justification of scores
SA Objectives	Narrative/justification
Biodiversity, flora and fauna	
To avoid adverse effects on all habitats and species	<p>The development of farm sheds can result in the loss of habitat, the severance of habitat corridors, changes in drainage patterns and increased risks in terms of water pollution, all of which may impact on local biodiversity, including potential implications for designated sites.</p> <p><b>Existing PDR</b> provide an opportunity for the planning authority to consider potential impacts on habitats and species through prior notification / prior approval, with <b>minor positive</b> effect. Conversely, <b>removing the need for prior notification / prior approval</b> on farm sheds up to 465m<sup>2</sup> and <b>removing the requirement for prior notification / prior approval for farm sheds of all sizes</b> would potentially result in <b>minor negative</b> effects on habitats and species through habitat loss, disturbance, changes in drainage patterns and increased risks in terms of water pollution.</p> <p><b>Increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> increases the likelihood of adverse effects on habitats and species due to the larger area of</p>

Farm sheds	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	potential habitat loss and greater risk of severance of wildlife corridors. Therefore <b>minor negative</b> effects are identified.
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<p><b>Increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> could support larger farm equipment which may support more efficient farming methods, with economic benefits, or house larger numbers of livestock, which in particular may have <b>minor negative</b> effects on greenhouse gas emissions. This effect is uncertain as it depends on the use of the shed.</p> <p><b>Removing the need for prior notification / prior approval</b> on farm sheds up to 465m<sup>2</sup> and <b>removing the requirement for prior notification / prior approval for farm sheds of all sizes</b> would result in <b>minor negative</b> but uncertain effects because it would remove the consideration of the effects of greenhouse gas emissions.</p> <p>Increased height in relation to proximity to an aerodrome or technical site does not impact directly on climate change.</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	<p>Climate change adaptation can include the requirement for larger agricultural machinery, new equipment, additional storage space for produce, the requirement for additional indoor space to provide a controlled environment for livestock, and opportunities for farm diversification. All of these may require larger farm sheds, and the potential changes to PDR of:</p> <ul style="list-style-type: none"> <li>• <b>increasing the area of farm sheds beyond 465m<sup>2</sup></b> and</li> <li>• <b>increasing the height beyond 12m in areas more than 3km from an aerodrome or technical site, or beyond 3m in areas less than 3km from an aerodrome or technical site;</b> and</li> <li>• <b>removing the requirement for prior notification / prior approval for farm sheds of any size or for sheds below 465m<sup>2</sup></b></li> </ul> <p>will have a <b>minor positive</b> effect on facilitating adaptation activities.</p>
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Although it is recognised that intensive livestock production may increase emissions of gases such as ammonia, it is not anticipated that activities undertaken in farm sheds will have significant impacts on air quality.
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<p>The use of farm sheds for housing livestock will lead to the additional need for increased storage of slurries and manure. This will increase the risk of run off and could lead to the requirement for additional disposal of slurry and manure to farmland which brings risks to the water environment. Larger farm sheds could also increase the risk of run off, and water pollution from other areas of the farm business if drainage requirements are not adequately addressed.</p> <p><b>Existing PDR</b> require an application to the planning authority to determine whether prior notification / prior approval is required which provides an opportunity for the siting of the development in relation to water courses to be identified, however this does not address the increased risk from storage and use of slurries and manures. A <b>mixed</b> effect is therefore identified.</p> <p>Introducing PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> or <b>increasing the height beyond 12m in areas more than 3km from an aerodrome or technical site, or beyond 3m in areas less than 3km from an aerodrome or technical site; removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> would potentially lead to an increase in the risk of water pollution, through the potential for the sheds to be used for livestock and as a result of the lack of consideration of impacts on the water environment from the proposed use of the shed. This would lead to <b>minor negative</b> effects on water pollution, although this effect is <b>uncertain</b>, depending on the use of the shed.</p>
To avoid and reduce flood risk	<p>Farm sheds increase the area of impermeable surface, and produce additional surface water for disposal. Increased flood risk also increases the number of potential receptors who may experience flooding.</p> <p><b>Existing PDR</b> require an application to the planning authority to determine whether prior notification / prior approval is required which provides an opportunity for issues of flood risk to be raised and addressed, which is identified as a <b>minor positive</b> effect on flood risk.</p> <p>PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> will increase the area of impermeable surface and lead to greater flood risk in all areas, but with greatest effects in existing flood risk areas. This change is identified as a <b>significant negative</b> effect. <b>Removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> would remove the consideration of flood risk with potential <b>minor negative</b> effects, however flood risk for farm sheds over 465m<sup>2</sup> would be potentially greater.</p> <p>PDR for increasing the area of farm sheds beyond 465m<sup>2</sup> but excluding areas of flood risk does not mitigate an increase in flood risk in all areas, and therefore a <b>minor negative</b> effect is identified.</p> <p>PDR for <b>increases in height</b> in relation to proximity to an aerodrome or technical site are not identified as impacting on flood risk.</p>

Farm sheds	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p>Farm sheds on agricultural holdings may result in the loss of high carbon soils or best and most versatile land. Depending on the use of the shed, increased size of farm sheds for livestock could lead to the additional need for increased storage of slurries and manure, with potential additional loss of soil to these additional storage facilities. It also increases the risks to soil quality from inappropriate disposal and storage of waste.</p> <p>The current prior notification / prior approval arrangement under <b>existing PDR</b> ensures consideration of potential impacts on soils, with <b>minor positive</b> effects. Introducing PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> has the potential to impact on larger areas of high carbon soil or best and most versatile land, with potential <b>minor negative</b> effects.</p> <p><b>Removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> removes the opportunity for potential impacts on soil to be considered with potential <b>minor negative</b> effects.</p> <p>The PDR changes in relation to distance to receptors are not identified as significantly increasing the total amount of development and any associated loss of soils, and <b>negligible</b> effects are identified.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>The development of larger farm sheds both in terms of area and height has the potential to impact on cultural heritage assets, due to the potential impact of the larger structures on a larger land area where assets may be located, and on the distance to which they may impact on the setting of cultural heritage assets. This includes the potential to impact on cultural heritage assets of national significance which do not have separate statutory consenting processes.</p> <p>The current prior notification / prior approval arrangement under <b>existing PDR</b> ensures consideration of potential impacts on cultural heritage resources, with a <b>minor positive</b> effect on avoiding adverse effects on cultural heritage.</p> <p>Cultural heritage assets of national significance which do not have separate statutory consenting processes include Conservation Areas, inventory listed gardens and designed landscapes, World Heritage Sites, and historic battlefields. Introducing PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> or <b>increasing the height beyond 12m in areas more than 3km from an aerodrome or technical site, or beyond 3m in areas less than 3km from an aerodrome or technical site; removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> could result in <b>significant negative</b> effects on designated cultural heritage assets due to the lack of consideration of these effects.</p> <p>The PDR changes in relation to distance to receptors are not identified as significantly increasing the total amount of development and any associated loss of cultural heritage or archaeology, and <b>negligible</b> effects are identified.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Farm sheds have the potential for adverse impacts on landscape through their scale, location and design. Sensitive siting, design and landscaping can provide mitigation against adverse effects.</p> <p>The <b>current PDR</b> which include prior notification / prior approval ensures consideration of potential impacts on landscape resources and the consideration of potential mitigation, with a <b>minor positive</b> effect on avoiding adverse effects on landscape.</p> <p>Introducing PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> or <b>increasing the height beyond 12m in areas more than 3km from an aerodrome or technical site, or beyond 3m in areas less than 3km from an aerodrome or technical site; removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> has the potential to impact on landscape, due to the potential impact of the larger structures and on the distance from which these larger structures are visible within the landscape. This includes the potential to impact on landscape assets of national significance which do not have separate statutory consenting processes such as National Parks and National Scenic Areas. This could result in <b>significant negative</b> effects on landscape. The removal of the requirement for prior notification / prior approval could also result in <b>significant negative</b> effects due to the lack of consideration of these effects.</p>
To enhance landscape quality	No effect identified.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	<p>Aerodromes and technical sites operate with safeguarding areas to ensure consideration of potential impacts of development on their safe operation. A consultee noted that large or tall structures within close proximity to aerodromes and technical sites need to be considered in relation to their potential impact on safety for which potential effects need to be assessed. Agricultural buildings may also lead to soil sealing which can affect sensitive soil resources such as best and most versatile agricultural land and high carbon soils.</p> <p><b>Existing PDR</b> require prior notification / prior approval, which ensures consideration of potential impacts on other land uses, including aerodromes and technical sites, and therefore a <b>minor positive</b> effect is identified.</p> <p>Introducing PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> or <b>increasing the height beyond 12m in areas more than 3km from an</b></p>



Farm sheds	Justification of scores
SA Objectives	Narrative/justification
	<p><b>aerodrome or technical site, or beyond 3m in areas less than 3km from an aerodrome or technical site</b>; have the potential to impact on the safe operation of aerodromes and technical sites and the loss of larger areas of resource such as best and most versatile agricultural land or high carbon soils and <b>significant negative</b> effects are identified. <b>Removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> removes the process for consideration of the loss of these assets, with <b>minor negative</b> effects. Increasing the permitted height of farm sheds also has potentially adverse impacts on the safe operation of an aerodrome or technical site, with <b>significant negative</b> effects on the operation of the aerodrome or technical site.</p>
To enhance material assets	<p>Existing PDR potentially limit the extent to which farmers are able to enhance the value of their agricultural unit, however this is not considered significant and a negligible effect is identified.</p> <p>Introducing PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> or <b>increasing the height beyond 12m in areas more than 3km from an aerodrome or technical site, or beyond 3m in areas less than 3km from an aerodrome or technical site; removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> and <b>removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> increases the value and operation of the agricultural unit, with a positive effect on agricultural infrastructure, therefore <b>minor positive</b> effects are identified for material assets across all potential PDR changes, excluding the changes relating to distance to protected buildings and classified roads, where the extent of development within these parameters is anticipated to be negligible.</p>
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> support opportunities for sustainable economic growth, by ensuring that sustainability issues are considered through the planning process, and a <b>minor positive</b> effect is identified.</p>
To support rural development	<p>Scotland's rural economy is facing a number of significant challenges including depopulation, an aging population, changing climate, competition from lower cost overseas producers and the potential impacts of the UK's withdrawal from the EU. The latter could affect existing trading relationships with other European nations, open the UK up to competition from other global producers, impact on the availability of labour and change the system of agricultural support and funding.</p> <p>Measures which increase flexibility and allow the sector to respond to these challenges will result in significant positive effects for the agricultural sector. On the other hand, it is possible that the development of farm sheds could have an adverse impact on Scotland's landscapes which play an important role in supporting the visitor economy – particularly in areas designated for their landscape importance (e.g. National Parks and National Scenic Areas). This is regarded as a less significant impact given the likely scale of new agricultural development, and one that could be mitigated, so the overall effect is likely to be <b>significant</b> positive for increases in area, increases in height and the removal of the requirement for prior notification/prior approval of farm sheds of any size. A minor positive effect is identified in relation to the removal of the requirement for prior notification/prior approval for farm sheds below 465m<sup>2</sup> reflecting their smaller size.</p> <p><b>Mixed</b> effects in terms of supporting rural development are identified for relaxation of the 25m distance to roads because of the benefits to the farm business of flexibility in location of farms sheds, and potential for adverse impacts in terms of disease control and run off from farm sheds impacting on road surfaces.</p>
To support smarter resourcing of the planning system	<p>All of the potential changes to PDR would support greater efficiency in the planning system through reducing the number of planning applications, however the number of planning applications for agricultural sheds is unknown and therefore the extent of this effect is <b>uncertain</b>.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p>Large shallow pitched roofed buildings can provide roosting areas for birds, which present a hazard to aircraft safety through wildlife strike. Tall structures can impact on the obstacle limitation surfaces which are in place for the runway approaches. Physical objects such as buildings can also cause radio signal reflections or diffractions with adverse impacts on radar and other electronic aids to aircraft navigation.<sup>255</sup></p> <p><b>Existing PDR</b> ensure the consideration of potential adverse effects in relation to risks to health and quality of life, through the prior notification / prior approval process, with a <b>minor positive</b> effect.</p> <p>Introducing PDR for <b>increasing the area of farm sheds</b> with PDR beyond 465m<sup>2</sup> or <b>increasing the height beyond 12m in areas more than 3km from an aerodrome or technical site, or beyond 3m in areas less than 3km from an aerodrome or technical site; removing the requirement for prior notification / prior approval for farm sheds below 465m<sup>2</sup> or for farm sheds of any size</b> could result in adverse effects in terms of risks to health and quality of life. This includes risks to aerodrome safety and <b>significant negative</b> effects are identified. Extending PDR to development within 25m of a classified road could result in <b>minor negative</b> effects if the development infringes sightlines on classified roads.</p>

<sup>255</sup>Airport Operators Association in Association with the Civil Aviation Authority (2016) Safeguarding of Aerodromes Advice Note 1 Aerodrome Safeguarding – An Overview. Available at: <https://www.aoa.org.uk/wp-content/uploads/2016/09/Advice-Note-1-Aerodrome-Safeguarding-An-Overview-2016.pdf>

Farm sheds	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<b>Minor negative effects</b> are identified for the amenity of residents from the relaxation of 400m distance to the curtilage of any protected building for buildings or structures used for housing pigs, poultry, rabbits or animals bred for their skin or fur <sup>256</sup> or the storage of slurry or sewage sludge. This is particularly in relation to noise and odour issues.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Polytunnels

### Assessment table

	No change in PDR	Up to a percentage of total land holding area excluding flood risk areas	Up to a percentage of land holding area including flood risk areas	Up to a percentage of land holding area and less than 200m to existing residential properties not connected with the farm	Up to a percentage of land holding area and less than 25m from the metalled portion of a trunk or classified road
<b>Biodiversity, flora and fauna</b>					
To avoid adverse effects on all habitats and species	+/-	-?	-?	0	0
To enhance biodiversity	0	0	0	0	0
<b>Climatic factors</b>					
To avoid increasing greenhouse gas emissions	0	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0
To support climate change adaptation	0	+	+/-	0	0
<b>Air</b>					
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0
To improve air quality	0	0	0	0	0

<sup>256</sup> Fur farming is banned in Scotland Fur Farming (Prohibition) (Scotland) Act 2002 <https://www.legislation.gov.uk/asp/2002/10/contents>

	No change in PDR	Up to a percentage of total land holding area excluding flood risk areas	Up to a percentage of land holding area including flood risk areas	Up to a percentage of land holding area and less than 200m to existing residential properties not connected with the farm	Up to a percentage of land holding area and less than 25m from the metalled portion of a trunk or classified road
<b>Water</b>					
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0
To avoid and reduce flood risk	-	--	--	-	-
<b>Soil</b>					
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0
<b>Cultural heritage</b>					
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0
<b>Landscape and geodiversity</b>					
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	--	--	--	--	--
To enhance landscape quality	0	0	0	0	0
<b>Material assets</b>					
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	?	?	0	0
To enhance material assets	+/-	-	-	0	0
<b>Economy</b>					
To support and enhance opportunities for sustainable economic growth	+/-	++/-	++/-	0	0



	No change in PDR	Up to a percentage of total land holding area excluding flood risk areas	Up to a percentage of land holding area including flood risk areas	Up to a percentage of land holding area and less than 200m to existing residential properties not connected with the farm	Up to a percentage of land holding area and less than 25m from the metalled portion of a trunk or classified road
To support rural development	+/-	++	++	0	0
To support smarter resourcing of the planning system	0	?	?	0	0
<b>Social, population and human health</b>					
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+/-	-	-	-	-
To improve the health and living environment of people and communities including support for access, recreation and physical activity	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0
To support access to education and training	0	0	0	0	0

## Justification of scores

Polytunnels	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p>Development of polytunnels can result in habitat loss and fragmentation over a larger area, and this could include the loss of supporting habitat for bird species from nearby designated sites. Although polytunnels are temporary structures, the impacts on soil and vegetation may persist, potentially in the longer term. There is a lack of clarity in existing PDR around polytunnels and therefore the extent to which effects on habitats and species are considered is likely to be inconsistent. Furthermore, it is unclear whether introducing PDR would significantly increase the area and extent of polytunnel development in Scotland.</p> <p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of polytunnels with potential <b>mixed</b> effects on habitats and species, where the planning authority may ensure consideration of effects on biodiversity, flora and fauna, and conversely, where potential impacts may not be considered. <b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area including or excluding flood risk areas</b> would potentially reduce the future proportion of land covered by polytunnels in some areas, but with overall potential <b>minor negative</b> effects for biodiversity.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Polytunnels can facilitate the production of a wider range of crops than would otherwise be the case, potentially reducing the food miles associated with imports from elsewhere. This is a <b>minor positive</b> effect.
To support actions which contribute to targets for reducing greenhouse gas emissions	

Polytunnels	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To support climate change adaptation	<p>Polytunnels provide a controlled environment for crops and can improve pest and disease control. Changes in weather patterns and associated impacts on pests and diseases mean that these risks will increasingly require to be managed.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas</b> would contribute to climate change adaptation by facilitating the growth of crops within a controlled environment, offering greater protection from weather extremes and allowing greater control of pests and diseases, with a <b>minor positive</b> effect.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area including flood risk areas</b> would result in <b>mixed effects</b> because it would secure the benefits for climate change adaptation described above, but would negatively impact on adaptation in relation to flood risk.</p>
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	<p>The treatment of polytunnels through planning permission is inconsistent, therefore flood risk issues may be considered in some locations and not others. Increasing the area of polytunnels can increase flood risk, as this increases the area of impermeable surface. It is recognised that the space between polytunnels is likely to be grassed down and available for infiltration, and some types of polytunnel have integrated rainwater and recycling building in, which reduced surface water run-off. Furthermore the management and use of polytunnels may mean some are in place all year, others are seasonal for a number of months, depending on the crop being grown and others may be used rotationally across the farm. However, particularly during periods of heavy rainfall there is an increase in run off which may result in localised flooding.</p> <p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of flood risk through the planning process with potential <b>minor negative</b> effects on flood risk, as there could be potential development in areas of flood risk.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas</b> would still result in <b>significant negative</b> effects as development of polytunnels increases the area of impermeable surface, increasing flood risk generally, although this is acknowledged as occurring to a lesser extent than for flood risk areas.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area including flood risk areas</b> would have a <b>significant negative</b> effect on flooding because this could result in development of polytunnels in areas with known and significant flood risk.</p> <p><b>Introducing PDR for a percentage of the total land holding area and within 200m of existing residential properties not connected with the farm, or up to a percentage of the land holding area and less than 25m from the metalled portion of a trunk or classified road</b> could increase run off and risk to property from surface water flooding, with potential <b>minor negative</b> effects.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	Soil sterilisation is a practice sometimes associated with polytunnels and soft fruit growing, however there are a variety of methods available, some of which are less harmful to the soil, and sterilisation may only be undertaken in certain circumstances. Therefore a negligible effect is identified.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>Polytunnels can have a significant impact on landscape character which can impact on the setting of cultural heritage assets.</p> <p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of polytunnels in the planning system with potential <b>minor negative</b> effects on cultural heritage assets, where potential development affecting designated and undesignated cultural heritage assets and their setting.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas or including flood risk areas</b> would result in <b>minor negative</b> effects as development of polytunnels could result on negative effects on the designated and undesignated cultural heritage assets. However impacts on setting are identified as temporary and reversible, which reduces the overall significance of the effect.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	

Polytunnels	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Polytunnels can have a significant impact on landscape character through the introduction of areas of plastic, which can create local issues such as glare, increasing the visual prominence of these structures at certain times of day. Key issues include the potential scale of development, and cumulative impacts, particularly on protected landscapes.</p> <p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of polytunnels with potential <b>significant negative</b> effects on landscape quality due to location of polytunnels particularly within or close to designated landscapes or within key views.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas or including flood risk areas</b> would reduce the potential area of polytunnels, but would not reduce cumulative impacts from neighbouring farm units and could therefore result in <b>significant negative</b> effects on landscape.</p> <p>Restricting PDR to a percentage of landholding and less than 200m of existing residential properties not connected with the farm, or less than 25m from the metalled portion of a trunk or classified road, may increase landscape impacts on residential properties or views from roads with potential <b>significant negative</b> effects. However depending on the use and any rotation of the polytunnels on the land holding, these effects are reversible.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	<p>Polytunnels generate waste plastic and without PDR there is no process to ensure the safe disposal of the waste.</p> <p>It is <b>uncertain</b> if <b>introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas or including flood risk areas</b> would result in a greater level of polytunnel development with a greater level of plastic waste generated.</p>
To enhance material assets	<p>Polytunnels enhance the viability and profitability of the agricultural unit, by providing a controlled environment for crops and can improve pest and disease control.</p> <p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of polytunnels within planning and result in variation between different planning authorities, with mixed minor positive and minor negative effects identified.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas or including flood risk areas</b> could reduce the potential area of polytunnels, and could result in minor negative impacts on the viability of some agricultural units with future plans to expand into polytunnels, however this effect is uncertain depending on the effect of the current inconsistent treatment of polytunnels on future plans.</p>
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>Polytunnels enhance the viability and profitability of the agricultural unit, by providing a controlled environment for crops and can improve pest and disease control. They also increase the range of crops which can be grown, providing greater flexibility for farmers. Supporting the development of the fruit growing sector could help agriculture in Scotland adjust to the effects of the UK's departure from the EU.</p> <p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of polytunnels, potentially reducing the level of future polytunnel development, with a <b>minor negative</b> effect identified.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas or including flood risk areas</b> would provide greater clarity to applicants on the processes, facilitating further development of the sector. This would lead to a significant positive effect on the farming economy. On the other hand, it is possible that the more extensive development of polytunnels could have an adverse impact on Scotland's landscapes which play an important role in supporting the visitor economy – particularly in areas designated for their landscape importance (e.g. National Parks and National Scenic Areas). This is regarded as a less significant impact given the likely scale and location of new polytunnel development (focused within parts of Eastern Scotland already accommodating intensive agriculture), so the overall effect is likely to be positive.</p>
To support rural development	<p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of polytunnels potentially reducing the level of future polytunnel development, with a <b>minor negative</b> effect identified.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas or including flood risk areas</b> would provide greater clarity to applicants on the processes facilitating further development of the sector. This would lead to a significant positive effect on the farming economy. On the other hand, it is possible that the more extensive development of polytunnels could have an adverse impact on Scotland's landscapes which play an important role in supporting the visitor economy – particularly in areas designated for their landscape importance (e.g. National Parks and National Scenic Areas). This is regarded as a less significant impact given the likely scale and location of new polytunnel development (focused within parts of Eastern Scotland already accommodating intensive agriculture), so the overall effect is likely to be positive.</p>
To support smarter resourcing of the planning system	Due to the lack of clarity in the planning requirements for polytunnels, no data is available to support this objective, and an uncertain effect is identified.
<b>Social, population and human health</b>	

Polytunnels	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p>No change to the <b>existing PDR</b> would continue the inconsistent treatment of polytunnels in the planning system, and therefore there is potential inconsistent treatment of effects of polytunnels on health and quality of life in relation to flood risk and risks to air safety arising from glare, with potential <b>mixed</b> effects.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area excluding flood risk areas</b> would help to manage flood risk in areas of greatest risk. However overall the development of polytunnels does contribute to flood risk in all areas.</p> <p>There are also potential impacts on health and quality of life, including risks to air safety from glare. <b>Minor negative effects</b> are identified.</p> <p><b>Introducing PDR for polytunnels restricted to a percentage of the total land holding area including flood risk areas</b> would increase risk to health and quality of life from flooding. There are also potential impacts on health and quality of life, including risks to air safety from glare. <b>Minor negative</b> effects are identified.</p> <p><b>Introducing PDR for a percentage of the total land holding area and within 200m of existing residential properties not connected with the farm</b> could result in adverse effects on the health and wellbeing of residents of nearby properties, in terms of landscape impacts and impacts from run off. Introducing PDR for a <b>percentage of land holding area and less than 25m from the metalled portion of a trunk or classified road</b> could impact on sightlines and road safety. <b>Minor negative</b> effects are identified for both of these changes.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Farm steadings

### Assessment table

	No change in PDR	Conversion of agricultural buildings to dwellinghouses											No change in PDR	Conversion of agricultural buildings to flexible commercial uses										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>																								
To avoid adverse effects on all habitats and species	+	-	-	0	0	0	0	0	0	-	0	0	+	-	-	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>																								

	No change in PDR	Conversion of agricultural buildings to dwellinghouses											No change in PDR	Conversion of agricultural buildings to flexible commercial uses											
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To avoid increasing greenhouse gas emissions	+	-	0	0	0	0	0	0	0	0	0	0	0	+	-	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>																									
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>																									
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																									
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	+	+	0	0	0	0	0	0	0	0	0	0	0	+	+	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																									
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	-?	0	0	0	0	-	-	-	0	0	0	0	+	-?	0	0	0	0	-	-	-	0	0	0

	No change in PDR	Conversion of agricultural buildings to dwellinghouses											No change in PDR	Conversion of agricultural buildings to flexible commercial uses										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>																								
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	+	+/-	0	+/-	+/-	0	0	0	0	0	0	0	+	+/-	0	+/-	+/-	0	0	0	0	0	0	0
<b>Material assets</b>																								
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>																								
To support and enhance opportunities for sustainable economic growth	+/-	+/-	0	+/-	+/-	+/-	+/-	0	0	0	0	0	+/-	+/-	0	+/-	+/-	+/-	+/-	0	0	0	0	0
To support rural development	+/-	+/-	0	+/-	+/-	+/-	+/-	0	0	0	0	0	+/-	+/-	0	+/-	+/-	+/-	+/-	0	0	0	0	0
To support smarter resourcing of the planning system	0	?	?	?	?	?	?	?	?	?	?	?	0	?	?	?	?	?	?	?	?	?	?	?
<b>Social, population and human health</b>																								
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	+	+/-	0	0	0	0	0	0	0	0	0	0	+	+/-	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



	No change in PDR	Conversion of agricultural buildings to dwellinghouses											No change in PDR	Conversion of agricultural buildings to flexible commercial uses										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
communities including support for access, recreation and physical activity including support for access, recreation and physical activity																								
To support community cohesion and vitality	+/-	+	0	0	0	0	0	0	0	0	0	0	+/-	+	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Justification of scores

Farm steadings	Justification of scores
SA Objectives	Narrative/justification
Biodiversity, flora and fauna	
To avoid adverse effects on all habitats and species	<p>Bird species such as barn owls often use farm buildings for nesting purposes, and bats are commonly found in traditional agricultural buildings and forage in the surrounding landscape. Establishing the presence of these species and accommodating appropriate mitigating measures in building design can accommodate these species without adverse impacts.</p> <p>The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use ensures the consideration of issues for biodiversity, flora and fauna and supports the requirement to seek the appropriate statutory consents, for which a <b>minor positive</b> effect is identified.</p> <p><b>Introducing PDR for the conversion of agricultural buildings to dwelling houses and conversion of agricultural buildings to flexible commercial uses in non-designated areas</b> would potentially result in <b>minor negative</b> effects for biodiversity, flora and fauna as a result of increased potential impacts on bats and wild birds. There is a high likelihood of these species being present in farm steadings and in the absence of planning permission there is likely to be a lower level of engagement to ensure that these effects are considered.</p> <p><b>Introducing PDR for the conversion of agricultural buildings to dwelling houses in areas designated for their natural heritage</b> such as European sites and SSSI could result in <b>minor negative</b> effects in relation to increased disturbance, and predation of species within these sites from domestic pets, due to the potential for the presence of protected species in these areas.</p> <p>The inclusion of PDR for agricultural buildings to dwellinghouses may impact on species due to the fact that birds and bats often use these types of building for nesting/roosting purposes. Therefore, protected habitats and species should be safeguarded by the requirements of other legislation, specifically through wildlife acts, as these would continue to apply despite any proposal constituting permitted development. This is uncertain however as it depends on the approach of the developer.</p>
To enhance biodiversity	No effect identified
Climatic factors	
To avoid increasing greenhouse gas emissions	Agricultural buildings are typically located within rural areas and therefore may be some distance from services, and have no or very limited public

Farm steadings	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>transport. This results in a reliance on use of private vehicles for transport and greater distances required for travel.</p> <p>The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use ensures consideration of wider sustainability issues, such as the increased need to travel from increased development in dispersed rural locations, and therefore a <b>minor positive</b> effect is identified.</p> <p><b>Introducing PDR for the conversion of agricultural buildings to dwelling houses and conversion of agricultural buildings to flexible commercial uses</b> in all areas would increase the need to travel within rural areas where there is limited option for travel other than the use of private vehicles, with a potential <b>minor negative</b> effect on this objective. The effects of <b>conversion to flexible commercial use</b> could have a greater negative effect than conversion to dwellings as, depending on the type of use, there could be more journeys created in terms of employees, customers and deliveries.</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	Conversion of redundant farm buildings to dwellings in areas at risk of flooding could result in an increase in vulnerability and a <b>minor negative</b> effect is identified, due to the residential nature of the development and 24 hour use of the site. Due to the lower inherent vulnerability of business or commercial use to flood risk which is assumed as only during business and commercial hours, a <b>negligible</b> effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	<p>Farm units may include agricultural buildings which are unused due to changes in agricultural practices, and the incompatibility of these buildings with modern agricultural needs.</p> <p>The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use ensures consideration of wider sustainability issues, including the benefits of use of vacant and derelict buildings, and therefore <b>minor positive effects</b> are identified.</p> <p><b>Introducing PDR for the conversion of agricultural buildings to dwelling houses and conversion of agricultural buildings to flexible commercial uses</b> in all areas would potentially increase the use of vacant farm buildings, bringing them back into use with a <b>minor positive</b> effect.</p>
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>Farm units may contain buildings and other assets of cultural heritage significance. The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use ensures consideration of wider sustainability issues, including impacts on cultural heritage assets, and <b>minor positive</b> effects are identified.</p> <p><b>Introducing PDR for the conversion of agricultural buildings to dwelling houses and conversion of agricultural buildings to flexible commercial uses</b> in <b>non-designated</b> areas would have potential impacts on the character of the rural landscape. Conversion for dwellings or for flexible commercial uses could require changes to the character of the buildings to accommodate living space, office space or parking, with the nature of effects depending on the use of the building. <b>Minor negative</b> but <b>uncertain</b> effects are identified.</p> <p>Most conservation areas cover groups of buildings extending over a village, town or city, and the number of conservation areas which include farm steadings is anticipated to be low. Historic Gardens and Designed Landscapes, World Heritage Sites and historic battlefields could include farm steadings, and introducing <b>PDR for the conversion of agricultural buildings to dwelling houses and conversion of agricultural buildings to flexible commercial uses</b> could result in <b>minor negative</b> effects on these cultural heritage assets.</p> <p>Listed buildings and scheduled monuments are subject to additional consent processes and therefore effects on these resources are identified as <b>negligible</b>.</p>



Farm steadings	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	<p>Development of derelict farm buildings through conversion for dwellinghouses or for flexible commercial use could lead to positive enhancement of landscape character through restoring these buildings and bringing them into active use within the rural landscape. However it could also result in changes in the character of the rural landscape through the introduction of features which are out of context within a rural environment such as formal entrances, gates, fencing and hedging.</p> <p>The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use ensures consideration of the proposed scale and character of changes being implemented, ensuring that these are within the context of local landscape character, and <b>minor positive</b> effects are identified.</p> <p><b>Introducing PDR for the conversion of agricultural buildings to dwelling houses and conversion of agricultural buildings to flexible commercial uses</b> in <b>non-designated</b> areas would have potential <b>mixed effects</b> resulting from both positive enhancement of derelict buildings, and negative changes in landscape character.</p> <p>These effects would be greater in National Scenic Areas and National Parks, reflecting the greater sensitivity of these landscapes.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>Scotland's rural economy is facing a number of additional pressures, which are complex and multi-faceted. For instance, Brexit will exacerbate the existing situation for agricultural businesses which already face real challenges in recruiting enough workers to meet their needs.</p> <p>Conversion of farm buildings supports the use of farm steadings for purposes which support rural population and the rural economy.</p> <p>The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use may currently limit economic growth in rural areas, by restricting the wider development and use of agricultural buildings, particularly for commercial use which would support farm diversification. However it may also help to protect the agricultural character of rural areas, which has wider benefits for economic growth, particularly in areas designated for their landscape character and important for visitors and tourism. It also ensures consideration of wider implications on surrounding land uses, and therefore <b>mixed effects</b> are identified.</p> <p><b>Introducing PDR for the conversion of farm steadings to dwellinghouses or for flexible commercial use</b> supports the use of agricultural buildings for purposes which support rural population and the rural economy, however it could lead to <b>minor negative</b> effects on rural character and particularly areas designated for their landscape value, or for which landscape character is important including National Scenic Areas, National Parks, Conservation Areas and Historic Gardens and Designed landscapes. Consultees also identified the potential for increases in rural population to increase the population within an HSE consultation zone for a major hazard site/major accident hazard pipeline or the safeguarding zone of a licensed explosives site has the potential to impact negatively on the operation of the site/pipeline/licensed site and a <b>mixed effect</b> is identified.</p>
To support rural development	<p>The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use may currently limit rural development, by restricting the wider development and use of agricultural buildings. This may result in lower levels of rural population and reduced farm diversification through development for commercial use. However it may also help to protect the agricultural character of rural areas, particularly in areas designated for their landscape value, or for which landscape character is important including National Scenic Areas, National Parks, Conservation Areas and Historic Gardens and Designed landscapes and therefore <b>mixed effects</b> are identified.</p> <p><b>Introducing PDR for the conversion of farm steadings to dwellinghouses or for flexible commercial use</b> supports the use of farm steadings for purposes which support rural population and the rural economy, however it could lead to minor negative effects on rural character and particularly areas designated for their landscape value which contribute to the rural economy and a <b>mixed effect</b> is identified for National Scenic Areas, National Parks, Conservation Areas and Historic Gardens and Designed landscapes.</p>
To support smarter resourcing of the planning system	Due to the lack of data on agricultural building conversions, an uncertain effect is identified.
<b>Social, population and human health</b>	

Farm steadings	Justification of scores
SA Objectives	Narrative/justification
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p>Potential risks to health from the location of development include areas of flood risk or proximity to major accident hazards. The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use ensures consideration of potential effects on health and quality of life, therefore a <b>minor positive</b> effect is identified.</p> <p><b>Introducing PDR for the conversion of farm steadings to dwellinghouses or for flexible commercial use</b> could increase the number of people living in rural communities, and accessing rural businesses helping to support the overall range of services available within rural communities and with a positive contribution to health and quality of life from the availability of these services. However in the absence of planning permission consideration of wider risks associated with the development such as proximity to major accident hazards may not be taken into account with <b>mixed positive and negative</b> effects on health and quality of life.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	<p>Increasing the rural population can bring benefits to community cohesion and vitality, and support the rural population, however the extent to which new residents engage with the local community and support local services can be variable. The <b>existing requirement for planning permission</b> for the conversion of agricultural buildings for dwellings or commercial use may in some locations limit the level of these developments coming forward, reducing the opportunity to support levels of rural population and their contribution to community cohesion and vitality, therefore <b>mixed effects</b> are identified.</p> <p><b>Introducing PDR for the conversion of farm steadings to dwellinghouses or for flexible commercial use</b> could increase the number of people living and working in rural communities, and accessing rural businesses helping to support the range of services available within rural communities and with a <b>minor positive</b> effect on community cohesion and vitality.</p>
To support access to education and training	No effect identified

**Micro-renewables (domestic and non-domestic)**

**Free-standing wind turbines (domestic)**

**Assessment table**

	No change in PDR	Extend existing PDR to Conservation Areas, World Heritage Sites, SSSIs, site of archaeological interest and within the curtilage of a category A Listed Building						Allow more than one turbine within the curtilage of a dwelling in all areas including where PDR are currently restricted						Relax 100m distance to neighbouring property in all areas including where PDR are currently restricted					
		Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building
<b>Biodiversity, flora and fauna</b>																			
To avoid adverse effects on all habitats and species	-?	-?	0	-?	-?	-?	-?	-?	0	-?	-?	-?	-?	-?	0	-?	-?	-?	-?
To enhance biodiversity	-?	-?	0	-?	-?	-?	-?	-?	0	-?	-?	-?	-?	-?	0	-?	-?	-?	-?
<b>Climatic factors</b>																			
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>																			
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	No change in PDR	Extend existing PDR to Conservation Areas, World Heritage Sites, SSSIs, site of archaeological interest and within the curtilage of a category A Listed Building						Allow more than one turbine within the curtilage of a dwelling in all areas including where PDR are currently restricted						Relax 100m distance to neighbouring property in all areas including where PDR are currently restricted					
		Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building
<b>Water</b>																			
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																			
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																			
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	--?	0	0	--?	--?	0	--?	0	0	--?	--?	0	--?	0	0	--?	--?	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	-?	--?	0	0	--?	--?	0	--?	0	0	--?	--?	0	--?	0	0	--?	--?	0
<b>Landscape and geodiversity</b>																			
To avoid adverse impacts on protected landscapes, wild land, geodiversity and	-?	-?	0	0	-?	-?	-?	-?	0	0	-?	-?	-?	-?	0	-0	-?	-?	-?

	No change in PDR	Extend existing PDR to Conservation Areas, World Heritage Sites, SSSIs, site of archaeological interest and within the curtilage of a category A Listed Building						Allow more than one turbine within the curtilage of a dwelling in all areas including where PDR are currently restricted						Relax 100m distance to neighbouring property in all areas including where PDR are currently restricted					
		Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological interest	Curtilage of a Listed Building
all landscapes																			
To enhance landscape quality	-?	-?	0	0	-?	-?	-?	-?	0	0	-?	-?	-?	-?	0	-0	-?	-?	-?
<b>Material assets</b>																			
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To enhance material assets	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Economy</b>																			
To support and enhance opportunities for sustainable economic growth	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support rural development	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support smarter resourcing of the planning system	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Social, population and human health</b>																			
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?

	No change in PDR	Extend existing PDR to Conservation Areas, World Heritage Sites, SSSIs, site of archaeological interest and within the curtilage of a category A Listed Building						Allow more than one turbine within the curtilage of a dwelling in all areas including where PDR are currently restricted						Relax 100m distance to neighbouring property in all areas including where PDR are currently restricted					
		Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological Interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological Interest	Curtilage of a Listed Building	Other areas	SSSIs	World Heritage Sites	Conservation Areas	Site of archaeological Interest	Curtilage of a Listed Building
for access, recreation and physical activity																			
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Free-standing wind turbines (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	The construction of free-standing wind turbines could result in the loss of protected habitats or protected species that rely on habitat at the existing site. The presence of free-standing wind turbines could also increase the risk of bird <sup>257</sup> and bat strike, <sup>258</sup> resulting in adverse impacts – particularly if threatened species are involved in the collisions. Therefore, existing PDR and each proposed change to PDR for free-standing wind turbines are judged to have minor negative effects due to the localised nature of effects. These impacts are uncertain given that the significance of the impacts depends on the previous use of the site and the biodiversity associated with that use. In addition, bird and bat collision risk is influenced by a combination of factors. Potential factors include species characteristics, site character and wind turbine features.
To enhance biodiversity	It is important to note, that, where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone to Natura 2000 sites, however, despite this, effects are

<sup>257</sup> SNH identify collision or interaction with turbine blades as a risk to birds <https://www.nature.scot/professional-advice/planning-and-development/renewable-energy-development/types-renewable-technologies/onshore-wind-energy/wind-farm-impacts-birds>

<sup>258</sup> Research undertaken at Stirling University and the University of Exeter identify the risk of bat strike. see <https://www.stir.ac.uk/news/2014/12/wind-turbine-warning-for-wildlife/index.html>, also <https://ore.exeter.ac.uk/repository/bitstream/handle/10871/22087/RichardsonS.pdf?sequence=1>

Free-standing wind turbines (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>considered to be minor negative for biodiversity overall as the HRA process focusses solely on maintaining the qualifying features of a Natura 2000 site.</p> <p>In addition, negligible effects are identified in relation to SSSIs, National Parks and National Scenic Areas. This is because wind turbines located within these sensitive areas are classified as a Schedule 2 development under the EIA Regulations 2017. Schedule 2 development does not constitute permitted development unless the planning authority has adopted a screening opinion to the effect that there are no likely significant environmental effects arising and therefore that EIA is not required. Where the authority's opinion is that there are likely significant effects arising from the proposal, PDR are withdrawn and a planning application must be submitted accompanied by an EIA report.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Free-standing wind turbines provide indirect benefits through the contribution they can make towards tackling climate change, especially in reducing greenhouse gas and carbon emissions compared to generating energy from fossil fuel resources. The proposed changes to PDR affecting designated areas do not significantly impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	Taking the above into account, the effects of existing PDR are judged to be minor positive due to the limited scale and extent of future free-standing wind turbine development as a result of the withdrawal of subsidies.
To support climate change adaptation	<p>Extending PDR to areas where PDR currently do not apply, relaxing the 100m distance to neighbouring properties and allowing more than one turbines within the curtilage of a building in all areas will remove the need to apply for planning permission and increase the area where PDR apply – particularly the latter. These relaxations are expected to support the further uptake of wind turbines, resulting in greater positive effects. However, these effects remain minor positive due to the limited scale and extent of future free-standing wind turbine development as a result of the withdrawal of subsidies. The development of free –standing turbines also helps to support the diversification of the energy supply, and reducing reliance on centralised energy generation resources which may be more vulnerable to climate change, and therefore minor positive effects are also identified for climate change adaptation.</p> <p>The significance of the effects described above remains uncertain, as the scale of future development is unknown.</p>
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Free-standing wind turbines provide indirect minor positive effects on the SA objective through the contribution they can make towards improving air quality, especially in reducing air pollutant emissions compared to fossil fuel-based energy sources. The proposed changes to PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To improve air quality	<p>Extending PDR to areas where PDR currently do not apply, relaxing the 100m distance to neighbouring properties and allowing more than one turbines within the curtilage of a building in all areas will remove the need to apply for planning permission and increase the area where PDR apply – particularly the latter. These relaxations are expected to support the further uptake of wind turbines, resulting in greater positive effects. However, these effects remain minor positive due to the limited scale and extent of future free-standing wind turbine development as a result of the withdrawal of subsidies.</p> <p>The significance of these effects remains uncertain, as the scale of future development is unknown.</p>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The effects of free-standing wind turbines can include adverse changes to water flow and drainage patterns, resulting in increased sedimentation and waterborne pollution. The significance of the impact will be less where developments are proposed away from watercourses. Having said this, such impacts generally arise from much larger wind turbines arranged in windfarms. Existing PDR and the proposed changes will only allow for isolated micro-wind turbines, which are much smaller than wind turbines associated with larger windfarm developments. The impact of free standing micro-wind turbines is considered to be low, and the



Free-standing wind turbines (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	effects resulting from current PDR and each proposed change to PDR are judged to be negligible due to the limited scale and extent of development which would be permitted.
To avoid and reduce flood risk	The construction of new free-standing wind turbines will increase the area of impermeable surface. However, the effects of existing PDR and each proposed change to PDR for free-standing wind turbines are judged to be negligible due to the limited scale and extent of development of future free-standing wind turbines, and their limited impact on flood risk.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The effects of existing PDR and each proposed change to PDR for free-standing wind turbines include soil sealing resulting from their construction. However, these effects are judged to be negligible due to the limited scale and extent of development of future free-standing wind turbines.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	The effects of existing PDR and each proposed change to PDR for free-standing wind turbines are unlikely to impact on vacant land and buildings. Therefore, the potential effects are judged to be negligible due to the limited scale and extent of development of future free-standing wind turbines.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects of free-standing wind turbines on cultural heritage include direct impacts on buried archaeology resulting from construction, as well as adverse effects on the setting of cultural heritage resources. Adverse effects on setting relate to principal views and skylines of heritage assets. Greater impacts could occur in areas designated for their heritage assets and archaeological value.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Existing PDR for free-standing wind turbines do not currently apply in Conservation Areas, World Heritage Sites and sites of archaeological interest – ensuring consideration of cultural heritage impacts through the planning in these areas. However, PDR apply outwith these areas, potentially resulting in minor negative effects to heritage assets.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which effects may occur, with greater potential for negative effects. As such, potential significant negative effects are identified in relation to areas of historic/archaeological importance and undesignated historic assets (e.g. townscapes). This is particularly the case for all of the proposed changes, as these consider allowing turbines within Conservation Areas and Sites of archaeological interest, which are particularly sensitive historic areas. The proposed changes to allow more than one turbine within the curtilage of a dwelling, and to allow turbines within 100m of other dwellings may lead to further negative effects to the setting of heritage assets due to a potential proliferation and cluttering effect. It is important to note turbines proposed within the curtilage of category A listed buildings will require listed building consent and therefore inappropriate physical impacts to listed buildings will be avoided through this consent regime and therefore impacts here are considered negligible as they will be mitigated through the listed building consent regime.</p> <p>The significance of the effects described above is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p> <p>Negligible effects are identified for SSSIs and World Heritage Sites. This is because wind turbines located within these sensitive areas (which include National Parks and National Scenic Areas) are classified as a Schedule 2 development under the EIA Regulations 2017. Schedule 2 development does not constitute permitted development unless the planning authority has adopted a screening opinion to the effect that there are no likely significant environmental effects arising and therefore that EIA is not required. Where the authority's opinion is that there are likely significant effects arising from the proposal, PDR are withdrawn and a planning application must be submitted accompanied by an EIA report. As such negligible effects are anticipated in SSSIs and World Heritage Sites. The significance of the effects described above is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect may depend on local factors such as the existing vegetation cover and topography.</p>



Free-standing wind turbines (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Adverse landscape effects resulting from domestic free-standing wind turbines include the introduction of complex structures or unnatural shapes, including vertical features into the landscape. Construction could result in impacts on important rocks, fossils, landforms, soils and land forming processes. In more rural landscapes, free-standing wind turbines may be seen over long distances depending on the nature of the landscape. In addition, free-standing wind turbines may introduce features which influence the sense of space in a landscape and introduce built features into a rural landscape which typically has lower levels of human influence. In sensitive landscapes, key areas where impacts would be greater include views from visitor attractions, scenic viewpoints and views from roads.</p>
To enhance landscape quality	<p>Existing PDR for domestic, free-standing wind turbines are judged to be minor negative, because although PDR do not currently apply in a number of designated areas including Conservation Areas, World Heritage Sites, SSSIs, sites of archaeological interests and within the curtilage of a Category A Listed Building (which ensures consideration of landscape and geodiversity impacts through the planning process in these areas), there remains the potential for impacts outside this designated areas, in locations such as those designated for their scenic value, areas of wild land or rural areas, and at the edge of protected areas.</p> <p>Each proposed change to PDR will remove the need to apply for planning permission and increases the area over which effects may occur, resulting in more significant impacts in relation to this SA objective. However, because the PDR allow only micro-renewables, the effects are anticipated to be minor negative as micro-turbines are generally smaller, and because of the association with dwelling houses – PDR apply only within the curtilage of a dwelling house. The significance of the effects described above is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p> <p>It is important to note that any wind turbines proposed within sensitive areas (i.e. SSSIs and World Heritage Sites) do not constitute permitted development unless the planning authority has adopted a screening opinion to the effect that there are no likely significant environmental effects arising and therefore that EIA is not required. Where the authority's opinion is that there are likely significant effects arising from the proposal, PDR are withdrawn and a planning application must be submitted accompanied by an EIA report. As such negligible effects are anticipated in SSSIs and World Heritage Sites.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	<p>The deployment of domestic free-standing wind turbines will support the uptake of renewable energy sources in Scotland, promoting the prudent use of resources. As such the existing PDR are considered likely to result in minor positive effects in relation to this SA objective. Only minor positive effects are anticipated due to the relatively low contribution that micro-turbines can make to this SA objective on a national basis. Although some soil may be sealed as a result of the provision of free-standing wind turbines, the amount expected to be lost is so small as to result in negligible changes.</p>
To enhance material assets	<p>Extending PDR to areas where PDR currently do not apply, relaxing the 100m distance to neighbouring properties and allowing more than one turbines within the curtilage of a building in all areas will remove the need to apply for planning permission and increase the area where PDR apply – particularly the latter alternative. These relaxations are expected to support the further uptake of wind turbines, resulting in greater positive effects. However, these effects remain minor positive, again due to the limited scale and extent of future free-standing micro-wind turbines in contributing towards this SA objective on a national basis.</p> <p>Having said this, the significance of these effects remains uncertain, as the scale of future development is unknown.</p>
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The increased development of domestic free-standing wind turbines is likely to underpin Scotland's sustainable economic development through the increased uptake of domestic free-standing wind turbines. This would help to achieve the Scottish Governments targets for renewable energy. In addition, the further deployment of domestic free-standing wind turbines is likely to positively impact upon health and quality of life through the potential to alleviate fuel poverty through improved energy efficiency and the associated reduction in energy costs as well as providing indirect benefits to the wider community through improved</p>
To support rural development	

Free-standing wind turbines (domestic)	Justification of scores
SA Objectives	Narrative/justification
	<p>system stability during electricity outages. This particularly applies to remote and peripheral rural areas.</p> <p>Taking the above into account, existing PDR are judged to result in minor positive effects in relation to both supporting sustainable economic growth and rural development. Only minor positive effects are identified due to the limited scale and extent of future free-standing wind turbine development as a result of the withdrawal of subsidies.</p> <p>Extending PDR to areas where PDR currently do not apply, relaxing the 100m distance to neighbouring properties and allowing more than one turbines within the curtilage of a building in all areas will remove the need to apply for planning permission and increase the area where PDR apply – particularly the latter alternative. These relaxations are expected to support the further uptake of wind turbines, resulting in greater positive effects. However, these positive effects remain minor positive due to the limited scale and extent of future free-standing wind turbine development as a result of the withdrawal of subsidies.</p> <p>The significance of these effects remains uncertain, as the scale of future development is unknown.</p>
To support smarter resourcing of the planning system	<p>The existing PDR already reduce the overall quantity of related planning applications which provides minor positive effects in relation to this SA objective. The proposed changes would further reduce the number of planning applications processed by planning authorities, thereby allowing resources to be diverted to other matters. However, the effects are likely to be similar to the current situation, and the effects therefore remain minor positive. This is because the volume of applications is expected to be low, reflecting the limited scale and extent of future development of domestic free-standing wind turbines. The significance of this effect is uncertain due to a lack of data on the number of planning applications.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p>The existing PDR for domestic wind turbines could have the potential to adversely impact upon flight safety. This is because free-standing wind turbines are known to cause 'clutter' on the radar at an aerodrome or technical site, degrading the performance of the sensitive electronic equipment used in the provision of air traffic services. However, due to the small scale of these turbines, and relatively low anticipated uptake, it is considered there is a relatively low risk of these effects occurring, and minor negative effects are identified. On the other hand, the existing PDR for domestic free-standing wind turbines are considered to result in minor positive effects upon health and quality of life through the potential to alleviate fuel poverty through improved energy efficiency and the associated reduction in energy costs as well as providing indirect benefits to the wider community through improved system stability during electricity outages.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p>.Extending PDR to areas where PDR currently do not apply, relaxing the 100m distance to neighbouring properties and allowing more than one turbine within the curtilage of a building in all areas will remove the need to apply for planning permission in these circumstances and increase the area where PDR apply – particularly for the latter alternative. These relaxations are expected to support the further uptake of wind turbines, resulting in greater positive effects. However, these effects remain minor positive due to the limited scale and extent of future free-standing wind turbine development as a result of the withdrawal of subsidies. In addition, further adverse effects may result from the proposed changes to allow domestic wind turbines within 100m of other dwelling houses, from changes to general visual amenity, and the production of shadow flicker and noise emittance. However, again due to the relatively low anticipated uptake, such effects are considered to be minor negative. As such, overall the proposed changes are considered to result in overall mixed effects.</p>
To support community cohesion and vitality	<p>It is assumed that the development of domestic free-standing wind turbines will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified.</p>
To support access to education and training	<p>It is assumed that the development of domestic free-standing wind turbines will not directly influence access to education and training. Therefore, a negligible effect is identified.</p>

Free-standing wind turbines (non-domestic)

Assessment table

	No PDR	Introduce existing PDR in designated and non-designated areas										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Setting of Category A Listed Building	Setting of Scheduled monument
<b>Biodiversity, flora and fauna</b>												
To avoid adverse effects on all habitats and species	+?	-?	0	0	0	-?	-?	-?	0	0	-?	-?
To enhance biodiversity	+?	-?	0	0	0	-?	-?	-?	0	0	-?	-?
<b>Climatic factors</b>												
To avoid increasing greenhouse gas emissions	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>												
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To improve air quality	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Water</b>												
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>												
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most	0	0	0	0	0	0	0	0	0	0	0	0

	No PDR	Introduce existing PDR in designated and non-designated areas										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Setting of Category A Listed Building	Setting of Scheduled monument
versatile agricultural land												
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>												
To avoid adverse effects on designated and undesignated heritage assets and their settings	+?	--?	0	0	0	--?	--?	--?	0	0	--?	--?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+?	--?	0	0	0	--?	--?	--?	0	0	--?	--?
<b>Landscape and geodiversity</b>												
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+?	--?	--?	0	0	--?	--?	-?	0	0	--?	--?
To enhance landscape quality	+?	--?	--?	0	0	--?	--?	-?	0	0	--?	--?
<b>Material assets</b>												
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To enhance material assets	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Economy</b>												
To support and enhance opportunities for sustainable economic growth	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support rural development	0?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support smarter resourcing of the planning system	?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?

	No PDR	Introduce existing PDR in designated and non-designated areas										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Setting of Category A Listed Building	Setting of Scheduled monument
<b>Social, population and human health</b>												
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?	-?/+?
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Free-standing wind turbines (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	The construction of free-standing wind turbines could result in the loss of protected habitats or protected species that rely on habitat at the existing site. In addition, the deployment of free-standing wind turbines could lead to an increase in collision mortality among bats and birds. At present, there are no PDR for non-domestic free-standing wind turbines – ensuring consideration of biodiversity impacts through the planning process in all areas. Therefore, current PDR (or the lack thereof) are considered to have positive effects on avoiding adverse effects on habitats and species. Based on the assumption that non-domestic free-standing wind turbines are most likely to be associated with existing buildings and built-up areas, the effects are likely to be minor positive. However, the significance of this effect is uncertain given that it depends on the previous use of the site and the biodiversity associated with that use.
To enhance biodiversity	Introducing PDR for non-domestic free-standing wind turbines is anticipated to result in the loss of protected habitats/species and increase the risk of bird strike, resulting in minor negative effects given the limited scale of future development. These impacts are uncertain given that the significance of the impacts depends on the previous use of the site and the biodiversity associated with that use. In addition, bird collision risk is influenced by a combination of factors. Potential factors include species characteristics, site character and wind turbine features.  It is important to note, that, where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for

Free-standing wind turbines (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone to Natura 2000 sites.</p> <p>In addition, negligible effects are identified in relation to SSSIs, European Sites, National Parks and National Scenic Areas. This is because wind turbines located within these sensitive areas are classified as a Schedule 2 development under the EIA Regulations 2017. Schedule 2 development does not constitute permitted development unless the planning authority has adopted a screening opinion to the effect that there are no likely significant environmental effects arising and therefore that EIA is not required. Where the authority's opinion is that there are likely significant effects arising from the proposal, PDR are withdrawn and a planning application must be submitted accompanied by an EIA report.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	The proposed PDR in relation to free-standing wind turbines provide indirect positive effects on this SA objective through the contribution they can make towards reducing greenhouse gas emissions and supporting climate change adaptation.
To support actions which contribute to targets for reducing greenhouse gas emissions	There are currently no PDR for non-domestic free-standing wind turbines; thus, planning permission is required. The lack of existing PDR may limit the rate of development of free-standing wind turbines, although this effect is likely to be very small. Therefore, a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic free-standing wind turbines is unknown.
To support climate change adaptation	Introducing PDR are likely to have positive effects on this SA objective, because they encourage the uptake of non-domestic free-standing wind turbines by removing the statutory requirement to submit a planning application under certain circumstances. Changes in PDR affecting different designated areas do not impact on the overall scale or extent of overall effect on climate change. An uncertain minor positive effect is identified, reflecting the limited scale and extent of future development.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Free-standing wind turbines provide indirect beneficial effects on the SA objective through the contribution they can make towards improving air quality, especially in reducing air pollutant emissions compared to fossil fuel-based energy sources.
To improve air quality	<p>There are currently no PDR for non-domestic free-standing wind turbines; thus, planning permission is required. The lack of existing PDR may limit the rate of development of free-standing wind turbines, although this effect is likely to be very small. Therefore, a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic free-standing wind turbines is unknown.</p> <p>Introducing PDR are likely to have positive effects on this SA objective, because they encourage the uptake of non-domestic free-standing wind turbines by removing the statutory requirement to submit a planning application under certain circumstances. Changes in PDR affecting different designated areas do not impact on the overall scale or extent of overall effect on climate change. An uncertain minor positive effect is identified, reflecting the limited scale and extent of future development.</p>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<p>The effects of free-standing wind turbines can include adverse changes to water flow and drainage patterns, resulting in increased sedimentation and waterborne pollution. The significance of the impact will be less where developments are proposed away from watercourses. Having said this, such impacts generally arise from much larger wind turbines arranged in windfarms. Micro-wind turbines are smaller than wind turbines associated with larger windfarm developments, and the impacts of free standing micro-wind turbines is considered to be low</p> <p>As such, even though there are no existing PDR, the impact of micro-turbines is considered to be so low that the fact they require planning permission results in negligible effects in relation to this SA objective. Similarly, the proposed changes to PDR are considered to result in negligible effects, due to the limited effect of</p>



Free-standing wind turbines (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
	micro-wind turbines and the likely distribution of development. As such, the effects resulting from current (i.e. no) PDR and each proposed change to PDR are judged to be negligible due to the limited scale and extent of development which would be permitted.
To avoid and reduce flood risk	The construction of new free-standing micro-wind turbines will increase the area of impermeable surface. However, the effects of this are judged to be very low due to the limited scale and extent of development of future free-standing micro-wind turbines, and their limited impact on flood risk. As such, the requirement for planning permission for micro-wind turbines (the current situation) is likely to result in negligible effects, and the effects of each of the proposed changes are also considered negligible.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The construction of new free-standing micro-wind turbines may affect valuable soil resources by placing turbines on top of valuable soils, which would effectively prevent their use. However, the effects of this are judged to be very low due to the limited scale and extent of development of future free-standing micro-wind turbines. As such, the requirement for planning permission for micro-wind turbines (the current situation) is likely to result in negligible effects, and the effects of each of the proposed changes are also considered negligible.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	Micro-turbines are not considered likely to affect the use of derelict land and buildings. The current situation, which is to require planning permission for free standing non-domestic micro-wind turbines, is therefore considered to result in negligible effects. Similarly, the proposed changes to allow micro-turbines in certain circumstances is also considered likely to result in negligible effects.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>Effects of free-standing wind turbines on cultural heritage include adverse effects on the setting of designated and non-designated cultural heritage assets and their settings. Adverse effects on setting relate to principal views and skylines.</p> <p>There are currently no PDR for non-domestic free-standing wind turbines, meaning that the lack of PDR for non-domestic free-standing wind turbines ensures consideration of cultural heritage impacts through the planning process in all areas. Therefore, a minor positive effect is identified in relation to the current situation. This is uncertain because it will depend on the specifics of each proposal site.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Introducing PDR for non-domestic free-standing micro-wind turbines will remove the need to apply for planning permission and increase the area over which effects could occur, resulting in adverse effects on heritage assets and their settings. Therefore, a significant negative effect is identified due to potential adverse effects on heritage assets and their setting in protected areas including Conservation Areas, and Sites of Archaeological Interest. Such effects could also apply to Historic Gardens and Designed Landscapes, historic battlefields and the setting of Scheduled Monuments and listed buildings. Similar adverse effects could also affect undesignated heritage assets such as townscapes. The significance of these effects is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography. It is important to note turbines proposed within the curtilage of category A listed buildings will require listed building consent and therefore inappropriate physical impacts to listed buildings will be avoided through this consent regime.</p> <p>In addition, negligible effects are identified in relation to SSSIs, European Sites, World Heritage Sites, National Parks and National Scenic Areas. This is because wind turbines located within these sensitive areas are classified as a Schedule 2 development under the EIA Regulations 2017. Schedule 2 development does not constitute permitted development unless the planning authority has adopted a screening opinion to the effect that there are no likely significant environmental effects arising and therefore that EIA is not required. Where the authority's opinion is that there are likely significant effects arising from the proposal, PDR are withdrawn and a planning application must be submitted accompanied by an EIA report. As such the EIA screening process should provide scrutiny and safeguarding against significant negative effects in relation to heritage assets and their enhancement. The significance of the effects described above is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on</p>

Free-standing wind turbines (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
	setting, the scale of effect may depend on local factors such as the existing vegetation cover and topography.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Adverse landscape effects resulting from free-standing wind turbines include the introduction of complex structures or unnatural shapes, including vertical features into the landscape. Construction could result in impacts on important rocks, fossils, landforms, soils and land forming processes. In more rural landscapes, free-standing wind turbines may be seen over long distances depending on the nature of the landscape. Free-standing wind turbines could introduce features which influence the sense of space in a landscape and introduce built features into a landscape which typically has lower levels of human influence. In sensitive landscapes, key areas where impacts would be greater include views from visitor attractions, scenic viewpoints and views from roads.</p>
To enhance landscape quality	<p>There are currently no PDR for non-domestic free standing micro-wind turbines, ensuring consideration of landscape and geodiversity impacts through the planning process in all areas. Therefore, it is assumed that the current situation results in minor positive effects. However, this is uncertain as such effects will be dependent upon site specific context.</p> <p>Introducing PDR will remove the need to apply for planning permission, potentially resulting in significant negative effects on protected landscapes, , geodiversity, other designated landscapes and minor negative effects on landscapes designated for their cultural heritage value for which setting is important. Similar impacts could also occur in rural areas and areas including wild land. However, these effects are uncertain given that the impacts depend upon the nature of the wider landscape and its features.</p> <p>The significance of these effects is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect would depend on local factors such as the existing vegetation cover and topography.</p> <p>Negligible effects are identified in relation to SSSIs, National Parks, National Scenic Areas and World Heritage Sites. This is because wind turbines located within these sensitive areas are classified as a Schedule 2 development under the EIA Regulations 2017. Schedule 2 development does not constitute permitted development unless the planning authority has adopted a screening opinion to the effect that there are no likely significant environmental effects arising and therefore that EIA is not required. Where the authority's opinion is that there are likely significant effects arising from the proposal, PDR are withdrawn and a planning application must be submitted accompanied by an EIA report. As such the EIA screening process should provide scrutiny and safeguarding against significant negative effects in relation to heritage assets and their enhancement. The significance of the effects described above is uncertain depending on the sensitivity of the surrounding landscape and the siting/scale of proposed development. In relation to effects on setting, the scale of effect may depend on local factors such as the existing vegetation cover and topography.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	<p>The provision of wind energy infrastructure provides energy from a sustainable and renewable resource and therefore reduces the amount of finite resources, such as those based on fossil fuels, needed to power businesses. There are currently no PDR for non-domestic free-standing wind turbines; thus, planning permission is required. The lack of existing PDR means that the current situation may limit the rate of development of free-standing wind turbines This effect is assumed to be very small and therefore a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic free-standing wind turbines is unknown.</p>
To enhance material assets	<p>Introducing PDR will remove the need to apply for planning permission for non-domestic free standing wind turbines, which should make their delivery more simple and viable. This is expected to result in greater uptake of micro-wind turbine technology, thereby decreasing dependence on fossil fuels. This will result in minor positive effects on the deployment of renewable energy sources in Scotland. he significance of these effects is uncertain, as the scale of future development is unknown.</p>



Free-standing wind turbines (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The increased development of free-standing wind turbines is likely to underpin Scotland's sustainable economic development through the increased uptake of wind energy.</p> <p>There are currently no PDR for non-domestic free-standing wind turbines; thus, planning permission is required. The lack of existing PDR may limit the rate of development of free-standing wind turbines, although this effect is assumed to be very small. Therefore, a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic free-standing wind turbines is unknown.</p> <p>Introducing PDR could have positive effects on this SA objective, because they encourage the uptake of non-domestic free-standing wind turbines by removing the statutory requirement to submit a planning application under certain circumstances. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change. An uncertain minor positive effect is identified, reflecting the limited scale and extent of future development.</p>
To support rural development	<p>The current situation where no PDR exist means that planning permission must be gained for the provision of non-domestic free standing micro-wind turbines. The requirement to gain planning permission may limit the uptake / delivery of these technologies, however the effects of this are considered to be negligible , and uncertain as the extent to which the technology is limited by the need for planning permission is unknown. Introducing PDR is likely to streamline the delivery of non-domestic free-standing micro-wind turbines, which may have beneficial effects on rural communities in terms of providing a relatively stable source of renewable energy, reduced electricity bills and potentially an income stream from the sale of electricity. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect. It needs to be noted that these effects are judged to be minor positive, reflecting the limited scale and extent of future development of non-domestic free-standing wind turbines. The significance of these effects remains uncertain, as the scale of future development is unknown.</p>
To support smarter resourcing of the planning system	<p>The current situation where no PDR exist means that planning permission must be gained for the provision of non-domestic free standing micro-wind turbines. The requirement to gain planning permission means that planning resources are spent dealing with planning applications for such developments. This effect is uncertain as the number of applications for planning permission is unknown.</p> <p>The proposed changes to PDR are likely to reduce the amount of applications processed by planning authorities. The effect of this may be to allow planning resources to be utilised for other matters, resulting in minor positive effects in relation to this SA objective. Only minor effects are anticipated because the volume of applications is expected to be low, reflecting the limited scale and extent of future development of non-domestic free-standing wind turbines. The significance of this effect is uncertain due to a lack of data on the number of planning applications.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p>Free-standing wind turbines can adversely impact upon flight safety. This is because free-standing wind turbines are known to cause 'clutter' on the radar at an aerodrome or technical site, degrading the performance of the sensitive electronic equipment used in the provision of air traffic services. The current situation – which is that planning permission is required for each non-domestic micro-wind turbine is likely to control adverse effects and is therefore considered to result in minor positive effects in relation to this SA objective. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic free-standing wind turbines is unknown.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p>Introducing PDR is likely to result in potential adverse impacts on health and safety, for example as a result of interference with radar operation. The anticipated limited uptake of micro-wind turbines means that the effects are considered to be minimised, resulting in minor negative effects. These effects are uncertain as the exact location and site context of sites is unknown.</p> <p>In addition, further minor negative effects may arise from the production of shadow flicker and noise emittance associated with turbines, which may affect local</p>

Free-standing wind turbines (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
	amenity. Again, the extent of this effect is uncertain as it depends on specific site context.  It is possible that the proposed PDR will create opportunities to ensure that local communities have more robust power supplies and potentially sources of income, which may result in minor positive effects. This is uncertain as this will depend on the specific site and local community aspirations.
To support community cohesion and vitality	It is assumed that the development of non-domestic free-standing wind turbines will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified for this SA objective.
To support access to education and training	It is assumed that the development of non-domestic free-standing wind turbines will not directly influence access to education and training. Therefore, a negligible effect is identified for this SA objective.

### Air source heat pumps (domestic)

#### Assessment table

	No change in PDR	Extend existing PDR to World Heritage Sites and within the curtilage of a Listed Building		Relax current location restrictions on a dwelling and in curtilage of a building in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas			Increase the number of ASHP allowed within the curtilage of a building (particularly for flats/housing associations) in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas		
		World Heritage Sites	Within the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building
<b>Biodiversity, flora and fauna</b>									
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>									

	No change in PDR	Extend existing PDR to World Heritage Sites and within the curtilage of a Listed Building		Relax current location restrictions on a dwelling and in curtilage of a building in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas			Increase the number of ASHP allowed within the curtilage of a building (particularly for flats/housing associations) in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas		
		World Heritage Sites	Within the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building
To avoid increasing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support climate change adaptation	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Air</b>									
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+?	+?	+?	+?	+?	+?	+?	+?	+?
To improve air quality	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Water</b>									
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0
<b>Soil</b>									
To protect and avoid adverse effects on valuable soil resources, including carbon soils	0	0	0	0	0	0	0	0	0

	No change in PDR	Extend existing PDR to World Heritage Sites and within the curtilage of a Listed Building		Relax current location restrictions on a dwelling and in curtilage of a building in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas			Increase the number of ASHP allowed within the curtilage of a building (particularly for flats/housing associations) in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas		
		World Heritage Sites	Within the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building
and best & most versatile agricultural land									
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>									
To avoid adverse effects on designated and undesignated heritage assets and their settings	+?	--?	--?	--?	--?	--?	--?	--?	--?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+?	--?	--?	--?	--?	--?	--?	--?	--?
<b>Landscape and geodiversity</b>									
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0
<b>Material assets</b>									
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the	+?	+?	+?	+?	+?	+?	+?	+?	+?

	No change in PDR	Extend existing PDR to World Heritage Sites and within the curtilage of a Listed Building		Relax current location restrictions on a dwelling and in curtilage of a building in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas			Increase the number of ASHP allowed within the curtilage of a building (particularly for flats/housing associations) in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas		
		World Heritage Sites	Within the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building
generation of waste									
To enhance material assets	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Economy</b>									
To support and enhance opportunities for sustainable economic growth	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support rural development	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support smarter resourcing of the planning system	-?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Social, population and human health</b>									
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+?	+?	+?	+?	+?	+?	+?	+?	+?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0

	No change in PDR	Extend existing PDR to World Heritage Sites and within the curtilage of a Listed Building		Relax current location restrictions on a dwelling and in curtilage of a building in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas			Increase the number of ASHP allowed within the curtilage of a building (particularly for flats/housing associations) in World Heritage Sites, within the curtilage of a Category A Listed Building and areas outside those aforementioned areas		
		World Heritage Sites	Within the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building	World Heritage Sites	Within the curtilage of a Listed Building	Areas outside the curtilage of a Listed Building
To support access to education and training	0	0	0	0	0	0	0	0	0

### Justification of scores

Air source heat pumps (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of domestic ASHP will not directly influence habitats and species. Therefore, a negligible effect is identified for this SA objective.
To enhance biodiversity	It is important to note that bat roosts and birds' nests are legally protected in the UK, by both domestic and international legislation. As such, adverse impacts on birds' nests and bat roosts that may result from the construction of ASHP would be avoided through current legislation.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	ASHP would have indirect positive effects on this SA objective through the contribution they can make towards tackling climate change through reducing greenhouse gas emissions and carbon emissions. This positive effect is particularly likely when compared to the contribution fossil fuel-based sources are likely to make to greenhouse gas emissions. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	Taking the above into account, the effects of existing PDR are judged to be minor positive due to the small scale of ASHP and their limited potential impact on reducing greenhouse gas emissions.  Extending PDR to areas where PDR currently do not apply will increase the overall area where such PDR apply. While this change would help to support the

Air source heat pumps (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>further uptake of ASHP, given that the areas designated as heritage assets account for only a small area of Scotland at a national level the positive effect is likely to be minor. Changes to PDR which would relax location restrictions on a dwelling in all areas and increase the number of ASHP allowed within the curtilage of a building in all areas are expected to have a greater impact in terms of promoting the uptake of this type of technology and therefore a significant positive effect has been recorded in relation to climate change for these options.</p> <p>The significance of the effects described above is uncertain, as the exact scale of future development remains unknown.</p>
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	ASHP provide indirect positive effects on this SA objective through the contribution they can make towards improving local air quality, especially in reducing air pollutant emissions compared to fossil fuel-based energy sources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on air quality.
To improve air quality	<p>Taking the above into account, the effects of existing PDR are judged to be minor due to the small scale of ASHP and their limited potential impact on reducing air pollutant emissions.</p> <p>Extending PDR to areas where PDR currently do not apply, relaxing location restrictions on a dwelling in all areas and increasing the number of ASHP allowed within the curtilage of a building in all areas will remove the need to apply for planning permission and increase the area where PDR apply – particularly the latter. These relaxations are expected to support the further uptake of ASHP, resulting in greater positive effects. These effects are judged to be minor, reflecting the small scale of development and the limited potential impacts of ASHP on reducing the emissions of air pollutants by displacing fossil fuel energy sources.</p> <p>The significance of the effects described above is uncertain, as the exact scale of future development remains unknown.</p>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of domestic ASHP will not directly influence the quality and quantity of watercourses and waterbodies and therefore, a negligible effect is identified.
To avoid and reduce flood risk	It is assumed that the development of domestic ASHP will not directly influence flood risk and therefore, a negligible effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of ASHP will not directly influence the quality of soil resources and therefore, a negligible effect is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land	It is assumed that the development of ASHP will not directly contribute towards reducing vacant land and buildings and therefore, a negligible effect is identified for this SA objective.
<b>Cultural heritage</b>	



Air source heat pumps (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid adverse effects on designated and undesignated heritage assets and their settings	Effects relating to cultural heritage principally include the risk of visual clutter.  The current PDR will have a minor positive effect on the avoidance of adverse effects on designated and undesignated heritage assets and their settings, given that at present PDR for domestic ASHP do not apply in World Heritage Sites or within the curtilage of a Listed Building. Additional restrictions apply in Conservation Areas. This means that existing PDR ensure consideration of cultural heritage impacts through the planning process in these areas.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Relaxing current location restrictions in all areas, extending existing PDR to World Heritage Sites and within the curtilage of a Listed Building and increasing the number of ASHP allowed within the curtilage of a building in all areas will remove the need to apply for planning permission and will increase the area over which effects may occur – particularly the latter. These relaxations could result in significant negative effects on cultural heritage assets and their settings, caused by the increased risk of visual clutter in sensitive areas including most designated and undesignated heritage assets as well as townscapes, and physical damage if equipment is attached to buildings. However, these effects are uncertain given that the impacts depend on the siting and scale of proposed development.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	It is assumed that the development of ASHP will not enhance landscape quality, but will not adversely impact upon it either due to their small size and their position on residential buildings. Therefore, a negligible effect is identified for this SA objective.
To enhance landscape quality	
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil, or the generation of waste	The deployment of ASHP will support the uptake of renewable energy sources in Scotland, promoting the prudent use of resources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on material assets.
To enhance material assets	Taking the above into account, the effects of existing PDR are judged to be minor positive due to the likely small scale of development of ASHP as a renewable energy source, although this is unknown.  Extending PDR to areas where PDR currently do not apply, relaxing location restrictions on a dwelling in all areas and increasing the number of ASHP allowed within the curtilage of a building in all areas will relax the conditions under which planning permission required and increase the area where PDR apply – particularly the latter. These relaxations are expected to support the further uptake of ASHP, resulting in greater positive effects. These effects are judged to be minor positive, reflecting the small scale of development. The significance of these effects is uncertain, as the exact scale of future development remains unknown.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The increased development of ASHP is likely to underpin Scotland's sustainable economic development through encouraging the uptake of renewable energy sources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on the economy.  Existing PDR and each proposed change to PDR for domestic ASHP would underpin Scotland's sustainable economic development through the increased use of renewable energy sources – particularly because domestic ASHP are a popular renewable heat technology throughout Scotland. Furthermore, increased uptake of domestic ASHP is likely to support the renewable energy sector in Scotland providing additional jobs and employment opportunities. Therefore, a minor positive effect is identified for this SA objective. The significance of these effects is uncertain, as the exact scale of future development remains unknown.



Air source heat pumps (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To support rural development	Existing PDR and each proposed change to PDR for domestic ASHP is expected to support the further development of domestic ASHP, which is beneficial to rural communities in terms of providing a relatively stable source of renewable energy. Therefore, minor positive effects are likely. The significance of these effects is uncertain, as the exact scale of future development remains unknown.
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under the proposed PDR changes. However, the volume of applications is unknown, however reflecting future support for low carbon energy. A minor positive effect is expected in relation to each of the options which propose PDR changes while a minor negative effect is expected in relation to the existing PDR. The significance of this effect is uncertain due to a lack of data on the number of planning applications.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Extending PDR for ASHP will positively impact upon health and quality of life through the potential to alleviate fuel poverty through improved energy efficiency and the associated reduction in energy costs as well as providing indirect benefits to the wider community through improved system stability during electricity outages. This particularly applies to communities in remote and peripheral areas.
To improve the health and living environment of people and communities including support for access, recreation and physical activity	The existing PDR and each proposed change to PDR are also likely to result in indirect minor positive effects on the avoidance of adverse effects on air quality and associated potential improvement to local amenity and living environment because they encourage the uptake of ASHP, resulting in improved air quality. However there may be other local effects such as noise from ASHP impacting on local amenity, resulting in overall mixed effects. The significance of the effects described above is uncertain given that the impacts depend on the siting and scale of proposed development.
To support community cohesion and vitality	It is assumed that the development of ASHP will have limited relevance to community cohesion and vitality. Therefore, a negligible effect is identified.
To support access to education and training	It is assumed that the development of ASHP will have limited relevance to access to education and training. Therefore, a negligible effect is identified.

## Air source heat pumps (non-domestic)

### Assessment table

	No PDR	Introduce existing PDR in designated and non-designated areas										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Setting of Category A Listed Building	Setting of Scheduled monument
<b>Biodiversity, flora and fauna</b>												
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0	0	0	0	0	0

	No PDR	Introduce existing PDR in designated and non-designated areas										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Setting of Category A Listed Building	Setting of Scheduled monument
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>												
To avoid increasing greenhouse gas emissions	0	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	0	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>												
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	0	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>												
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>												
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>												

	No PDR	Introduce existing PDR in designated and non-designated areas										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Setting of Category A Listed Building	Setting of Scheduled monument
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	--?	--?	--?	--?	--?	--?	--?	--?	--?	--?	--?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
<b>Landscape and geodiversity</b>												
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+	-?	-?	-?	-?	-?	-?	-?	--?	-?	--?	--?
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>												
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	+	+	+	+	+	+	+	+	+	+	+
To enhance material assets	0	+	+	+	+	+	+	+	+	+	+	+
<b>Economy</b>												
To support and enhance opportunities for sustainable economic growth	0	+	+	+	+	+	+	+	+	+	+	+
To support rural development	0	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	?	?	?	?	?	?	?	?	?	?	?	?
<b>Social, population and human health</b>												
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+	+

	No PDR	Introduce existing PDR in designated and non-designated areas										
		Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Setting of Category A Listed Building	Setting of Scheduled monument
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	0	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?	0?
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Air source heat pumps (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p>It is assumed that the development of non-domestic ASHP will not directly influence habitats and species. Therefore, a negligible is identified for this SA objective.</p> <p>It is important to note that bat roosts and birds' nests are legally protected in the UK, by both domestic and international legislation. As such, adverse impacts on birds' nests and bat roosts that may result from the construction of ASHP would be avoided through current legislation.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<p>ASHP would have indirect positive effects on this SA objective through the contribution they can make towards tackling climate change through reducing greenhouse gas emissions and carbon emissions – particularly compared to fossil fuel-based sources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.</p> <p>There are currently no PDR for non-domestic air source heat pumps; thus, planning permission is required. The lack of existing PDR may limit the rate of development of ASHP, although this effect is assumed to be very small. Therefore, a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic ASHP is unknown.</p> <p>Introducing PDR are likely to have positive effects on this SA objective, because it encourages the uptake of non-domestic ASHP by removing the statutory</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	

Air source heat pumps (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
	requirement to submit a planning application under certain circumstances. A minor positive effect is identified, reflecting the limited impact of ASHP overall as a renewable energy source on reducing greenhouse gas emissions.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<p>ASHP provide indirect positive effects on the SA objective through the contribution they can make towards improving air quality, especially in reducing air pollutant emissions compared to fossil fuel-based energy sources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on air quality.</p> <p>There are currently no PDR for non-domestic ASHP; thus, planning permission is required. The lack of existing PDR may limit the rate of development of ASHP, although this effect is assumed to be very small. Therefore, a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic air source heat pumps is unknown.</p> <p>Introducing PDR will support the uptake of ASHP, resulting in positive effects on the avoidance of adverse effects on local air quality. These effects are judged to be minor, reflecting the small scale of development and the limited potential impacts of ASHP on reducing the emissions of air pollutants.</p>
To improve air quality	As discussed above, PDR for non-domestic ASHP are anticipated to result in minor positive effects on air quality.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of non-domestic ASHP will not directly influence the quality and quantity of watercourses and waterbodies due to their small size. Therefore, a negligible effect is identified.
To avoid and reduce flood risk	It is assumed that the development of non-domestic ASHP will not directly influence flood risk due to their small size. Therefore, a negligible effect is identified.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of ASHP will not directly influence the quality of soil resources due to their small size. Therefore, a negligible effect is identified for this SA objective.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	It is assumed that the development of ASHP will not directly contribute towards reducing vacant land and buildings due to their small size. Therefore, a negligible effect is identified for this SA objective.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>Effects of non-domestic ASHP include adverse effects on the setting of heritage assets, caused by visual clutter. Another key impact relates to physical damage resulting from the attachment of kit to historic buildings and structures.</p> <p>There are currently no PDR for non-domestic air source heat pumps, meaning that the statutory requirement for planning permission ensures consideration of cultural heritage impacts through the planning process in designated areas (i.e. areas designated for their heritage assets). Therefore, a minor positive effect is identified in relation to current PDR (or more precisely, the lack thereof).</p> <p>Introducing PDR for non-domestic ASHP will remove the need to apply for planning permission, potentially resulting in adverse effects on heritage assets and their settings. A significant negative effect is identified, reflecting the increased risk of visual clutter in sensitive areas and undesignated heritage assets including</p>

Air source heat pumps (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
	townscapes. However, this effect is uncertain depending on local factors such as the sensitivity of the heritage asset in question, the previous use of the site and the topography of the wider landscape.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	Non-domestic ASHP are likely to have adverse effects on the setting of cultural heritage resources, although these effects are likely to be minor due to the small scale of individual development. Therefore, a minor effect is identified for this SA objective.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Effects of non-domestic ASHP include adverse effects on the setting of heritage assets. Adverse effects on setting principally relate to visual clutter and impacts on local amenity.</p> <p>There are currently no PDR for non-domestic ASHP, meaning that the statutory requirement for planning permission ensures consideration of landscape and diversity impacts through the planning process in designated areas (i.e. areas designated for their heritage assets). Therefore, a minor positive effect is identified in relation to current PDR (or more precisely, the lack thereof).</p> <p>Introducing PDR for non-domestic ASHP will remove the need to apply for planning permission, potentially resulting in adverse effects on landscape quality at a local scale, reflecting the association of these structures with existing buildings. A significant negative effect is identified for changes which affect nationally and internationally important cultural heritage, reflecting their significance and role in local landscape character, however minor effects are identified in relation to other assets. However, this effect is uncertain depending on local factors such as the sensitivity of the heritage asset in question, the previous use of the site and the topography of the wider landscape.</p>
To enhance landscape quality	It is assumed that the development of non-domestic ASHP will not directly influence landscape quality due to their small size and their position within the curtilage of dwellings. Therefore, a negligible effect is identified.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	<p>The deployment of ASHP will support the uptake of renewable energy sources in Scotland, promoting the prudent use of resources. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on material assets.</p> <p>There are currently no PDR for non-domestic ASHP; thus, planning permission is required. The lack of existing PDR may limit the rate of development of ASHP, although this effect is assumed to be very small. Therefore, a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic ASHP is unknown.</p> <p>Introducing PDR for non-domestic ASHP will positively support the deployment of renewable energy sources in Scotland, promoting the prudent use of resources. Therefore, the effects on this SA objective are judged to be minor positive.</p>
To enhance material assets	The development of non-domestic ASHP will positively support the deployment of renewable energy sources in Scotland, promoting the prudent use of resources. The effects on this SA objective are judged to be minor positive, reflecting the small scale of development associated with ASHP.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The increased uptake of ASHP is likely to contribute to Scotland's sustainable economic development. Furthermore, the increased uptake of ASHP is likely to

Air source heat pumps (non-domestic)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>support Scotland's renewable energy sector by providing additional employment opportunities.</p> <p>There are currently no PDR for non-domestic ASHP; thus, planning permission is required. The lack of existing PDR may limit the rate of development of air source heat pumps, although this effect is assumed to be very small. Therefore, a negligible effect is identified. However, this effect is uncertain as the extent to which the lack of PDR may limit the uptake of non-domestic ASHP is unknown.</p> <p>Introducing PDR could have positive effects on this SA objective, because they encourage the uptake of non-domestic ASHP by removing the statutory requirement to submit a planning application under certain circumstances. A minor positive effect is identified, reflecting the limited scale and extent of future development.</p>
To support rural development	Existing PDR and each proposed change to PDR is expected to support the further development of non-domestic ASHP, which is beneficial to rural communities in terms of providing a relatively stable source of renewable energy. Therefore, minor positive effects are likely.
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under the proposed PDR changes. However, the volume of future applications is unknown. The significance of this effect is uncertain due to a lack of data on the number of planning applications.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The existing PDR and each proposed change to PDR are likely to result in minor positive effects on the avoidance of significant adverse effects on air quality, because they encourage the uptake of ASHP. The uptake of renewable energy sources, in turn, could have positive effects on human health through reducing air pollution and the effects of climate change.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	
To support community cohesion and vitality	It is assumed that the development of ASHP will have limited relevance to community cohesion and vitality, although where a CHP scheme is developed from locally identified need this could support this objective. Therefore, a negligible uncertain effect is identified.
To support access to education and training	It is assumed that the development of ASHP will have limited relevance to access to education and training. Therefore, a negligible effect is identified.

## Domestic solar panels (on dwellinghouses)

### Assessment table

	No change to PDR	Extend existing PDR into Conservation Areas	Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs	Allow development on balconies in Conservation Areas, Listed Buildings and areas outside CAs and Listed Buildings
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			Conservation Areas	All other areas (except CAs)	Conservation Areas	All other areas (except CAs)
<b>Biodiversity, flora and fauna</b>						
To avoid adverse effects on all habitats and species	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0
<b>Climatic factors</b>						
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+
<b>Air</b>						
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+
<b>Water</b>						
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0
<b>Soil</b>						
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0
<b>Cultural heritage</b>						
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	--	--	-.?	--	--?
To enhance, where appropriate, heritage assets and their settings and to	0	0	0	0	0	0



	No change to PDR	Extend existing PDR into Conservation Areas	Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs		Allow development on balconies in Conservation Areas, Listed Buildings and areas outside CAs and Listed Buildings	
			Conservation Areas	All other areas (except CAs)	Conservation Areas	All other areas (except CAs)
improve the quality of the wider built environment						
<b>Landscape and geodiversity</b>						
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-
To enhance landscape quality	0	0	0	0	0	0
<b>Material assets</b>						
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+
<b>Economy</b>						
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+
To support smarter resourcing of the planning system	-?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>						
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-	-	-	-	-	-
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0

	No change to PDR	Extend existing PDR into Conservation Areas	Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs		Allow development on balconies in Conservation Areas, Listed Buildings and areas outside CAs and Listed Buildings	
			Conservation Areas	All other areas (except CAs)	Conservation Areas	All other areas (except CAs)
To support access to education and training	0	0	0	0	0	0

### Justification of scores

Domestic solar panels (on dwellinghouses)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of domestic solar panels will not directly influence habitats and species due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective.
To enhance biodiversity	It is assumed that the development of domestic solar panels will not directly influence habitats and species due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Domestic solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing greenhouse gas emissions and tackling climate change. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall effect on climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	Taking the above into account, it is anticipated that existing PDR and the other individual proposed changes will contribute to the Scottish Government's targets for reducing greenhouse gas emissions and supporting climate adaptation by making power supplies more resilient. A minor positive effect is identified for this SA objective, reflecting the small scale of development associated with domestic solar panels.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Domestic solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing emissions of air pollutants, particularly compared to fossil fuel-based sources of energy.  It is anticipated that existing PDR and the other individual proposed changes will contribute to the Scottish Government's targets for tackling air pollution, particularly in AQMAs. A minor positive effect is identified for this SA objective, reflecting the small scale of development associated with domestic solar panels.
To improve air quality	As discussed above, existing PDR and the other individual proposed changes are expected to have minor positive effects on reducing air pollution.

Domestic solar panels (on dwellinghouses)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of domestic solar panels will not directly influence the quality and quantity of watercourses and waterbodies due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
To avoid and reduce flood risk	It is assumed that the development of domestic solar panels will not directly influence flood risk due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of domestic solar panels will not directly influence valuable soil resources due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	It is assumed that the development of domestic solar panels will not have any relevance with regard to reducing the amount of vacant and derelict land. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>PDR currently do not apply in Conservation Areas, ensuring consideration of cultural heritage impacts through the planning process. Therefore, existing PDR are expected to have minor positive effects in terms of avoiding adverse effects on heritage assets and their settings.</p> <p>Extending PDR into Conservation Areas has the potential to result in significant adverse effects on heritage assets and their settings. Actual impacts will depend on the character of the Conservation Area in question, but the visible presence of solar panels on roofs could affect the appearance of individual historic buildings and affect the wider character of the townscape. Physical impacts could also result depending on panels' means of attachment to historic structures.</p> <p>Allowing development to protrude more than 1 metre and allowing development on balconies could result in significant adverse impacts on heritage assets and their settings, most particularly within Conservation Areas but also potentially impacting undesignated buildings and townscapes more widely. The potential impacts on this SA objective are uncertain given that the effects depend on the siting of development and the character of designated and undesignated heritage assets.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	As discussed previously, existing PDR and each individual proposed change are likely to have adverse effects on the setting of cultural heritage resources, and will not contribute to enhancement or improvement. Therefore, a negligible effect is identified for this SA objective. However, the potential impacts on this SA objective are uncertain given that the impacts depend on the siting of development and the nature of the surrounding landscape.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	It is anticipated that the development of domestic solar panels will have relatively limited visual impacts due to their small scale and location largely within built up areas. There is some scope however for the introduction of new sources of reflection and glare which may be visible more widely and local landscape effects where the appearance of vernacular buildings is altered through the addition of panels. Overall, a minor adverse effect is identified for this SA objective.
To enhance landscape quality	It is assumed that the development of domestic solar panels will not enhance landscape quality therefore, a negligible effect is identified for this SA objective.
<b>Material assets</b>	

Domestic solar panels (on dwellinghouses)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Existing PDR, extending PDR into Conservation Areas, allowing development to protrude more than 1 metre in all areas and allowing development on balconies in all areas will positively support the deployment of renewable energy sources in Scotland, promoting the prudent use of resources. Therefore, the effects on this SA objective are judged to be minor positive.
To enhance material assets	As discussed above, the current PDR and each proposed alternative is likely to encourage the uptake of domestic solar panels, resulting in minor positive effects on enhancing material assets and supporting the use of renewable energy sources in Scotland.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The current PDR are likely to have minor positive effects on supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating the uptake and purchase of domestic solar panels.
To support rural development	Existing PDR and each proposed alternative for domestic solar panels is expected to support the further development of this renewable technology, which is beneficial to rural communities in terms of providing a stable source of renewable energy. These positive effects are judged to be minor, reflecting the limited scale and extent of development.
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under the proposed PDR changes. However, the volume of applications is expected to be relatively low, reflecting the associated costs of the development. Furthermore, the overall significance of this effect is uncertain due to a lack of data on the number of planning applications and a negligible uncertain effect is identified.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Current PDR and each proposed change to PDR could increase the risk of 'glint and glare', causing a hazard to pilots on approach or Air Traffic Control tower staff – as well as causing possible interference with reflected radar signals, communication signals and Instrument Landing Systems. While it is unlikely that individual domestic scale installations would represent a major source of risk, it is possible that the concentration of a number of panels could result in a significant adverse effect. However, these effects are uncertain depending on the height of the proposed structures and their proximity to an aerodrome or technical site.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	It is assumed that the development of domestic solar panels will not directly influence the health and living environment of people and communities. Therefore, a negligible effect is identified for this SA objective.
To support community cohesion and vitality	It is assumed that the development of domestic solar panels will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified for this SA objective.
To support access to education and training	It is assumed that the development of domestic solar panels will not directly influence access to education and training. Therefore, a negligible effect is identified for this SA objective.

## Domestic solar panels on flats

### Assessment table

	No change to PDR	Extend existing PDR into Conservation Areas	Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs		Allow development on balconies in Conservation Areas, Listed Buildings and areas outside CAs and Listed Buildings	
			Conservation Areas	All other areas (except CAs)	Conservation Areas	All other areas (except CAs)
<b>Biodiversity, flora and fauna</b>						
To avoid adverse effects on all habitats and species	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0
<b>Climatic factors</b>						
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+
<b>Air</b>						
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+
<b>Water</b>						
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0
<b>Soil</b>						

	No change to PDR	Extend existing PDR into Conservation Areas	Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs		Allow development on balconies in Conservation Areas, Listed Buildings and areas outside CAs and Listed Buildings	
			Conservation Areas	All other areas (except CAs)	Conservation Areas	All other areas (except CAs)
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0
<b>Cultural heritage</b>						
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	--	--	--?	0?	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	-	-	-?	0?	-
<b>Landscape and geodiversity</b>						
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-
To enhance landscape quality	0	0	0	0	0	0
<b>Material assets</b>						
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+
<b>Economy</b>						
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+
To support rural development	0	0	0	0	0	0

	No change to PDR	Extend existing PDR into Conservation Areas	Allow development to protrude more than 1 metre beyond the external surface of the wall, roof plane, roof ridge or chimney of the building in Conservation Areas, and areas outside CAs		Allow development on balconies in Conservation Areas, Listed Buildings and areas outside CAs and Listed Buildings	
			Conservation Areas	All other areas (except CAs)	Conservation Areas	All other areas (except CAs)
To support smarter resourcing of the planning system	0	0	0	0	0	0
<b>Social, population and human health</b>						
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-	-	-	-	-	-
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	-	0	-
To support community cohesion and vitality	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0

### Justification of scores

Domestic solar panels (on flats)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of domestic solar panels will not directly influence habitats and species due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective.
To enhance biodiversity	It is assumed that the development of domestic solar panels will not directly influence habitats and species due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Domestic solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing greenhouse gas emissions and tackling climate change. Changes in PDR affecting designated areas do not impact on the overall scale or extent of overall

Domestic solar panels (on flats)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>effect on climate change.</p> <p>Taking the above into account, it is anticipated that existing PDR and the other individual proposed changes will contribute to the Scottish Government's targets for reducing greenhouse gas emissions and supporting climate adaptation by making power supplies more resilient. A minor positive effect is identified for this SA objective, reflecting the small scale of development associated with domestic solar panels.</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<p>Domestic solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing emissions of air pollutants, particularly compared to fossil fuel-based sources of energy.</p> <p>It is anticipated that existing PDR and the other individual proposed changes will contribute to the Scottish Government's targets for tackling air pollution, particularly in AQMAs. A minor positive effect is identified for this SA objective, reflecting the small scale of development associated with domestic solar panels.</p>
To improve air quality	As discussed above, existing PDR and the other individual proposed changes are expected to have minor positive effects on reducing air pollution.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of domestic solar panels will not directly influence the quality and quantity of watercourses and waterbodies due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
To avoid and reduce flood risk	It is assumed that the development of domestic solar panels will not directly influence flood risk due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of domestic solar panels will not directly influence valuable soil resources due to their small size and their position on residential buildings/rooftops. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	It is assumed that the development of domestic solar panels will not have any relevance with regard to reducing the amount of vacant and derelict land. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their	PDR currently do not apply in Conservation Areas, ensuring consideration of cultural heritage impacts through the planning process in these areas. Therefore, existing PDR are expected to have minor positive effects in terms of avoiding adverse effects on heritage assets and their



Domestic solar panels (on flats)	Justification of scores
SA Objectives	Narrative/justification
settings	<p>settings.</p> <p>Extending PDR into Conservation Areas has the potential to result in significant adverse effects on heritage assets and their settings. Actual impacts will depend on the character of the Conservation Area in question, but the visible presence of solar panels on roofs could affect the appearance of individual historic buildings and affect the wider character of the townscape. Physical impacts could also result depending on panels' means of attachment to historic structures.</p> <p>Allowing development to protrude more than 1 metre and allowing development on balconies could result in significant adverse impacts on heritage assets and their settings, most particularly within Conservation Areas but also potentially impacting undesignated buildings and townscapes more widely. The potential impacts on this SA objective are uncertain given that the effects depend on the siting of development and the character of designated and undesignated heritage assets.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	As discussed previously, existing PDR and each individual proposed change are likely to have adverse effects on the setting of cultural heritage resources, but will not contribute to enhancement or quality of the wider built environment. Therefore, a negligible effect is identified for this SA objective.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	It is anticipated that the development of domestic solar panels will have relatively limited visual impacts due to their small scale and location largely within built up areas. There is some scope however for the introduction of new sources of reflection and glare which may be visible more widely and local landscape effects where the appearance of vernacular buildings is altered through the addition of panels. Overall, a minor adverse effect is identified for this SA objective.
To enhance landscape quality	It is assumed that the development of domestic solar panels will not enhance landscape quality. Therefore, a negligible effect is identified for this SA objective.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Existing PDR, extending PDR into Conservation Areas, allowing development to protrude more than 1 metre in all areas and allowing development on balconies in all areas will positively support the deployment of renewable energy sources in Scotland, promoting the prudent use of resources. Therefore, the effects on this SA objective are judged to be minor positive.
To enhance material assets	As discussed above, the current PDR and each proposed alternative is likely to encourage the uptake of domestic solar panels, resulting in minor positive effects on enhancing material assets and supporting the use of renewable energy sources in Scotland.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The current PDR are likely to have minor positive effects on supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating the uptake and purchase of domestic solar panels.
To support rural development	Existing PDR and each proposed alternative for domestic solar panels is expected to support the further development of this renewable technology, which is beneficial to rural communities in terms of providing a stable source of renewable energy. Negligible effects are identified reflecting the limited scale and extent of development and the concentration of flats in urban areas.

Domestic solar panels (on flats)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under the proposed PDR changes. However, the volume of applications is expected to be relatively low, and a negligible effect is identified. Furthermore, the significance of this effect is uncertain due to a lack of data on the number of planning applications.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	Current PDR and each proposed change to PDR could increase the risk of 'glint and glare', causing a hazard to pilots on approach or Air Traffic Control tower staff – as well as causing possible interference with reflected radar signals, communication signals and Instrument Landing Systems. While it is unlikely that individual domestic scale installations would represent a major source of risk, it is possible that the concentration of a number of panels could result in a significant adverse effect. However, these effects are uncertain depending on the height of the proposed structures and their proximity to an aerodrome or technical site.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The relaxation of restrictions on solar panels that protrude more than a metre from a building and on the use of balconies could affect the living environment of the occupiers of neighbouring flats. This could result in a minor adverse effect.
To support community cohesion and vitality	It is assumed that the development of domestic solar panels will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified for this SA objective.
To support access to education and training	It is assumed that the development of domestic solar panels will not directly influence access to education and training. Therefore, a negligible effect is identified for this SA objective.

## Underground pipes

### Assessment table

Underground pipes	No change to PDR	Extend existing PDR into World Heritage Sites, within the curtilage of a Listed Building, a site of archaeological interest, a historic garden or designed landscape
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	0?	0?
To enhance biodiversity	0?	0?
<b>Climatic factors</b>		

<b>Underground pipes</b>	<b>No change to PDR</b>	<b>Extend existing PDR into World Heritage Sites, within the curtilage of a Listed Building, a site of archaeological interest, a historic garden or designed landscape</b>
To avoid increasing greenhouse gas emissions	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+
To support climate change adaptation	+	+
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0
To improve air quality	0	0
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-?	-?
To avoid and reduce flood risk	0	0
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-?	-?
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	--?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+	--?
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0
To enhance landscape quality	0	0

Underground pipes	No change to PDR	Extend existing PDR into World Heritage Sites, within the curtilage of a Listed Building, a site of archaeological interest, a historic garden or designed landscape
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+
To enhance material assets	+	+
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	+	+
To support rural development	+	+
To support smarter resourcing of the planning system	-?	+?
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0
To support community cohesion and vitality	+	+
To support access to education and training	0	0

### Justification of scores

Underground pipes	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of underground pipes will not directly influence habitats and species. Therefore, a negligible effect is identified for this SA objective. However, these effects are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use.
To enhance biodiversity	It is assumed that the development of underground pipes will not directly influence habitats and species. Therefore, a negligible effect is identified for this SA

Underground pipes	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	objective. However, these effects are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Underground pipes are likely to result in indirect positive effects on this SA objective through the ancillary function they fulfil to renewable energy sources/technologies such as biomass heating systems which, in turn, can help towards reducing greenhouse gas emissions and tackling climate change.
To support actions which contribute to targets for reducing greenhouse gas emissions	Changes in PDR affecting designated areas are unlikely to impact on the overall scale or extent of overall effect of supporting new biomass development in Scotland and therefore on climate change.
To support climate change adaptation	Taking the above into account, it is anticipated that existing PDR and extending existing PDR into areas where PDR currently do not apply will both contribute to the Scottish Government's targets for reducing greenhouse gas emissions and supporting climate adaptation. A minor positive effect is identified for this SA objective, reflecting the localised scale of development associated with underground pipes.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	A negligible effect is identified for this SA objective in relation to existing PDR and the proposed change, because the nature and significance of the impact strongly depends on the technology/source to which the underground pipes are ancillary. For instance, the smoke and odours associated with biomass heating systems are known to have adverse impacts on local air quality whilst other technologies may have limited, or even positive, effects on local air quality .
To improve air quality	As discussed above, the potential impacts of existing PDR and the proposed change are negligible as the potential impacts depend on the technology/source to which the underground pipes are ancillary and not the pipes themselves.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The effects of underground pipes include adverse changes to drainage patterns under current PDR and extending existing PDR into areas where PDR currently do not apply, although these effects are judged to be minor due to the localised scale and nature of impacts associated with underground pipes. However, these effects are uncertain given that the impacts strongly depend on the local geo-hydrological conditions, as well as the scale and extent of the proposed development.
To avoid and reduce flood risk	It is assumed that the development of underground pipes will not significantly influence flood risk. Therefore, a negligible effect is identified for this SA objective.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The effects of underground pipes include adverse changes to soil quality/composition resulting from physical disturbances caused by digging, although these effects are judged to be minor. However, these effects are uncertain given that the impacts strongly depend on the soil quality and composition of the site, as well as the scale and extent of the proposed development.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	It is assumed that the development of underground pipes will not have any relevance in relation to reducing the amount of vacant and derelict land. Therefore, a negligible effect is identified for this SA objective for existing PDR and the proposed change.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	PDR currently do not apply in World Heritage Sites, within the curtilage of a Listed Building, a site of archaeological interest, a historic garden or landscape. This ensures consideration of relevant proposals through the planning process which is likely to minimise adverse impacts on these types of heritage assets and their settings as a result of such developments. Therefore, existing PDR are expected to have minor positive effects in terms of avoiding adverse effects on heritage

Underground pipes	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>assets and their settings.</p> <p>Extending existing PDR into areas where PDR currently do not apply is anticipated to have significant adverse impacts on designated and non-designated heritage assets and their settings, particularly if digging the trenches for underground pipes damages buried archaeological assets. However, the potential adverse impacts relating to this SA objective are uncertain given that the impacts depend on the siting of development.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>As discussed previously, existing PDR are likely to help protect heritage assets and their settings in Scotland and therefore a minor positive effect is expected. The proposed change is likely to have adverse effects on cultural heritage resources, particularly buried archaeological assets. Therefore, a significant negative effect is identified for this SA objective. However, the potential adverse impacts relating to this SA objective are uncertain given that the impacts depend on the siting of development.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	It is anticipated that the development of underground pipes will have limited visual impacts due to their small scale and will therefore not directly impact on protected landscapes, wild land, geodiversity and all other landscapes. Overall, a negligible effect is identified for this SA objective.
To enhance landscape quality	It is assumed that the development of underground pipes will not enhance landscape quality, but will not have adverse impacts on landscape quality either. Therefore, a negligible effect is identified for this SA objective.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Existing PDR and extending existing PDR into areas where PDR currently do not apply for underground pipes will indirectly support the transition to a sustainable energy system, because underground pipes are ancillary structures to renewable technologies which, in turn, promote the prudent use of resources. Therefore, the effects on this SA objective are judged to be minor positive.
To enhance material assets	As discussed above, the existing PDR and extending existing PDR into areas where PDR currently do not apply is likely to indirectly encourage the uptake of renewable technologies, resulting in minor positive effects on enhancing material assets and supporting the use of renewable energy sources in Scotland.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The current PDR and extending existing PDR into areas where PDR currently do not apply are likely to have minor positive effects in relation to supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating the uptake of renewable technologies and sources.
To support rural development	Existing PDR and the proposed alternative for underground pipes are expected to indirectly support the uptake of renewable technologies such as biomass heating systems (to which underground pipes are ancillary). The increased uptake of renewable technologies and sources is likely to be beneficial to rural communities in terms of providing a stable source of renewable energy. These positive effects are judged to be minor, reflecting the limited scale and extent of development.
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under the proposed PDR changes. Therefore, a minor negative effect is identified. Underground pipes are integral to the functioning of biomass heating systems and other renewable energy systems, and it is judged that extending PDR in the manner proposed would reduce the number of planning applications entering the system, resulting in minor positive effects. The significance of these effects is uncertain due to a lack of data on the number of current planning applications, or likely future levels of development.

Underground pipes	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	It is assumed that the development of underground pipes will not directly influence human health. Therefore, a negligible effect is identified for this SA objective.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	It is assumed that the development of underground pipes will not directly influence the health and living environment of people and communities. Therefore, a negligible effect is identified for this SA objective.
To support community cohesion and vitality	The current PDR and extending existing PDR into areas where PDR currently do not apply are likely to have minor positive effects in relation to supporting community cohesion and vitality given that development of this nature is likely to help support the provision of community heating schemes.
To support access to education and training	It is assumed that the development of underground pipes will not directly influence access to education and training. Therefore, a negligible effect is identified for this SA objective.

**Agricultural buildings (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)**

**Assessment table**

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Increase in size beyond 465 square metres in areas outside AQMAs	Remove restriction on height ( <u>within</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on height ( <u>more than</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on distance to a classified road in areas outside AQMAs	Remove restrictions on distance from protected building ('cordon sanitaire') in areas outside AQMAs
<b>Biodiversity, flora and fauna</b>							
To avoid adverse effects on all habitats and species	-?	-?	-?	-?	-?	-?	-?
To enhance biodiversity	-?	-?	-?	-?	-?	-?	-?
<b>Climatic factors</b>							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas	+	+	+	+	+	+	+

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Increase in size beyond 465 square metres in areas outside AQMAs	Remove restriction on height ( <u>within</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on height ( <u>more than</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on distance to a classified road in areas outside AQMAs	Remove restrictions on distance from protected building ('cordon sanitaire') in areas outside AQMAs
emissions							
To support climate change adaptation	+	+	+	+	+	+	+
<b>Air</b>							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	-?	-?	-?	-?	-?	-?	-?
To improve air quality	-?	-?	-?	-?	-?	-?	-?
<b>Water</b>							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+	+	+	+	+	+	+
To avoid and reduce flood risk	-?	-?	-?	-?	-?	-?	-?
<b>Soil</b>							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
<b>Cultural heritage</b>							
To avoid adverse effects on designated and undesignated heritage assets and their settings	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0



	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Increase in size beyond 465 square metres in areas outside AQMAs	Remove restriction on height ( <u>within</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on height ( <u>more than</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on distance to a classified road in areas outside AQMAs	Remove restrictions on distance from protected building ('cordon sanitaire') in areas outside AQMAs
<b>Landscape and geodiversity</b>							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To enhance landscape quality	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
<b>Material assets</b>							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+
<b>Economy</b>							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	0	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-?	-?	-?	--?	-?	-?	-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	-?	-?	-?	--?	-?	-?	-?
To support community cohesion and vitality	0	0	0	0	0	0	0

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Increase in size beyond 465 square metres in areas outside AQMAs	Remove restriction on height ( <u>within</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on height ( <u>more than</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on distance to a classified road in areas outside AQMAs	Remove restrictions on distance from protected building ('cordon sanitaire') in areas outside AQMAs
To support access to education and training	0	0	0	0	0	0	0

### Justification of scores

Agricultural buildings (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p>It is assumed that introducing PDR to increase the size beyond 465 square metres could result in the loss of protected habitats or protected species that rely on habitat at the existing site. These factors are likely to result in minor negative effects, but these are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use.</p> <p>The other proposed changes and existing PDR could result in the loss of protected habitats or protected species that rely on habitat at the existing site, albeit to a lesser extent than introducing PDR to increase the size beyond 465 square metres. The adverse impacts would decrease due to the lower size allowed under these alternatives, but the uncertain minor negative effects would remain.</p> <p>Protected habitats and species should be safeguarded by the requirements of other legislation, specifically through wildlife acts, as these would continue to apply despite any proposal constituting permitted development. This is uncertain however as it depends on compliance with these requirements. In addition, developments for the production of electricity, steam and hot water over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To enhance biodiversity	<p>Agricultural buildings are not anticipated to result in enhancement to biodiversity. As such the existing PDR and the proposed changes are anticipated to have minor negative effects on this SA objective. However, these effects are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use. Protected habitats and species should be safeguarded by the requirements of other legislation, specifically through wildlife acts, as these would continue to apply despite any proposal constituting permitted development. This is uncertain however as it depends on compliance with these requirements.</p> <p>In addition, developments for the production of electricity, steam and hot water over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA</p>

<b>Agricultural buildings</b> (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	<b>Justification of score</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
	process may therefore reduce the adverse impacts of any developments over this scale.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	The erection and/or extension of buildings for energy from burning biomass, energy from anaerobic digestion or storing biomass is considered to provide indirect positive effects on the SA objective. The reason for this is because current PDR and each proposed change to PDR encourage the uptake of low carbon energy sources (i.e. energy sources based on biomass fuel and the recovery of energy from waste in line with the waste hierarchy), resulting in minor positive effects on climate change adaptation and the avoidance of increasing greenhouse gas emissions. The proposed change to allow for increased output to above 50KW electricity or 45 KW heat outside AQMAs will result in more beneficial effects, however the significance of the effect is considered to be similar to the existing PDR and the other proposed changes, thereby resulting in a minor positive effect.
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The current PDR and each proposed change to PDR would have minor negative effects on local air quality, because the storage of biomass and biogas produced by anaerobic digestion has a high odour impact potential, and there is potential for particulates to be released from combustion of biomass. However, these effects are uncertain depending on the scale of development, the techniques/technologies used and the sensitivity of the receiving environment (i.e. in close proximity to towns, villages and dwellings or an AQMA.
To improve air quality	
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The development of agricultural buildings for storing biomass or utilising it to produce energy and / or fertiliser may result in more stringent waste management on farm sites, as such wastes can now help generate profit, which in turn may result in less pollution to local watercourses. As such the existing PDR and each proposed change are anticipated to result in minor positive effects in relation to this SA objective.
To avoid and reduce flood risk	The current PDR and each proposed change to PDR are likely to result in minor negative impacts on avoiding flood risk. The construction of agricultural buildings for the storage of biomass and the energy from anaerobic digestion/biomass would increase the area of impermeable surfaces and therefore increase overall flood risk. However, these effects are uncertain, depending on whether sites are within high risk flood zones or have been identified as being at risk from surface water or groundwater flooding.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The current PDR and each proposed change to PDR are likely to result in minor negative effects on soil quality, mainly due to soil sealing resulting from the construction of agricultural buildings. These effects are uncertain, depending on whether sites are within areas identified as having valuable soils. Having said this, the output of the Anaerobic Digestion process can include a soil improver, which may help to enhance valuable soils. In this regard, the current PDR and each proposed change are also anticipated to result in a minor positive effect in relation to this SA objective. This effect is uncertain as it depends on the individual land owner / facilities operator as to how the products created within the buildings allowed by PDR are utilised.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	The current PDR and each proposed change to PDR could help to reduce vacant land, if vacant land and buildings were to be converted to agricultural buildings for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. However, the effect depends on the existing land use prior to development – particularly if greenfield land were to be converted for the purpose of new development, resulting in adverse effects. Therefore, an uncertain mixed minor positive and minor negative effect is identified.

<b>Agricultural buildings</b> (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	<b>Justification of score</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>The existing PDR and each proposed change to PDR could lead to adverse effects on the settings of designated heritage assets, due to the potential height (up to 12 metres) of a building used for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. Such effects could be significant, however the requirement for prior notification/prior approval in respect of the siting, design and external appearance of the proposed building, structure or flue are considered to mitigate any significant issues, and as such a negligible effect is anticipated. Furthermore, it may be the case that the erection or modernisation of a building could result in benefits to the setting of heritage assets, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known</p> <p>It is important to note that listed building consent would be required for works which affected a listed building or its curtilage.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>The existing PDR and each proposed change to PDR could lead to adverse effects on the settings of designated heritage assets, due to the potential height (up to 12 metres) of a building used for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. Such effects could be significant, however the requirement for prior notification/ prior approval in respect of the siting, design and external appearance of the proposed building, structure or flue are considered to mitigate any significant issues, and as such a negligible effect is anticipated. Furthermore, it may be the case that the erection or modernisation of a building could result in benefits to the setting of heritage assets, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p> <p>It is important to note that listed building consent would be required for works which affected a listed building or its curtilage.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Current PDR and each proposed change to PDR could lead to adverse effects on protected landscapes, wild land, geodiversity and all other landscapes, particularly due to the potential scale and height (up to 12 metres) of a building used for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. Although there is a requirement for prior notification / approval in respect of the siting, design and external appearance of the proposed building, structure or flue a minor negative effect is anticipated, due to the fact that new buildings in the countryside results in the potential for change to rural landscapes. Furthermore, it may be the case that the erection or modernisation of a building could result in benefits to landscape, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known. Minor negative effects could be reduced by ensuring that permitted buildings are close to existing buildings, and constructed of appropriate materials likely to be used in agricultural buildings.</p>
To enhance landscape quality	<p>Current PDR and each proposed change to PDR could pose challenges in terms of enhancing protected landscapes, wild land, geodiversity and all other landscapes, particularly due to the potential scale and height (up to 12 metres) of a building used for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. Although there is a requirement for prior notification / approval in respect of the siting, design and external appearance of the proposed building, structure or flue a minor negative effect is anticipated, due to the potential for change to rural landscapes. Furthermore, it may be the case that the erection or modernisation of a building could result in benefits to landscape, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p>

<b>Agricultural buildings</b> (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	<b>Justification of score</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Current PDR and each proposed change to PDR are likely to result in minor positive effects by promoting the prudent use of resources.
To enhance material assets	As discussed above, existing PDR and the other individual proposed changes are anticipated to enhance material assets by promoting the prudent use of resources. Therefore, minor positive effects are likely.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	Current PDR and each of the individual proposed changes to PDR are likely to indirectly contribute to Scotland's sustainable economic development by encouraging the uptake of biomass based energy sources. Therefore, minor positive effects are likely.
To support rural development	Current PDR and each of the individual proposed changes to PDR are likely to indirectly support rural development by supporting the deployment of biomass-based energy sources. Therefore, minor positive effects are likely.
To support smarter resourcing of the planning system	Current PDR result in a greater number of planning applications entering the planning system than would occur under each proposed change to PDR,. However, the current and future volume of applications is expected to be relatively low, although this is uncertain and a negligible effect is identified.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	The proposed change to allow the erection or extension of buildings over 3m within 3km of an aerodrome or technical site has the potential to affect the safety of aerodromes and technical sites, due to the potential for this to affect radar. The impacts of this are considered to be significant negative because of the potential hazards of an aeroplane accident in relation to health and safety. This is uncertain as it depends on the final location and design of buildings.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The current PDR and other proposed change to PDR would have minor negative effects on human health, because the storage of biomass and biogas produced by anaerobic digestion has a high odour impact potential, and the combustion of biomass has the potential to produce airborne particulates. However, these effects are uncertain depending on the scale of development, the techniques/technologies used and the sensitivity of the receiving environment (i.e. in close proximity to towns, villages and dwellings or an AQMA.
To support community cohesion and vitality	It is assumed that the development of agricultural buildings will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified.
To support access to education and training	It is assumed that the development of agricultural buildings will not directly influence access to education and training. Therefore, a negligible effect is identified.

**Forestry buildings (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)**

**Assessment table**

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Remove restriction on height ( <u>within</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on the number of flues allowed to be connected to biomass equipment in areas outside AQMAs	Remove restrictions on diameter (new) of the flue in areas outside AQMAs	Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs	Remove restrictions on proximity to a classified road in areas outside AQMAs
<b>Biodiversity, flora and fauna</b>							
To avoid adverse effects on all habitats and species	-?	-?	-?	-?	-?	-?	-?
To enhance biodiversity	-?	-?	-?	-?	-?	-?	-?
<b>Climatic factors</b>							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+
<b>Air</b>							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	-?	-?	-?	-?	-?	-?	-?
To improve air quality	-?	-?	-?	-?	-?	-?	-?
<b>Water</b>							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+	+	+	+	+	+	+
To avoid and reduce flood risk	-?	-?	-?	-?	-?	-?	-?
<b>Soil</b>							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Remove restriction on height ( <u>within</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on the number of flues allowed to be connected to biomass equipment in areas outside AQMAs	Remove restrictions on diameter (new) of the flue in areas outside AQMAs	Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs	Remove restrictions on proximity to a classified road in areas outside AQMAs
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
<b>Cultural heritage</b>							
To avoid adverse effects on designated and undesignated heritage assets and their settings	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0	+?/0
<b>Landscape and geodiversity</b>							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To enhance landscape quality	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
<b>Material assets</b>							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+
<b>Economy</b>							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	0	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>							



	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Remove restriction on height ( <u>within</u> 3km from the perimeter of an aerodrome or technical site) in areas outside AQMAs	Remove restriction on the number of flues allowed to be connected to biomass equipment in areas outside AQMAs	Remove restrictions on diameter (new) of the flue in areas outside AQMAs	Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs	Remove restrictions on proximity to a classified road in areas outside AQMAs
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-?	-?	--?	-?	-?	-?	-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	-?	-?	--?	-?	-?	-?	-?
To support community cohesion and vitality	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0

## Justification of scores

Forestry buildings (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p>The proposed changes and existing PDR could result in the loss of protected habitats or protected species that rely on habitat at the existing site, due to the potential for habitats to be lost from the creation of new built form. This is anticipated to have minor negative effects on protected habitats and species. However, these effects are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use.</p> <p>Protected habitats and species should be safeguarded by the requirements of other legislation, specifically through wildlife acts, as these would continue to apply despite any proposal constituting permitted development. This is uncertain however as it depends on compliance with these requirements. In addition, developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To enhance biodiversity	<p>The proposed changes and existing PDR could result in the loss of protected habitats or protected species that rely on habitat at the existing site, due to the potential for habitats to be lost from the creation of new built form. This is anticipated to have minor negative effects on protected habitats and species. However, these effects are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use.</p>



<b>Forestry buildings</b> (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	<b>Justification of scores</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
	In addition, developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may provide biodiversity benefits for developments over this scale.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	The erection and/or extension of buildings for energy from burning biomass, energy from anaerobic digestion or storing biomass is considered to provide indirect positive effects on the SA objective. The reason for this is because current PDR and each proposed change to PDR encourage the uptake of low carbon energy sources (i.e. energy sources based on biomass fuel and the recovery of energy from waste in line with the waste hierarchy), resulting in minor positive effects on climate change adaptation and the avoidance of increasing greenhouse gas emissions. The proposed change to allow for increased output to above 50KW electricity or 45 KW heat outside AQMAs will result in more beneficial effects, however the significance of the effect is considered to be similar to the existing PDR and the other proposed changes, thereby resulting in a minor positive effect.
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	The current PDR and each proposed change to PDR would have minor negative effects on local air quality, because the storage of biomass and biogas produced by anaerobic digestion has a high odour impact potential, and there is potential for particulates to be released from combustion of biomass. However, these effects are uncertain depending on the scale of development, the techniques/technologies used and the sensitivity of the receiving environment (i.e. in close proximity to towns, villages and dwellings or an AQMA.
To improve air quality	
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The development of forestry buildings for storing biomass or utilising it to produce energy and / or fertiliser may result in more stringent waste management on forestry sites, as such wastes can now help generate profit, which in turn may result in less pollution to local watercourses. As such the existing PDR and each proposed change are anticipated to result in minor positive effects in relation to this SA objective.
To avoid and reduce flood risk	The current PDR and each proposed change to PDR are likely to result in minor negative impacts on avoiding flood risk. The construction of forestry buildings for the storage of biomass and energy from anaerobic digestion/biomass would increase the area of impermeable surfaces and therefore increase overall flood risk. However, these effects are uncertain, depending on whether sites are within high risk flood zones are have been identified as being at risk from surface water or groundwater flooding.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The current PDR and each proposed change to PDR are likely to result in minor negative effects on soil quality, mainly due to soil sealing resulting from the construction of agricultural buildings. These effects are uncertain, depending on whether sites are within areas identified as having valuable soils. Having said this, the output of the Anaerobic Digestion process can include a soil improver, which may help to enhance valuable soils. In this regard, the current PDR and each proposed change are also anticipated to result in a minor positive effect in relation to this SA objective. This effect is uncertain as it depends on the individual land owner / facilities operator as to how the products created within the buildings allowed by PDR are utilised.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	The current PDR and each proposed change to PDR could help to reduce vacant land, if vacant land and buildings were to be converted to forestry buildings for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. However, the effect depends on the existing land use prior to development – particularly if greenfield land were to be converted for the purpose of new development, resulting in adverse effects. Therefore, an uncertain

<b>Forestry buildings</b> (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	<b>Justification of scores</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
	mixed minor positive and minor negative effect is identified.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>The existing PDR and each proposed change to PDR could lead to adverse effects on the settings of designated heritage assets, due to the potential for uncharacteristic buildings to be constructed / extended. Such effects could be significant, however the requirement for prior notification / prior approval in respect to the siting, design and external appearance of the proposed building, structure or flue are considered to mitigate any significant issues, and as such a negligible effect is anticipated. Furthermore, it may be the case that the erection or modernisation of a building could result in benefits to the setting of heritage assets, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p> <p>It is important to note that listed building consent would be required for works which affected a listed building or its curtilage.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>The existing PDR and each proposed change to PDR could pose challenges with regards to enhancing designated heritage assets and their settings, due to the potential for uncharacteristic buildings to be constructed / extended. Such effects could be significant, however the requirement for prior notification / prior approval in respect of the siting, design and external appearance of the proposed building, structure or flue are considered to mitigate any significant issues, and as such a negligible effect is anticipated. Furthermore, it may be the case that the erection or modernisation of a building could result in benefits to the setting of heritage assets, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Current PDR and each proposed change to PDR could lead to adverse effects on protected landscapes, wild land, geodiversity and all other landscapes, particularly due to the potential scale and height (up to 12 metres) of a building used for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. Although there is a requirement for prior approval in respect of the siting, design and external appearance of the proposed building, structure or flue a minor negative effect is anticipated, due to the fact that new buildings in the countryside results in the potential for change to rural landscapes. Furthermore, it may be the case that the erection or modernisation of a building could result in benefits to landscape, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p>
To enhance landscape quality	<p>Current PDR and each proposed change to PDR could pose challenges in terms of enhancing protected landscapes, wild land, geodiversity and all other landscapes, particularly due to the potential scale and height (up to 12 metres) of a building used for energy from burning biomass, energy from anaerobic digestion/biomass and biomass storage. Although there is a requirement for prior notification / prior approval in respect of the siting, design and external appearance of the proposed building, structure or flue a minor negative effect is anticipated, due to the potential for change to rural landscapes. Furthermore, it may be the case that the erection or alteration of a building could result in benefits to landscape, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of	Current PDR and each proposed change to PDR are likely to result in minor positive effects by promoting the prudent use of resources.

<b>Forestry buildings</b> (for the erection and/or extension of buildings for energy from burning biomass; energy from anaerobic digestion or biomass or storing biomass)	<b>Justification of scores</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
resources such as soil or the generation of waste	
To enhance material assets	As discussed above, existing PDR and the other individual proposed changes are anticipated to enhance material assets by promoting the prudent use of resources. Therefore, minor positive effects are likely.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	Current PDR and each of the individual proposed changes to PDR are likely to indirectly contribute to Scotland's sustainable economic development by encouraging the uptake of biomass based energy sources. Therefore, minor positive effects are likely.
To support rural development	Current PDR and each of the individual proposed changes to PDR are likely to indirectly support rural development by supporting the deployment of biomass-based energy sources and the requirement for the production and processing of the required fuel. Therefore, minor positive effects are likely.
To support smarter resourcing of the planning system	Current PDR result in a greater number of planning applications entering the planning system than would occur under each proposed change to PDR,. However, the current and future volume of applications is expected to be relatively low, although this is uncertain, and a negligible effect is identified.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	The proposed change to allow the erection or extension of buildings over 3m within 3km of an aerodrome or technical site has the potential to affect the safety of aerodromes and technical sites, due to the potential for this to affect radar. The impacts of this are considered to be significant negative because of the potential hazards of an aeroplane accident in relation to health and safety. This is uncertain as it depends on the final location and design of buildings.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The current PDR and other proposed changes to PDR would have minor negative effects on human health, because the storage of biomass and biogas produced by anaerobic digestion has a high odour impact potential, and the combustion of biomass has the potential to produce airborne particulates. However, these effects are uncertain depending on the scale of development, the techniques/technologies used and the sensitivity of the receiving environment (i.e. in close proximity to towns, villages and dwellings or an AQMA.
To support community cohesion and vitality	It is assumed that the development of forestry buildings will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified.
To support access to education and training	It is assumed that the development of forestry buildings will not directly influence access to education and training. Therefore, a negligible effect is identified.

**Industrial buildings (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)**

**Assessment table**

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Remove restriction on height in relation to height of original building in areas outside AQMAs	Remove restriction on footprint relative to size of original building in areas outside AQMAs	Remove restriction on footprint relative to the provision of parking space in areas outside AQMAs	Remove restriction on number of flues to be connected to biomass equipment in areas outside AQMAs	Remove restrictions on diameter (new) of the flue in areas outside AQMAs	Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs	Remove restrictions on proximity to any boundary of the curtilage of the premises in areas outside AQMAs
<b>Biodiversity, flora and fauna</b>									
To avoid adverse effects on all habitats and species	-?	-?	-?	-?	-?	-?	-?	-?	-?
To enhance biodiversity	-?	-?	-?	-?	-?	-?	-?	-?	-?
<b>Climatic factors</b>									
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+
<b>Air</b>									
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	-?	-?	-?	-?	-?	-?	-?	-?	-?
To improve air quality	-?	-?	-?	-?	-?	-?	-?	-?	-?
<b>Water</b>									
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+	+	+	+	+	+	+	+	+
To avoid and reduce flood risk	-?	-?	-?	-?	-?	-?	-?	-?	-?
<b>Soil</b>									

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Remove restriction on height in relation to height of original building in areas outside AQMAs	Remove restriction on footprint relative to size of original building in areas outside AQMAs	Remove restriction on footprint relative to the provision of parking space in areas outside AQMAs	Remove restriction on number of flues to be connected to biomass equipment in areas outside AQMAs	Remove restrictions on diameter (new) of the flue in areas outside AQMAs	Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs	Remove restrictions on proximity to any boundary of the curtilage of the premises in areas outside AQMAs
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-?	-?	-?	-?	-?	-?	-?	-?	-?
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
<b>Cultural heritage</b>									
To avoid adverse effects on designated and undesignated heritage assets and their settings	+?/-?	+?/-?	+?/--?	+?/--?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+?/-?	+?/-?	+?/--?	+?/--?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
<b>Landscape and geodiversity</b>									
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+?/-?	+?/-?	+?/--?	+?/--?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
To enhance landscape quality	+?/-?	+?/-?	+?/--?	+?/--?	+?/-?	+?/-?	+?/-?	+?/-?	+?/-?
<b>Material assets</b>									
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+	+	+
<b>Economy</b>									
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+

	No change to PDR	Allow schemes to produce more than 50/45kW in areas outside AQMAs	Remove restriction on height in relation to height of original building in areas outside AQMAs	Remove restriction on footprint relative to size of original building in areas outside AQMAs	Remove restriction on footprint relative to the provision of parking space in areas outside AQMAs	Remove restriction on number of flues to be connected to biomass equipment in areas outside AQMAs	Remove restrictions on diameter (new) of the flue in areas outside AQMAs	Remove restrictions on diameter (replacement or alternation) of the flue in areas outside AQMAs	Remove restrictions on proximity to any boundary of the curtilage of the premises in areas outside AQMAs
To support rural development	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	0	0?	0?	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>									
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-?	-?	--?	-?	-?	-?	-?	-?	-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	-?	-?	--?	-?	-?	-?	-?	-?	-?
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0

### Justification of scores

Industrial buildings (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)	Justification of score
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	The proposed changes and existing PDR could result in the loss of protected habitats or protected species that rely on habitat at the existing site, due to the potential for habitats to be lost from the creation of new built form. This is anticipated to have minor negative effects on protected habitats and species. However, these effects are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use.

<b>Industrial buildings</b> (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)	<b>Justification of score</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>Protected habitats and species should be safeguarded by the requirements of other legislation, specifically through wildlife acts, as these would continue to apply despite any proposal constituting permitted development. This is uncertain however as it depends on the compliance with these requirements. In addition, developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To enhance biodiversity	<p>The proposed changes and existing PDR could result in the loss of protected habitats or protected species that rely on habitat at the existing site, due to the potential for habitats to be lost from the creation of new built form. This is anticipated to have minor negative effects on protected habitats and species. However, these effects are uncertain given that the impacts depend on the previous use of the site and the biodiversity associated with that use.</p> <p>In addition, developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may provide biodiversity benefits for developments over this scale.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<p>The erection and/or extension of buildings for energy from burning biomass, energy from anaerobic digestion or storing biomass is considered to provide indirect positive effects on the SA objective. The reason for this is because current PDR and each proposed change to PDR encourage the uptake of low carbon energy sources (i.e. energy sources based on biomass fuel and the recovery of energy from waste in line with the waste hierarchy), resulting in minor positive effects on climate change adaptation and the avoidance of increasing greenhouse gas emissions. The proposed change to allow for increased output to above 50KW electricity or 45 KW heat outside AQMAs will result in more beneficial effects, however the significance of the effect is considered to be similar to the existing PDR and the other proposed changes, thereby resulting in a minor positive effect.</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<p>The current PDR and each proposed change to PDR would have minor negative effects on local air quality, because the storage of biomass has a high odour impact potential, and there is potential for particulates to be released from combustion of biomass. However, these effects are uncertain depending on the scale of development, the techniques/technologies used and the sensitivity of the receiving environment (i.e. in close proximity to towns, villages and dwellings or an AQMA).</p>
To improve air quality	
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<p>The erection or conversion of buildings for storing biomass or utilising it to produce energy and / or fertiliser may result in more stringent waste management, as such wastes can now help generate profit, which in turn may result in less pollution to local watercourses. As such the existing PDR and each proposed change are anticipated to result in minor positive effects in relation to this SA objective.</p>
To avoid and reduce flood risk	<p>The current PDR and each proposed change to PDR are likely to result in minor negative impacts on avoiding flood risk. The construction of industrial buildings for the storage of biomass and energy from anaerobic digestion/biomass would increase the area of impermeable surfaces and therefore increase overall flood risk. However, these effects are uncertain, depending on whether sites are within high risk flood zones are have been identified as being at risk from surface water or groundwater flooding.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources,	<p>The current PDR and each proposed change to PDR are likely to result in minor negative effects on soil quality, mainly due to soil sealing resulting from the</p>



<b>Industrial buildings</b> (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)	<b>Justification of score</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
including carbon soils and best & most versatile agricultural land	construction of agricultural buildings. These effects are uncertain, depending on whether sites are within areas identified as having valuable soils.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	The current PDR and each proposed change to PDR could help to reduce vacant land, if vacant land and existing buildings were to be used for energy from burning biomass and / or biomass storage. However, the effect depends on the existing land use prior to development – particularly if greenfield land were to be converted for the purpose of new development, resulting in adverse effects. Therefore, an uncertain mixed minor positive and minor negative effect is identified.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>Existing PDR and the majority of the proposed changes to PDR could lead to adverse effects on heritage assets, due to the potential for uncharacteristic buildings to be introduced/extended. Such effects could be significant. However, such effects are constrained by the current restriction that buildings cannot increase by more than 25% of their original floor space or 1,000 square metres (whichever is the greater) and cannot exceed the height of the existing building, and are considered minor negative.</p> <p>However, the proposed changes to remove these restrictions could result in larger developments (greater than 25% of the current floor space or 1,000 square metres - whichever is the greater) which would have more significant effects. These particular changes are considered likely to result in significant negative effects.</p> <p>Alternatively, it may be the case that the erection or alteration of a building could result in benefits to the setting of heritage assets, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p> <p>It is important to note that listed building consent would be required for works which affected a listed building or its curtilage. Developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Existing PDR and the majority of the proposed changes to PDR could lead to adverse effects on heritage assets, due to the potential for uncharacteristic buildings to be introduced/extended. Such effects could be significant. However, such effects are constrained by the current restriction that buildings cannot increase by more than 25% of their original floor space or 1,000 square metres (whichever is the greater) and cannot exceed the height of the existing building, and are considered minor negative.</p> <p>However, the proposed changes to remove these restrictions could result in larger developments (greater than 25% of the current floor space or 1,000 square metres - whichever is the greater) which would have more significant effects. These particular changes are considered likely to result in significant negative effects.</p> <p>Alternatively, it may be the case that the erection or alteration of a building could result in benefits to the setting of heritage assets, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p> <p>It is important to note that listed building consent would be required for works which affected a listed building or its curtilage. Developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>



<b>Industrial buildings</b> (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)	<b>Justification of score</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>Existing PDR and the majority of the proposed changes to PDR could lead to adverse effects on landscape, due to the potential for uncharacteristic buildings to be introduced/extended. Such effects could be significant. However, such effects are constrained by the current restriction that buildings cannot increase by more than 25% of their original floor space or 1,000 square metres (whichever is the greater) and cannot exceed the height of the existing building, and are considered minor negative.</p> <p>However, the proposed changes to remove these restrictions could result in larger developments (greater than 25% of the current floor space or 1,000 square metres - whichever is the greater) or increased height which would have more significant effects. These particular changes are considered likely to result in significant negative effects.</p> <p>Alternatively, it may be the case that the erection or alteration of a building could result in benefits to landscapes, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p> <p>It is important to note that developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To enhance landscape quality	<p>Existing PDR and the majority of the proposed changes to PDR could lead to adverse effects on landscape, due to the potential for uncharacteristic buildings to be introduced/extended. Such effects could be significant. However, such effects are constrained by the current restriction that buildings cannot increase by more than 25% of their original floor space or 1,000 square metres (whichever is the greater) and cannot exceed the height of the existing building, and are considered minor negative.</p> <p>However, the proposed changes to remove these restrictions could result in larger developments (greater than 25% of the current floor space or 1,000 square metres - whichever is the greater) or increased height which would have more significant effects. These particular changes are considered likely to result in significant negative effects.</p> <p>Alternatively, it may be the case that the erection or alteration of a building could result in benefits to landscapes, for example if this were to redevelop vacant land or poorly maintained buildings. This could therefore result in minor positive effects. However, the impacts of such effects are uncertain because the specific value of sites, and the design of buildings is not known.</p> <p>It is important to note that developments over 0.5ha in size or within sensitive areas should be screened for EIA. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Current PDR and each proposed change to PDR are likely to result in minor positive effects by promoting the prudent use of resources.
To enhance material assets	As discussed above, existing PDR and the other individual proposed changes are anticipated to enhance material assets by promoting the prudent use of

<b>Industrial buildings</b> (for the erection and/or extension of buildings for energy from biomass and storage of biomass, including flues for biomass)	<b>Justification of score</b>
<b>SA Objectives</b>	<b>Narrative/justification</b>
	resources. Therefore, minor positive effects are likely.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	Current PDR and each of the individual proposed changes to PDR are likely to indirectly contribute to Scotland's sustainable economic development by encouraging the uptake of biomass-based energy sources. Therefore, minor positive effects are likely.
To support rural development	Current PDR and each of the individual proposed changes to PDR are likely to indirectly support rural development by supporting the deployment of biomass-based energy sources and the production and processing of the fuel. Therefore, minor positive effects are likely.
To support smarter resourcing of the planning system	Current PDR result in a greater number of planning applications entering the planning system than would occur under each proposed change to PDR,. However, the volume of applications is expected to be relatively low, although this is uncertain, and a negligible effect is identified.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	The proposed change to allow the extension of buildings above their original height has the potential to result in health and safety effects if the buildings are close to an aerodrome or technical site. The impacts of this are considered to be significant negative because of the potential hazards of an aeroplane accident in relation to health and safety. This is uncertain as it depends on the final location and design of buildings.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The current PDR and other proposed changes to PDR would have minor negative effects on human health, because the storage of biomass and biogas produced by anaerobic digestion has a high odour impact potential, and the combustion of biomass has the potential to produce airborne particulates. However, these effects are uncertain depending on the scale of development, the techniques/technologies used and the sensitivity of the receiving environment (i.e. in close proximity to towns, villages and dwellings or an AQMA).
To support community cohesion and vitality	It is assumed that the development of industrial buildings will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified.
To support access to education and training	It is assumed that the development of industrial buildings will not directly influence access to education and training. Therefore, a negligible effect is identified.

## Flues for biomass heating systems

### Assessment table

	No change to PDR	Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites			Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas		
		Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)	Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)
<b>Biodiversity, flora and fauna</b>							
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0
<b>Climatic factors</b>							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+
<b>Air</b>							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	-	-	-	-	-	-	-
To improve air quality	-	-	-	-	-	-	-
<b>Water</b>							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0
<b>Soil</b>							

	No change to PDR	Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites			Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas		
		Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)	Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0
<b>Cultural heritage</b>							
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	-?	-?	0?	--?	--?	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	-?	-?	-?	-?	-?	-?
<b>Landscape and geodiversity</b>							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0
<b>Material assets</b>							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+
<b>Economy</b>							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+	+

	No change to PDR	Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites			Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas		
		Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)	Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)
To support smarter resourcing of the planning system	-?	0?	0?	0?	0?	0?	0?
<b>Social, population and human health</b>							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	-	-	-	-	-	-	-
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	-	-	-	-	-	-	-
To support community cohesion and vitality	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0

### Justification of scores

Flues for biomass heating systems (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of flues for biomass heating systems will not directly influence habitats and species due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective.
To enhance biodiversity	It is assumed that the development of flues for biomass heating systems will not directly influence habitats and species due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Biomass heating systems are considered to be a low-carbon and renewable energy source. However, the combustion of wood and other types of biomass fuel still produces emissions of greenhouse gases such as carbon dioxide (CO <sub>2</sub> ) and nitrogen oxides (NO <sub>x</sub> ). Carbon dioxide (CO <sub>2</sub> ) is a potent greenhouse gas, and nitrogen oxides (NO <sub>x</sub> ) act as an indirect greenhouse gas by producing the tropospheric greenhouse gas ozone and which may also have significant impacts on
To support actions which contribute to targets for reducing greenhouse	

Flues for biomass heating systems (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
gas emissions	the Earth's ozone layer.
To support climate change adaptation	Nevertheless, biomass heating systems would result in lower GHG emissions compared to fossil fuel-based sources. Therefore, minor positive effects are identified as the deployment of biomass heating systems would result in lower emissions compared to the current situation. These minor positive effects apply to existing PDR and each individual proposed change to PDR, because each alternative encourages the deployment of flues for biomass heating systems.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	If flues are inappropriately sited in relation to windows of neighbouring properties, they could lead to odour nuisance. These issues are most pronounced when flues are installed in single storey extensions, where the flue terminates at a lower level than surrounding property or where the behaviour of emissions are otherwise influenced by the surrounding environment. These impacts are a particular problem for urban areas containing a mix of houses and taller buildings containing flats, where flues for biomass heating systems could further degrade air quality. While existing PDR and each individual proposed change to PDR would not allow new flues within an AQMA each option is anticipated to result in minor negative effects, reflecting the fact that smoke and odour from boilers remain a key issue associated with flues for biomass heating systems. It is possible that the increased deployment of biomass boilers and flues in areas adjacent to AQMAs could increase the area within which poor air quality is a concern.
To improve air quality	As discussed previously, smoke and odour from boilers remains a key issue associated with flues for biomass heating systems. Therefore, a minor negative effect is identified for this SA objective for existing PDR and each individual proposed change to PDR.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of flues for biomass heating systems will not directly influence the quality and quantity of watercourses and waterbodies due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective for existing PDR and the each individual proposed change to PDR.
To avoid and reduce flood risk	It is assumed that the development of flues for biomass heating systems will not directly influence flood risk due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective for existing PDR and each individual proposed change to PDR.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of flues for biomass heating systems will not directly influence valuable soil resources due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes to PDR.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	It is assumed that the development of flues for biomass heating systems will not have any relevance with regard to reducing the amount of vacant and derelict land. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes to PDR.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	It is anticipated that the development of flues for biomass heating systems will have a limited impact on the setting of cultural heritage assets due to their relatively small size and their position within residential buildings. In addition, restrictions to PDR apply in Conservation Areas and World Heritage Sites if the flue would be installed on the principal elevation of the dwellinghouse, ensuring consideration of cultural heritage impacts through the planning process in these areas. Taking this into account, a negligible effect is identified for this SA objective for existing PDR.

Flues for biomass heating systems (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>The other individual proposed changes to PDR are likely to have adverse impacts on the setting of heritage assets.</p> <p>It is expected that extending PDR to allow flues to be installed on the principal elevation of properties within a Conservation Area or World Heritage Site could have a significant adverse effect on these types of heritage asset, affecting the appearance of individual buildings and the wider townscape. The nature of these effects will depend on the character of the Conservation Area or the World Heritage Site in question. Impacts on buildings which are not within areas designated for their cultural heritage significance are likely to be negligible, reflecting the relatively small scale of the development.</p> <p>Extending PDR to allow development to protrude more than 1 metre above the highest part of the roof within Conservation Areas and World Heritage Sites is also likely to have a significant adverse effect on the wider townscape and the setting of undesignated assets outside of such areas given their height. The effect of allowing taller flues in undesignated areas is likely to be minor negative as the wider townscape is likely to be less sensitive to new forms of development than designated heritage assets. All effects identified are uncertain given that the impacts depend on the siting and scale of proposed development.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	It is assumed that the development of flues for biomass heating systems will not enhance heritage assets and their settings. Therefore, a minor negative effect is identified for this SA objective for the each individual proposed change to PDR. A negligible effect is identified for this SA objective for existing PDR, considering that restrictions to PDR apply in Conservation Areas and World Heritage Sites if the flue would be installed on the principal elevation of the dwelling house, ensuring consideration of cultural heritage impacts through the planning process in these areas. However, these effects are uncertain given that the impacts depend on the siting and scale of proposed development.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Planning complaints regarding flues for biomass heating systems are typically more to do with smoke pollution than visual appearance. Therefore, it is anticipated that the development of flues for biomass heating systems will not directly impact on protected landscapes, wild land, geodiversity and all other landscapes. Overall, a negligible effect is identified for this SA objective.
To enhance landscape quality	It is assumed that the development of flues for biomass heating systems will not enhance landscape quality, but will not adversely impact upon it either due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	Biomass heating systems are defined as a renewable source of energy and heating. As such, biomass heating systems promote the prudent use of resources. Therefore, existing PDR and the other individual proposed changes for PDR are anticipated to have a minor positive effect on this SA objective.
To enhance material assets	As discussed above, existing PDR and the other individual proposed changes for PDR are anticipated to have a minor positive effect on this SA objective.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	Existing PDR and each of the individual proposed changes to PDR for flues for biomass heating systems would contribute to Scotland's sustainable economic development through the increased use of renewable energy sources – particularly because biomass heating systems are a popular renewable heat technology throughout Scotland. The change in PDR to allow greater flexibility in relation to the provision of new biomass heating systems may also help to support the growth of the woodfuel and timber industry in the country. Therefore, minor positive effects are likely.
To support rural development	Existing PDR and each proposed change to PDR for flues for biomass heating systems is expected to support the further development of this renewable



Flues for biomass heating systems (domestic)	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	technology, which is beneficial to rural communities in terms of providing a relatively stable source of renewable energy. Overall, minor positive effects are likely.
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under the other proposed changes to PDR. Therefore, a minor negative effect is identified. Flues are integral to the functioning of biomass heating systems, and it is judged that extending PDR would reduce the number of planning applications entering the system ,however, the significance of these effects is uncertain due to a lack of data on the number of current or future planning applications and a negligible effect is identified.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	Although biomass heating systems are considered to be a low-carbon and renewable energy source, the combustion of wood and other types of biomass fuel produces emissions of carbon dioxide (CO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ) and fine particulates whereas the incomplete combustion of wood results in the release of volatile organic gases, much higher levels of particulates, carbon monoxide (CO) and other hazardous substances, some of which are carcinogenic. In addition, the release of particulate matter constitutes a health risk as inhaled particles form a complex mixture of hazardous chemical compounds. Recent evidence shows that particulate matter affects more people than any other air pollutant.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p>In addition, flue heights need to be sufficiently tall in order to allow efficient dispersal of flue gases. If flues are inappropriately sited in relation to windows of neighbouring properties, they could lead to odour nuisance. These issues are most pronounced when flues are installed in single storey extensions, where the flue terminates at a lower level than surrounding property or where the behaviour of emissions are otherwise influenced by the surrounding environment. These impacts are a particular problem for urban areas containing a mix of houses and taller buildings containing flats, where flues for biomass heating systems could further degrade air quality.</p> <p>Taking the above into account, existing PDR, extending existing PDR to World Heritage Sites and Conservation Areas and allowing flues to be installed on the principal elevation of residential buildings in World Heritage Sites and Conservation Areas are anticipated to result in minor negative effects.</p> <p>Allowing additional height of flues (i.e. protruding more than 1 metre above the highest part of the roof at World Heritage Sites and Conservation Areas and also outside of such areas) as part of PDR would contribute towards avoiding these negative impacts. However, it should be noted that emissions of hazardous substances (as mentioned above) remains an issue. Therefore, a minor negative effect is also identified for this individual proposed change.</p>
To support community cohesion and vitality	It is assumed that the development of flues for biomass heating systems will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified for this SA objective.
To support access to education and training	It is assumed that the development of flues for biomass heating systems will not directly influence access to education and training. Therefore, a negligible effect is identified for this SA objective.

## Flues for combined heat and power systems

### Assessment table

	<b>No change to PDR</b>	<b>Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites</b>	<b>Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas</b>
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		Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)	Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)
<b>Biodiversity, flora and fauna</b>							
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0
<b>Climatic factors</b>							
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+
<b>Air</b>							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	-	-	-	-	-	-	-
To improve air quality	-	-	-	-	-	-	-
<b>Water</b>							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0
<b>Soil</b>							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0
<b>Cultural heritage</b>							
To avoid adverse effects on designated and undesignated heritage assets and their settings	0?	--?	--?	0?	--?	--?	-?

	No change to PDR	Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites			Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas		
		Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)	Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0?	-?	-?	0?	-?	-?	0?
<b>Landscape and geodiversity</b>							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0
<b>Material assets</b>							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+	+	+
To enhance material assets	+	+	+	+	+	+	+
<b>Economy</b>							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	-?	+?	+?	-?	+?	+?	-?
<b>Social, population and human health</b>							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	-	-	-	-	-	-	-
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	-	-	-	-	-	-	-
To support community cohesion and vitality	0	0	0	0	0	0	0

	No change to PDR	Allow flue to be installed on the principal elevation of the dwellinghouse, or building containing a flat in Conservation Areas and World Heritage Sites			Allow development to protrude more than 1 metre above the highest part of the roof in World Heritage Sites and Conservation Areas and areas outside these aforementioned areas		
		Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)	Conservation Areas	World Heritage Sites	All other areas (where PDR currently apply)
To support access to education and training	0	0	0	0	0	0	0

### Justification of scores

Flues for combined heat and power systems	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of flues for CHP will not directly influence habitats and species due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective.
To enhance biodiversity	It is assumed that the development of flues for CHP will not directly influence habitats and species due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	CHP systems are considered to be an efficient and clean energy source. CHP systems have become increasingly important in the Scottish energy sector as a means to reduce carbon emissions and achieve energy efficiency. CHP systems are typically installed onsite, supplying users with heat and power directly at the point of use. CHP systems requires less fuel to produce a given energy output compared to fossil fuel-based energy sources. CHP avoids transmission and distribution losses that occur when electricity travels over power lines. As a result, less fuel is burned to produce each unit of energy output – reducing emissions of greenhouse gases.  Taking the above into account, existing PDR and each individual proposed change are likely to result in minor positive effects as they promote the development of CHP systems. However, these effects are uncertain given that the impacts depend on the technologies and fuels used. <i>(NB: CHP covers a wide range of technologies and fuels, each with differing emissions performance. For instance, natural gas boilers with steam turbines have lower NO<sub>x</sub> emissions compared to other technology/fuel combinations such as natural gas and liquid fuel/internal combustion engines.</i>
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	CHP systems require less fuel to produce each unit of energy output, reducing emissions of air pollutants. Nevertheless, CHP systems are likely to have adverse impacts on local air quality. NO <sub>x</sub> is the main pollutant emitted by CHP systems, and some technology and fuel combinations will also emit PM <sub>10</sub> and SO <sub>2</sub> . These substances are known to have adverse impacts on local air quality. If flues are inappropriately sited in relation to windows of neighbouring properties, they could also lead to odour nuisance. These issues are most pronounced when flues are installed in single storey extensions, where the flue terminates at a lower level

Flues for combined heat and power systems	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>than surrounding property or where the behaviour of emissions are otherwise influenced by the surrounding environment. These impacts are a particular problem for urban areas containing a mix of houses and taller buildings containing flats, where flues for biomass heating systems could further degrade air quality.</p> <p>Taking the above into account, existing PDR and each individual proposed change are likely to result in negative effects as they promote the development of CHP systems. These effects are expected to be minor, reflecting the small scale of development. However, these effects are uncertain given that the impacts depend on the technologies and fuels used, as well as proximity to sensitive areas such as AQMA. <i>(NB: CHP covers a wide range of technologies and fuels, each with differing emissions performance. For instance, natural gas boilers with steam turbines have lower NO<sub>x</sub> emissions compared to other technology/fuel combinations such as natural gas and liquid fuel/internal combustion engines.)</i></p>
To improve air quality	As discussed previously, smoke and odour from CHP systems remains a key issue. Therefore, a minor negative effect is identified for this SA objective for existing PDR and each individual proposed change to PDR.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	It is assumed that the development of CHP systems will not directly influence the quality and quantity of watercourses and waterbodies due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes to PDR.
To avoid and reduce flood risk	It is assumed that the development of flues for CHP systems will not directly influence flood risk due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	It is assumed that the development of flues for CHP systems will not directly influence valuable soil resources due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes to PDR.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	It is assumed that the development of flues for CHP systems will not have any relevance with regard to reducing the amount of vacant and derelict land. Therefore, a negligible effect is identified for this SA objective for existing PDR and the other individual proposed changes to PDR.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>It is anticipated that the development of flues for CHP systems will have a limited impact on the setting of cultural heritage assets due to their relatively small size and their position within residential buildings. In addition, restrictions to PDR apply in Conservation Areas and World Heritage Sites if the flue would be installed on the principal elevation of the dwellinghouse, ensuring consideration of cultural heritage impacts through the planning process in these areas. Taking this into account, a negligible effect is identified for this SA objective for existing PDR.</p> <p>The other individual proposed changes to PDR are likely to have adverse impacts on the setting of heritage assets.</p> <p>It is expected that extending PDR to allow flues to be installed on the principal elevation of properties within a Conservation Area or World Heritage Site could have a significant adverse effect on these types of heritage asset, affecting the appearance of individual buildings and the wider townscape. The nature of these effects will depend on the character of the Conservation Area or the World Heritage Site in question.</p> <p>Extending PDR to allow development to protrude more than 1 metre above the highest part of the roof within Conservation Areas and World Heritage Sites is also likely to have a significant adverse effect on the wider townscape and the setting of undesignated assets outside of such areas given their height. The effect of allowing taller flues in undesignated areas is likely to be minor negative as the wider townscape is likely to be less sensitive to new forms of development than</p>

Flues for combined heat and power systems	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	designated heritage assets.  All effects identified are uncertain given that the impacts depend on the siting and scale of proposed development.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	It is assumed that the development of flues for CHP systems will not enhance heritage assets and their settings. Therefore, a minor negative effect is identified for this SA objective for the each individual proposed change to PDR. A negligible effect is identified for this SA objective for existing PDR, considering that restrictions to PDR apply in Conservation Areas and World Heritage Sites if the flue would be installed on the principal elevation of the dwellinghouse, ensuring consideration of cultural heritage impacts through the planning process in these areas. However, these effects are uncertain given that the impacts depend on the siting and scale of proposed development.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	It is anticipated that the development of flues for CHP systems will have limited visual impacts due to their small scale and will therefore not directly impact on protected landscapes, wild land, geodiversity and all other landscapes. Overall, a negligible effect is identified for this SA objective.
To enhance landscape quality	It is assumed that the development of flues for CHP systems will not enhance landscape quality, but will not adversely impact upon it either due to their small size and their position within residential buildings. Therefore, a negligible effect is identified for this SA objective.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	CHP systems are defined as a renewable source of energy and heating. As such, CHP systems promote the prudent use of resources. Taking this into account, existing PDR and the other individual proposed changes are anticipated to have a minor positive effect on this SA objective, reflecting the importance of CHP systems as an efficient source of energy in Scotland (e.g. figures from 2016 indicate that CHP contributed 12-15% to the total renewable heat output in Scotland).
To enhance material assets	As discussed above, existing PDR and the other individual proposed changes are anticipated to have minor positive effects on this SA objective.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	CHP can save facilities considerable money on their energy bills due to its high efficiency. As such, existing PDR and each of the individual proposed changes to PDR for flues for CHP systems would contribute to Scotland's sustainable economic development through the increased use of renewable energy sources. Therefore, a minor positive effect is identified for this SA objective.
To support rural development	CHP is an on-site generation resource that can be designed to support continued operations in the event of grid failure or disruption. As a result, CHP systems provide a reliable source of electricity which could be of particular importance in rural areas. Existing PDR and each of the individual proposed changes to PDR for flues for CHP systems would contribute to sustainable rural development through the increased use of renewable energy sources. Therefore, a minor positive effect is identified for this SA objective.
To support smarter resourcing of the planning system	Existing PDR result in a greater number of planning applications entering the planning system than would occur under the proposed PDR changes. Therefore, a minor negative effect is identified. Flues are integral to the functioning of CHP systems, and it is judged that extending PDR would reduce the number of planning applications entering the system, resulting in minor positive effects. The significance of these effects is uncertain due to a lack of data on the number of planning applications.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to	As discussed previously, CHP systems are likely to have adverse impacts on local air quality. NO <sub>x</sub> is the main pollutant emitted by CHP systems, and some

Flues for combined heat and power systems	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
health and quality of life and reduce risks to health and quality of life	technology and fuel combinations will also emit PM <sub>10</sub> and SO <sub>2</sub> . The release of PM constitutes a health risk as inhaled particles form a complex mixture of hazardous chemical compounds. Recent evidence shows that PM affects more people than any other air pollutant. As a result, emissions from flues could have adverse impacts on human health. Furthermore, flue heights need to be sufficiently tall in order to allow efficient dispersal of flue gases. If flues are inappropriately sited in relation to windows of neighbouring properties, they could lead to odour nuisance. These issues are most pronounced when flues are installed in single storey extensions, where the flue terminates at a lower level than surrounding property or where the behaviour of emissions are otherwise influenced by the surrounding environment. These impacts are a particular problem for urban areas containing a mix of houses and taller buildings containing flats, where flues for CHP systems could further degrade air quality.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	Taking the above into account, existing PDR, extending existing PDR and allowing flues to be installed on the principal elevation of residential buildings are anticipated to result in minor negative effects. Allowing additional height of flues (i.e. protrude more than 1 metre above the highest part of the roof) to be permitted development would contribute towards avoiding these negative impacts. However, it needs to be noted that emissions of hazardous substances (as mentioned above) remains an issue. Therefore, a minor negative effect is identified for this individual proposed change. However, these effects are uncertain given that the impacts depend on the technologies and fuels used (NB: CHP covers a wide range of technologies and fuels, each with differing emissions performance. For instance, natural gas boilers with steam turbines have lower NO <sub>x</sub> emissions compared to other technology/fuel combinations such as natural gas and liquid fuel/internal combustion engines.)
To support community cohesion and vitality	It is assumed that the development of CHP systems will not directly influence community cohesion and vitality. Therefore, a negligible effect is identified for this SA objective.
To support access to education and training	It is assumed that the development of CHP systems will not directly influence access to education and training. Therefore, a negligible effect is identified for this SA objective.

### Non-domestic solar energy

#### Non-domestic solar panels installed on a pitched roof

##### Assessment table

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove the restriction on the dimensions which solar panels can protrude or project beyond the current edge of the roof or ridge
<b>Biodiversity, flora and fauna</b>					
To avoid adverse effects on all habitats and species	+	0	0	0	0
To enhance biodiversity	0	0	0	0	0

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove the restriction on the dimensions which solar panels can protrude or project beyond the current edge of the roof or ridge
<b>Climatic factors</b>					
To avoid increasing greenhouse gas emissions	+	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+
To support climate change adaptation	+	0	+	+	+
<b>Air</b>					
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	0	+	+	+
To improve air quality	+	0	+	+	+
<b>Water</b>					
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0
<b>Soil</b>					
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0
<b>Cultural heritage</b>					
To avoid adverse effects on designated and undesignated heritage	+	+	-?	-?	-?



	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove the restriction on the dimensions which solar panels can protrude or project beyond the current edge of the roof or ridge
assets and their settings					
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0
<b>Landscape and geodiversity</b>					
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+?	+	-?	-?	-?
To enhance landscape quality	0	0	0	0	0
<b>Material assets</b>					
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	-	+	+
To enhance material assets	+	+	+	+	+
<b>Economy</b>					
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+
To support rural development	+	0	-	+	+
To support smarter resourcing of the planning system	+?	0	0	?	?
<b>Social, population and human health</b>					
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	0	--	0	0



	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove the restriction on the dimensions which solar panels can protrude or project beyond the current edge of the roof or ridge
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0
To support access to education and training	0	0	0	0	0

### Justification of scores

Non – domestic solar installed on a pitched roof	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of non-domestic solar panels will have limited impacts on habitats and species due to their small size and their position on pitched roofs. Adverse impacts on nesting birds and bat roosts could occur during the construction of the solar panels, however these should be addressed through the existing statutory controls. Due to the relatively low risk of these effects, <b>minor positive</b> effects have been identified in relation to existing PDR.
To enhance biodiversity	The effects resulting from each of the proposed changes in PDR are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed, and relative to the very minor effects on biodiversity, flora and fauna <b>negligible</b> effects are identified.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing greenhouse gas emissions. Taking this into account, it is anticipated that existing PDR result in <b>minor positive</b> effects in relation to this SA objective, reflecting the anticipated limited scale of future development. The effects resulting from each of the proposed changes in PDR are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed, and therefore <b>negligible</b> effects are identified.
To support actions which contribute to targets for reducing greenhouse gas emissions	Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing greenhouse gas emissions. Taking this into account, it is anticipated that existing PDR result in <b>minor positive</b> effects in relation to this SA objective, reflecting the small scale of future development. The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them. The effects resulting from <b>removing the restriction on development within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> would be similar to those provided by existing PDR, and increase the area or capacity of the effects are generated, and would therefore remain <b>minor positive</b> .
To support climate change adaptation	Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards providing for decentralised energy generation. Taking this into account, it is anticipated that existing PDR result in <b>minor positive</b> effects in relation to this SA objective, by reducing dependence on large scale energy generation and transmission, which can be affected by climate change related events such as extreme weather. The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of

Non – domestic solar installed on a pitched roof	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>World Heritage Sites and the potential level of development within them.</p> <p>The effects resulting from <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> would be similar to those provided by existing PDR, and increase the area or capacity of the effects are generated, and would therefore remain <b>minor positive</b>.</p>
<b>Air</b>	
<p>To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA</p>	<p>Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing emissions of air pollutants, particularly compared to fossil fuel-based sources of energy. Therefore, it is anticipated that existing PDR help to improve local air quality. A <b>minor positive</b> effect is therefore identified for this SA objective, reflecting the limited scale of development.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them.</p> <p>The effects resulting from <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> would be similar to those provided by existing PDR, and increase the area or capacity of the effects are generated, and would therefore remain <b>minor positive</b>.</p>
<p>To improve air quality</p>	<p>As discussed above, existing PDR are expected to result in <b>minor positive</b> effects on reducing air pollution.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them.</p> <p>The effects resulting from <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> would be similar to those provided by existing PDR, and increase the area or capacity of the effects are generated, and would therefore remain <b>minor positive</b>.</p>
<b>Water</b>	
<p>To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies</p>	<p>No effect identified</p>
<p>To avoid and reduce flood risk</p>	<p>No effect identified</p>
<b>Soil</b>	
<p>To protect and avoid adverse effects on valuable soil resources, including carbon soils and best &amp; most versatile agricultural land</p>	<p>No effect identified</p>
<p>To reduce vacant and derelict land/buildings and contaminated land and contaminated land</p>	<p>No effect identified</p>
<b>Cultural heritage</b>	
<p>To avoid adverse effects on designated and undesignated heritage assets and their settings</p>	<p>The existing PDR currently do not apply in World Heritage Sites, conservation areas, sites of archaeological interest, within the curtilage of a listed building or a historic garden or designed landscape. This ensures consideration of cultural heritage impacts through the planning process in these areas. Therefore, existing PDR are expected to result in <b>minor positive</b> effects in terms of avoiding adverse effects on heritage assets and their settings.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply are expected to have <b>minor positive</b> effects as planning applications in World Heritage Sites will be subject to greater scrutiny.</p> <p>Extending existing PDR by <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> are anticipated to have adverse impacts on designated and undesignated heritage assets and their settings due to an expected increase in size/scale of development. A <b>minor negative</b> effect is likely, because the proposed changes do not apply in Conservation Areas, sites of archaeological interests, within the curtilage of a Listed Building and a historic garden or designed landscape. The potential impacts on this SA objective are <b>uncertain</b> given that the impacts depend on the siting of development and the nature of the surrounding landscape.</p>
<p>To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment</p>	<p>No effect identified</p>
<b>Landscape and geodiversity</b>	
<p>To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes</p>	<p>Solar panels on pitched roofs can increase the visual prominence of a roof, particularly if glint and glare are an issue. However, non-domestic solar panels are by their nature located on non-domestic buildings which can be of large size and scale, and may be located within an urban or rural environment. Current PDR and the proposed changes do not apply in National Scenic Areas and National Parks, ensuring consideration of landscape and geodiversity in these areas, and <b>minor</b></p>

Non – domestic solar installed on a pitched roof	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p><b>positive</b> effects are identified.</p> <p>Extending PDR to exclude World Heritage Sites would also ensure consideration of cultural heritage impacts through the planning process in these areas with associated <b>minor positive</b> effects.</p> <p>Extending existing PDR by <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> are anticipated to have adverse impacts on landscape due to an expected increase in size/scale of development. However, the significance of the effect depends on the nature of the wider landscape and the scale and location of proposed development, therefore <b>minor negative uncertain</b> effects are identified.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	<p>The existing PDR positively support the deployment of renewable energy sources (i.e. solar panels) in Scotland, promoting the prudent use of resources. Therefore, the effects of existing PDR on this SA objective are judged to be <b>minor positive</b>.</p> <p>Extending PDR to World Heritage Sites would also ensure consideration of material assets impacts through the planning process in these areas, with associated <b>minor positive</b> effects.</p> <p>Extending existing PDR by <b>removing the restriction within 3km of an aerodrome or technical site</b> could result in <b>minor negative</b> effects on the operation of the aerodrome or technical site.</p> <p><b>Removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> would have similar effects to those provided by existing PDR, and would therefore remain <b>minor positive</b>.</p>
To enhance material assets	<p>As discussed above, the existing PDR are likely to encourage the uptake of solar panels, supporting the use of renewable energy sources in Scotland, and enhance the value of the buildings on which they are located. Therefore, <b>minor positive</b> effects are likely.</p> <p>Extending PDR to World Heritage Sites would also ensure consideration of material assets impacts through the planning process in these areas with associated <b>minor positive</b> effects.</p> <p>Extending existing PDR by <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> would be similar to those provided by existing PDR, and would therefore remain <b>minor positive</b>.</p>
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The existing PDR are likely to result in <b>minor positive</b> effects on supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating the uptake and purchase of solar panels.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply are expected to have <b>minor positive</b> effects as there will be a requirement for planning applications in World Heritage Sites, supporting the character of these areas and their importance for tourism.</p> <p>The effects resulting from removing the restriction within 3km of an aerodrome or technical site could have adverse effects on the operation of the aerodrome or technical site, and therefore <b>minor negative</b> effects are identified.</p> <p>Extending the current restriction of <b>50 kW of electricity generated or 45 kW of thermal heat produced or altering the restriction on dimensions of solar panels protruding from the roof</b> would allow more extensive solar panel development. Therefore <b>minor positive</b> effects are identified.</p>
To support rural development	<p>The development of non-domestic solar panels is expected to support the further development of this renewable technology, which is beneficial to rural communities in terms of providing a local source of renewable energy. Agricultural buildings may be suitable for solar panels, and could contribute to farm diversification.</p> <p>The existing PDR for non-domestic solar panels may limit the extent to which they are currently brought forward in rural areas. However non-domestic solar panels may also have wider impacts on landscape character which is also important to the rural economy for tourism and recreation, and the planning system ensures scrutiny of these environmental effects, and therefore <b>minor positive</b> effects are identified.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them.</p> <p>The effects resulting from removing the restriction within 3km of an aerodrome or technical site could have adverse effects on the operation of the aerodrome or technical site, and therefore <b>minor negative</b> effects are identified.</p> <p>Extending the current restriction of <b>50 kW of electricity generated or 45 kW of thermal heat produced or altering the restriction on dimensions of solar panels protruding from the roof</b> would allow more extensive solar panel development. Therefore <b>minor positive</b> effects are identified reflecting the limited scale and extent of development.</p>
To support smarter resourcing of the planning system	Existing PDR result in fewer planning applications entering the planning system than would occur if there were no PDR. This saves resources in the planning sector,

Non – domestic solar installed on a pitched roof	Justification of scores
SA Objectives	Narrative/justification
	<p>and therefore is considered to result in <b>minor positive</b> effects in relation to this SA objective. The effect is however, <b>uncertain</b>, as the number and scale of planning applications saved is unknown.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply, and removing the restriction within 3km of an aerodrome or technical site is expected to have a <b>negligible</b> effect due to the limited extent of these areas and the potential level of development within them.</p> <p>Extending the current restriction of <b>50 kW of electricity generated or 45 kW of thermal heat produced or altering the restriction on dimensions of solar panels protruding from the roof</b> would allow more extensive solar panel development, however the scale and extent of larger scale development is unknown and therefore effects are uncertain.</p>
Social, population and human health	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p><b>Non domestic solar panels</b> can increase the risk of ‘glint and glare’, causing a hazard to pilots on approach or Air Traffic Control tower staff – as well as causing possible interference with reflected radar signals, communication signals and Instrument Landing Systems. The <b>existing PDR</b> include a restriction within a 3km perimeter around an aerodrome or technical site, and scrutiny through the planning system, therefore <b>negligible</b> effects have been identified.</p> <p>The proposed change to restrict non - domestic solar panels from World Heritage Sites is likely to result in similar effect to the existing proposals and effects would therefore remain <b>negligible</b>.</p> <p>The proposed changes to extend the PDR to within 3km of the perimeter of an aerodrome or technical site are anticipated to increase hazards to pilots on approach or Air Traffic Control tower staff – as well as increase the potential for possible interference with reflected radar signals, communication signals and Instrument Landing Systems. As such, <b>significant negative</b> effects are anticipated in relation to this proposed change.</p> <p>Extending the current restriction of <b>50 kW of electricity generated or 45 kW of thermal heat produced</b> would allow more extensive solar panel development, however no additional impacts on health and quality of life are identified and the overall effect is judged to be <b>negligible</b>.</p> <p><b>Altering the restriction on dimensions of solar panels protruding from the roof</b> may increase the opportunity to alter the angle of the panels, and mitigate potential impacts of glint and glare, however in line with the likely the scale and extent of development these effects are identified as <b>negligible</b>.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

### Non-domestic solar panels installed on a flat roof

#### Assessment table

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove current restriction on PDR for flat roofs with or without a parapet wall and implement the following restrictions: Equipment not to exceed 1 meter from the roof (excluding chimneys or other roof features) Equipment not to be located on the roof closer to the edge of the roof than the height of the installed equipment
Biodiversity, flora and fauna					

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove current restriction on PDR for flat roofs with or without a parapet wall and implement the following restrictions: Equipment not to exceed 1 meter from the roof (excluding chimneys or other roof features) Equipment not to be located on the roof closer to the edge of the roof than the height of the installed equipment
To avoid adverse effects on all habitats and species	+	0	0	0	0
To enhance biodiversity	0	0	0	0	0
<b>Climatic factors</b>					
To avoid increasing greenhouse gas emissions	+	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	0	0	0	0
To support climate change adaptation	0	0	0	0	0
<b>Air</b>					
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	0	0	0	0
To improve air quality	+	0	0	0	0
<b>Water</b>					
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0
<b>Soil</b>					
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0



	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove current restriction on PDR for flat roofs with or without a parapet wall and implement the following restrictions: Equipment not to exceed 1 meter from the roof (excluding chimneys or other roof features) Equipment not to be located on the roof closer to the edge of the roof than the height of the installed equipment
<b>Cultural heritage</b>					
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	+	-?	-?	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0
<b>Landscape and geodiversity</b>					
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+	+	-	-	-
To enhance landscape quality	0	0	0	0	0
<b>Material assets</b>					
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	0	+	+	+
To enhance material assets	+	0	+	+	0
<b>Economy</b>					
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+
To support rural development	+	0	+	+	0
To support smarter resourcing of the planning system	-?	0	+	+	+
<b>Social, population and human health</b>					
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and	+	0	--?	--?	--?

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Remove current restriction on PDR for flat roofs with or without a parapet wall and implement the following restrictions: Equipment not to exceed 1 meter from the roof (excluding chimneys or other roof features) Equipment not to be located on the roof closer to the edge of the roof than the height of the installed equipment
reduce risks to health and quality of life					
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0
To support access to education and training	0	0	0	0	0

## Justification of scores

Non – domestic solar installed on a flat roof	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of non-domestic solar panels will have limited impacts on habitats and species due to their small size and their position on flat roofs. However, adverse impacts on nesting birds could occur during the construction of the solar panels, however these should be addressed through the existing statutory controls. Due to the relatively low risk of these effects, <b>minor positive</b> effects have been identified in relation to existing PDR.
To enhance biodiversity	The effects resulting from each of the proposed changes in PDR are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed, and relative to the very minor effects on biodiversity, flora and fauna <b>negligible</b> effects are identified.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards avoiding increases and reducing greenhouse gas emissions. Taking this into account, it is anticipated that existing PDR result in <b>minor positive</b> effects in relation to this SA objective, reflecting the anticipated limited scale of future development.
To support actions which contribute to targets for reducing greenhouse gas emissions	The effects resulting from each of the proposed changes in PDR are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed relative to overall potential impacts on climatic factors, and therefore <b>negligible</b> effects are identified.
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing emissions of air pollutants, particularly compared to fossil fuel-based sources of energy. Therefore, it is anticipated that <b>existing PDR</b> help to improve local air quality. A <b>minor positive</b> effect is therefore identified for this SA objective, reflecting the limited scale of development.  The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them.  The effects resulting from <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed, and the relative impact on air quality, therefore <b>negligible</b> effects are identified.
To improve air quality	As discussed above, existing PDR are expected to result in <b>minor positive</b> effects on reducing air pollution. Extending PDR will also contribute to reducing air pollution. However, the potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them.  The effects resulting from <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on dimensions of solar panels protruding from the roof</b> all contribute to reducing air pollution, however the extent of these impacts is judged to be <b>negligible</b> .
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	PDR currently do not apply in Conservation Areas, sites of archaeological interests, within the curtilage of a Listed Building and a historic garden or designed landscape. This ensures consideration of cultural heritage impacts through the planning process in these areas. Therefore, <b>existing PDR</b> are expected to have <b>minor positive</b> effects in terms of avoiding adverse effects on heritage assets and their settings.  <b>Including World Heritage Sites in areas where PDR currently do not apply</b> is expected to have <b>minor positive</b> effects as planning applications in World Heritage Sites will be subject to greater scrutiny.  <b>Removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current</b>



	<p><b>restriction requirement for a parapet wall and introducing limits on dimensions of solar panels protruding from the roof</b> are anticipated to have adverse impacts on heritage assets and their settings due to an expected increase in size/scale of development. A <b>minor negative</b> effect is likely, because the proposed changes do not apply in a number of designated areas (including Conservation Areas, sites of archaeological interest, within the curtilage of a Listed Building and a historic garden or designed landscape), thus, ensuring consideration of cultural heritage impacts through the planning process in these areas. The potential impacts on this SA objective are <b>uncertain</b> given that the impacts depend on the siting of development and the nature of the surrounding landscape.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Current PDR and each proposed change to PDR</b> do not apply in National Scenic Areas and National Parks, ensuring consideration of landscape and geodiversity impacts through the planning process in these areas, and minor positive effects are identified. Based on the assumption that non-domestic solar panels on flat roofs are most likely to be associated with industrial buildings and built-up areas, <b>removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction requirement for a parapet wall and introducing limits on dimensions of solar panels protruding from the roof</b> will increase the scale and extent of solar panels on flat roofs, and effects on landscape quality are judged to be <b>minor negative</b>. However, the significance of the effect depends on the nature of the wider landscape and the scale of proposed development.</p>
To enhance landscape quality	
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	<p><b>Current PDR and removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction requirement for a parapet wall and introducing limits on dimensions of solar panels protruding from the roof</b> will positively support the deployment of renewable energy sources (i.e. solar panels) in Scotland, promoting the prudent use of resources. Therefore, the effects on this SA objective are judged to be <b>minor positive</b>.</p> <p><b>Extending PDR to World Heritage Sites</b> would also ensure consideration of material assets impacts through the planning process in these areas with associated <b>minor positive</b> effects through ensuring consideration of impacts on all other assets.</p>
To enhance material assets	<p>As discussed above, the <b>current PDR and removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction requirement for a parapet wall and introducing limits on dimensions of solar panels protruding from the roof</b> are likely to encourage the uptake of solar panels, supporting the use of renewable energy sources in Scotland. <b>Extending PDR to World Heritage Sites</b> does not explicitly enhance material assets due to the expected low rate of development and negligible effects are identified.</p>
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The <b>current PDR and removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction requirement for a parapet wall and introducing limits on dimensions of solar panels protruding from the roof</b> are likely to have <b>minor positive</b> effects on supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating the uptake and purchase of solar panels.</p> <p><b>Extending PDR restrictions to World Heritage Sites</b> would also ensure consideration of economic impacts through the planning process in these areas with associated <b>minor positive</b> effects by ensuring consideration of impacts on all World Heritage Sites, which also contribute to the economy through tourism.</p>
To support rural development	<p><b>Existing PDR and removing restrictions on development within 3km of an aerodrome or technical site and removing the 45kW/50kW restriction</b> for non-domestic solar panels is expected to support the further development of this renewable technology, which is beneficial to rural communities in terms of providing a local source of renewable energy. However, the extent of industrial scale flat roofed buildings in rural areas is likely to be lower than that found in urban locations. These <b>positive</b> effects are judged to be <b>minor</b>, reflecting the limited scale and extent of development.</p> <p><b>Extending PDR restrictions to World Heritage Sites and altering the current restriction requirement for a parapet wall and introducing limits on dimensions of solar panels protruding from the roof</b> are expected to have more limited impacts in rural areas due to these characteristics being more strongly associated with non-domestic buildings in urban areas, and therefore a negligible effect is identified.</p>
To support smarter resourcing of the planning system	<p><b>Existing PDR</b> result in a greater number of planning applications entering the planning system than would occur under the <b>proposed changes to PDR</b>, and a <b>minor negative</b> effect is identified. However, the volume of future applications is expected to be relatively low. Furthermore, the significance of this effect is <b>uncertain</b> due to a lack of data on the number of planning applications, particularly in relation to flat roofs.</p> <p><b>Removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction requirement for a parapet wall and introducing limits on dimensions of solar panels protruding from the roof</b> are anticipated to reduce the number of planning applications required, with a <b>minor positive</b> effect.</p> <p><b>Extending PDR restrictions to World Heritage Sites</b> is not anticipated to significantly affect the number of planning applications coming forward, and a <b>negligible</b> effect is identified.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p><b>Existing PDR</b> ensure health and safety considerations are considered for some locations, size and scale of development, and minor positive effects are identified.</p> <p><b>Removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction on dimensions of solar panels protruding from the roof</b> could increase the risk of 'glint and glare', which was identified by a member of the VRG as</p>

	having potential to cause a hazard to pilots on approach or Air Traffic Control tower staff – as well as causing possible interference with reflected radar signals, communication signals and Instrument Landing Systems. Due to the potential impact of these effects, <b>significant negative</b> effects have been identified. However, these effects are <b>uncertain</b> depending on a range of factors including the location of the proposed structures and their proximity to an aerodrome or technical site. <b>Extending PDR restrictions to World Heritage Sites</b> is not anticipated to significantly affect health and quality of life and <b>negligible</b> effects are identified.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Non-domestic solar panels installed on an external wall

### Assessment table

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Allow a wall mounted array to wrap around a building
<b>Biodiversity, flora and fauna</b>					
To avoid adverse effects on all habitats and species	+	0	0	0	0
To enhance biodiversity	0	0	0	0	0
<b>Climatic factors</b>					
To avoid increasing greenhouse gas emissions	+	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	0	0	0	0
To support climate change adaptation	0	0	0	0	0
<b>Air</b>					
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	0	0	0	0
To improve air quality	+	0	0	0	0
<b>Water</b>					

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Allow a wall mounted array to wrap around a building
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0
<b>Soil</b>					
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0
<b>Cultural heritage</b>					
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	+	-?	-?	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0
<b>Landscape and geodiversity</b>					
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+	+	-?	-?	-?
To enhance landscape quality	0	0	0	0	0
<b>Material assets</b>					
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	+	+	+	+	+
To enhance material assets	+	+	+	+	+

	No change in PDR (PDR currently do not extend to developments within a site of archaeological interest; the curtilage of a Listed Building; a National Scenic Area; a historic garden or designed landscape; a Conservation Area; or a National Park.)	Include World Heritage Sites to locations where PDR do not apply	Remove restriction on development within 3km of an aerodrome or technical site	Remove the restriction of 50 kW of electricity generated or 45 kW of thermal heat produced	Allow a wall mounted array to wrap around a building
<b>Economy</b>					
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+
To support rural development	+	0	+	+	+
To support smarter resourcing of the planning system	-?	0	+	+	+
<b>Social, population and human health</b>					
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	0	--?	--?	--?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0
To support access to education and training	0	0	0	0	0

### Justification of scores

Non – domestic solar installed on an external wall	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	It is assumed that the development of non-domestic solar panels will have limited impacts on habitats and species due to their position on external walls. However, adverse impacts on nesting birds could occur during the construction of the solar panels, however these should be addressed through the existing statutory controls. Due to the relatively low risk of these effects, <b>minor positive</b> effects have been identified in relation to <b>current PDR</b> .
To enhance biodiversity	The effects resulting from each of the proposed changes in PDR are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed, and relative to the very minor effects on biodiversity, flora and fauna <b>negligible</b> effects are identified.
<b>Climatic factors</b>	

Non – domestic solar installed on an external wall	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<p>To avoid increasing greenhouse gas emissions</p> <p>To support actions which contribute to targets for reducing greenhouse gas emissions</p> <p>To support climate change adaptation</p>	<p>Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing greenhouse gas emissions and tackling climate change. However wall mounted arrays are less common than roof mounted panels. Taking this into account, it is anticipated that <b>existing PDR</b> will contribute to the Scottish Government's targets for reducing greenhouse gas emissions. A <b>minor positive</b> effect is identified for this SA objective, reflecting the anticipated small scale of future development.</p> <p>The effects resulting from each of the proposed changes in PDR are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed relative to climatic factors, and therefore <b>negligible</b> effects are identified.</p>
<b>Air</b>	
<p>To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA</p>	<p>Solar panels provide indirect positive effects on this SA objective through the contribution they can make towards reducing emissions of air pollutants, particularly compared to fossil fuel-based sources of energy.</p> <p>Therefore, it is anticipated that <b>existing PDR</b> help to indirectly improve local air quality and contribute to the Scottish Government's targets for tackling air pollution. A <b>minor positive</b> effect is therefore identified for this SA objective, reflecting the limited scale of development.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them.</p> <p>The effects resulting from <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on solar panels that wrap around a building</b> are not anticipated to significantly increase or decrease the number of non-domestic solar panels installed, and the relative impact on air quality, therefore <b>negligible</b> effects are identified.</p>
<p>To improve air quality</p>	<p>As discussed above, <b>existing PDR</b> are expected to have <b>minor positive</b> effects on reducing air pollution.</p> <p>The potential change to include World Heritage Sites in areas where PDR currently do not apply is expected to have a <b>negligible</b> effect due to the limited extent of World Heritage Sites and the potential level of development within them.</p> <p>The effects resulting from <b>removing the restriction within 3km of an aerodrome or technical site, removing the restriction on kW, or altering the restriction on solar panels that wrap around a building</b>, all contribute to reducing air pollution, however the extent of these impacts is judged to be <b>negligible</b>.</p>
<b>Water</b>	
<p>To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies</p>	<p>No effect identified</p>
<p>To avoid and reduce flood risk</p>	<p>No effect identified</p>
<b>Soil</b>	
<p>To protect and avoid adverse effects on valuable soil resources, including carbon soils and best &amp; most versatile agricultural land</p>	<p>No effect identified</p>
<p>To reduce vacant and derelict land/buildings and contaminated land and contaminated land</p>	<p>No effect identified</p>
<b>Cultural heritage</b>	
<p>To avoid adverse effects on designated and undesignated heritage assets and their settings</p>	<p>Wall mounted solar panels are potentially locally visually prominent, particularly in relation to direct effects on cultural heritage resources, and on the setting of these assets. PDR currently do not apply in Conservation Areas, sites of archaeological interests, within the curtilage of a Listed Building, and a historic garden or designed landscape. This ensures consideration of cultural heritage impacts through the planning process in these areas. Therefore, <b>existing PDR</b> are expected to have <b>minor positive</b> effects in terms of avoiding adverse effects on heritage assets and their settings.</p> <p><b>Including World Heritage Sites in areas where PDR currently do not apply</b> is expected to have <b>minor positive</b> effects as planning applications in World Heritage Sites will be subject to greater scrutiny.</p> <p><b>Removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction and altering the restriction on solar panels that wrap around a building</b> are anticipated to have adverse impacts on heritage assets and their settings due to an expected increase in size/scale of development and increased prominence of solar panels on walls. A <b>minor negative</b> effect is likely, because the proposed changes do not apply in a number of designated areas (including Conservation Areas, sites of archaeological interest, within the curtilage of a Listed Building and a historic garden or designed landscape), thus, ensuring consideration of cultural heritage impacts through the planning process in these areas. The potential impacts on this SA objective are <b>uncertain</b> given that the impacts depend on the siting of development and the nature of the surrounding landscape.</p>
<p>To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment</p>	<p>No effect identified</p>

Non – domestic solar installed on an external wall	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Wall mounted solar panels are potentially locally visually prominent, and <b>current PDR</b> and <b>each proposed change to PDR</b> do not apply in National Scenic Areas and National Parks, ensuring consideration of land impacts through the planning process in these areas, and <b>minor positive</b> effects are identified.
To enhance landscape quality	<p><b>Including World Heritage Sites in areas where PDR currently do not apply</b> is expected to have <b>minor positive</b> effects as planning applications in World Heritage Sites will be subject to greater scrutiny.</p> <p>Based on the assumption that non-domestic solar panels on walls are most likely to be associated with industrial buildings, institutions and built-up areas <b>removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction and altering the restriction on solar panels that wrap around a building</b> are anticipated to have adverse impacts on landscape due to an expected increase in size/scale of development and increased prominence of solar panels on walls. Effects on landscape quality are judged to be <b>minor negative</b>. However, the significance of the effect depends on the nature of the wider landscape and the scale and location of proposed development.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	<p><b>Existing PDR and removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction and altering the current restriction on solar panels that wrap around a building</b> will positively support the deployment of renewable energy sources (i.e. solar panels) in Scotland, promoting the prudent use of resources. Therefore, the effects on this SA objective are judged to be <b>minor positive</b>.</p> <p><b>Extending PDR to World Heritage Sites</b> would also ensure consideration of material assets impacts through the planning process in these areas with associated <b>minor positive</b> effects through ensuring consideration of impacts on all other assets.</p>
To enhance material assets	As discussed above, the <b>current PDR and removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction and altering the current restriction on solar panels that wrap around a building</b> are likely to encourage the uptake of solar panels, supporting the use of renewable energy sources in Scotland. <b>Extending PDR to World Heritage Sites</b> does not explicitly enhance material assets and negligible effects are identified.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The <b>current PDR and removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction and altering the current restriction on solar panels that wrap around a building</b> are likely to have <b>minor positive</b> effects on supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating the uptake and purchase of solar panels.</p> <p><b>Extending PDR restrictions to World Heritage Sites</b> would also ensure consideration of economic impacts through the planning process in these areas with associated <b>minor positive</b> effects by ensuring consideration of impacts on all World Heritage Sites, which also contribute to the economy through tourism.</p>
To support rural development	<p>The <b>current PDR and removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction and altering the current restriction on solar panels that wrap around a building</b> is expected to support the further development of this renewable technology, which is beneficial to rural communities in terms of providing a local source of renewable energy. These <b>positive</b> effects are judged to be <b>minor</b>, reflecting the limited scale and extent of development.</p> <p><b>Including World Heritage Sites in areas where PDR currently do not apply</b> is expected to have a negligible effect due to the scale and extent of World Heritage Sites.</p>
To support smarter resourcing of the planning system	<p><b>Existing PDR</b> result in a greater number of planning applications entering the planning system than would occur under the <b>proposed changes to PDR</b>, and a <b>minor negative</b> effect is identified. However, the volume of future applications is expected to be relatively low. Furthermore, the significance of this effect is <b>uncertain</b> due to a lack of data on the number of planning applications, particularly in relation to walls.</p> <p><b>Removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction on solar panels that wrap around a building</b> is anticipated to reduce the number of planning applications required, with a <b>minor positive</b> effect.</p> <p><b>Extending PDR restrictions to World Heritage Sites</b> is not anticipated to significantly affect the number of planning applications coming forward, and a <b>negligible</b> effect is identified.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p><b>Existing PDR</b> ensure health and safety considerations are considered for some locations, size and scale of development, and <b>minor positive</b> effects are identified.</p> <p><b>Removing restrictions on development within 3km of an aerodrome or technical site, removing the 45kW/50kW restriction, and altering the current restriction on solar panels that wrap around a building</b> could increase the risk of 'glint and glare', causing a hazard to pilots on approach or Air Traffic Control tower staff – as well as causing possible interference with reflected radar signals, communication signals and Instrument Landing Systems. Due to the potential impact of these effects, <b>significant negative</b> effects have been identified. However, these effects are <b>uncertain</b> depending on a range of factors including the location of the proposed structures and their proximity to an aerodrome or technical site.</p>



Non – domestic solar installed on an external wall	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<b>Extending PDR restrictions to World Heritage Sites</b> is not anticipated to significantly affect health and quality of life, due to the location and extent of these designated areas and <b>negligible</b> effects are identified.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**District heating and supporting infrastructure**

**District heating**

**Assessment table**

	No change in PDR	PDR for pipe work and associated infrastructure but not including plant or equipment used to generate the heat supplied via district heating										
	No change in PDR	Non designated areas	European Sites (SPAs, SACs)	SSSIs	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>												
To avoid adverse effects on all habitats and species	+	0?	-?	-?	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>												
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	0+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>												
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	+/-?	0	0	0	0	0	0	0	0	0	0
<b>Water</b>												
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0



	No change in PDR	PDR for pipe work and associated infrastructure but not including plant or equipment used to generate the heat supplied via district heating										
	No change in PDR	Non designated areas	European Sites (SPAs, SACs)	SSSIs	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	Category A Listed Building	Scheduled monument
<b>Soil</b>												
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>												
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	-?	0	0	0	0	-?	-?	-?	-?	0	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>												
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>												
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	+	+	+	+	+	+	+	+	+	+	+
<b>Economy</b>												

	No change in PDR	PDR for pipe work and associated infrastructure but not including plant or equipment used to generate the heat supplied via district heating										
	No change in PDR	Non designated areas	European Sites (SPAs, SACs)	SSSIs	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	Category A Listed Building	Scheduled monument
To support and enhance opportunities for sustainable economic growth	0	+	+	+	+	+	+	+	+	+	+	+
To support rural development	0	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	-?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
<b>Social, population and human health</b>												
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0

## Justification of scores

District heating	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p>The construction of district heating pipes and associated infrastructure will involve digging trenches and laying pipes, although some pipes can be surface lain. These pipes are typically laid along with other services under the pavement or carriageway, however in rural communities the pipework may be laid through undeveloped land. Therefore particularly in rural communities the potential effects of construction could result in minor short term impacts on water quality, and the installation of the pipes could result in long term changes to surface drainage, with potential impacts on biodiversity.</p> <p>As there are currently no PDR in relation to district heating at present, installation of the underground pipes and infrastructure requires planning permission. The planning process ensures consideration of impacts on biodiversity and therefore helps to avoid adverse impacts. As such the current situation is considered to result</p>

District heating	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>in <b>minor positive</b> effects in relation to this SA objective.</p> <p>Where there are PDR for a development which is likely to have a significant effect on a Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only <b>minor negative</b> effects are identified for this potential change in PDR in relation to Natura sites. Construction could also result in impacts on SSSI through short term impacts on water quality during construction and longer term impacts on drainage patterns, and <b>minor negative</b> effects are identified. Impacts on non-designated areas could occur, however these are identified as negligible but <b>uncertain</b>.</p> <p>Industrial installations for carrying gas, steam and hot water over 1ha in size would need to be screened for EIA and any PDR would not apply unless a negative screening opinion concludes there are no likely significant environmental effects. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To enhance biodiversity	No effect identified.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	District heating can be supplied by low carbon energy sources, such as biomass, make use of waste heat from industrial processes and it can also be generated from fossil fuels, and is usually more efficient than individual boilers and therefore schemes will contribute to reducing carbon emissions.
To support actions which contribute to targets for reducing greenhouse gas emissions	<p>There are currently no PDR in relation to district heating infrastructure and therefore the impacts on climate change are considered through the planning process with a minor positive effect.</p> <p>Extending PDR to underground pipes and associated infrastructure is likely to make it simpler to deliver district heating infrastructure, which should contribute to avoiding an increase of greenhouse gas emissions, and is therefore likely to result in <b>minor positive</b> effects. Extending the changes in PDR to include or exclude designated areas does not impact significantly on the overall scale or extent of overall effect on climate change and therefore this effect is anticipated for all of the proposed changes to PDR.</p> <p>Taking the above into account, it is anticipated that introducing PDR in relation to district heating will contribute to the Scottish Government's targets for reducing greenhouse gas emissions. A <b>minor positive</b> effect is identified for this SA objective, reflecting the localised scale of development associated with district heating pipes and associated infrastructure.</p>
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	District heating can be supplied by low carbon energy sources, such as biomass, make use of waste heat from industrial processes and it can also be generated from fossil fuels. The fuel source for the district heating can result in air quality impacts, however these effects relate to the boiler, which is not included within the potential PDR change, therefore negligible effects are identified.
To improve air quality	<p>There are currently no PDR in relation to district heating infrastructure and therefore <b>negligible</b> effects are identified in relation to this SA objective.</p> <p>A <b>mixed uncertain</b> effect is identified for this SA objective in relation to introducing PDR for district heating in undesignated areas because the nature and significance of the impact strongly depends on the energy source for the district heating scheme to which the underground pipes are ancillary. For instance, the smoke and odours associated with biomass heating systems are known to have adverse impacts on local air quality whilst other technologies may have limited, or even positive, effects on local air quality if they replace more polluting alternatives. Extending the changes in PDR to include or exclude designated areas does not impact significantly on the overall scale or extent of overall effect and therefore a negligible effect is anticipated for all of the proposed changes to PDR.</p> <p>Industrial installations for carrying gas, steam and hot water over 1ha in size would need to be screened for EIA and any PDR would not apply unless a negative screening opinion concludes there are no likely significant environmental effects. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The construction of district heating pipes and associated infrastructure will involve digging trenches and laying pipes, although some pipes can be surface lain. These pipes are typically laid along with other services under the pavement or carriageway, however in rural communities the pipework may be laid through undeveloped land. Therefore particularly in rural communities the potential effects of construction could result in minor short term impacts on water quality, and the installation of the pipes could result in long term changes to surface drainage. Industrial installations for carrying gas, steam and hot water over 1ha in size would need to be screened for EIA and any PDR would not apply unless a negative screening opinion concludes there are no likely significant environmental effects. The EIA process may therefore reduce the adverse impacts of any developments over this scale.

District heating	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	<p>As there are currently no PDR in relation to district heating at present, installation of the underground pipes and infrastructure requires planning permission. The planning process ensures consideration of impacts on the water environment and therefore helps to avoid adverse impacts. As such the current situation is considered to result in <b>minor positive</b> effects in relation to this SA objective.</p> <p>With regards to the potential changes, the effects of underground pipes and associated infrastructure may result in short term impacts on water quality during construction and long term adverse changes to drainage patterns, although these effects are judged to be minor due to the localised scale and nature of impacts associated with underground pipes and associated infrastructure. As such, <b>minor negative</b> effects are anticipated in relation to this SA objective. However, these effects are <b>uncertain</b> given that the impacts strongly depend on the local geo-hydrological conditions, as well as the scale, location and extent of the proposed development.</p> <p>Extending the changes in PDR to include or exclude designated areas does not impact significantly on the scale or extent of overall effect and therefore this effect is anticipated for all of the proposed changes to PDR.</p>
To avoid and reduce flood risk	The installation of buried pipes may impact on local drainage, particularly in rural areas where pipes may not be laid under pavements and roads. However the scale of these effects is anticipated to be very minor, as pipework will be more likely laid under pavements and road. Therefore, a <b>negligible</b> effect is identified for this SA objective.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p>The effects of installing underground pipes include potential adverse changes to soil quality/composition resulting from physical disturbances caused by digging, particularly where the pipes are not installed under existing roads and pavements.</p> <p>As there are currently no PDR in relation to district heating at present, installation of the underground pipes and infrastructure requires planning permission. The planning process provides scrutiny and therefore helps to avoid adverse impacts. As such the current situation is considered to result in <b>minor positive</b> effects in relation to this SA objective.</p> <p>The potential changes to PDR could result in <b>minor negative</b> effects on soil in all areas. However, these effects are <b>uncertain</b> given that the impacts strongly depend on the soil quality and composition of the site, as well as the scale and extent of the proposed development.</p> <p>Industrial installations for carrying gas, steam and hot water over 1ha in size would need to be screened for EIA and any PDR would not apply unless a negative screening opinion concludes there are no likely significant environmental effects. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>Potential effects on cultural heritage assets include direct impacts on designated and undesignated heritage assets because of the potential for digging trenches for underground pipes to damage foundations, retaining walls and basements, as well as unknown buried archaeological assets. Surface infrastructure could also impact on the setting of cultural heritage assets.</p> <p>As there are currently no PDR in relation to district heating at present, installation of the underground pipes and infrastructure requires planning permission. The planning process provides scrutiny and therefore helps to avoid adverse impacts. As such the current situation is considered to result in <b>minor positive</b> effects in relation to this SA objective.</p> <p>The proposed changes allow for underground pipes and associated infrastructure in Conservation Areas, Historic Gardens and Designed Landscapes, historic battlefields, and World Heritage Sites and could affect these sites directly as well as the setting of Scheduled Monuments with potential <b>significant negative</b> effects, given the particular sensitivity of these locations.</p> <p>Scheduled Monument Consent ensures consideration of the potential direct negative effects on Scheduled Monuments but there could be effects on setting. Listed Building consent also ensures consideration of direct impacts on Listed buildings and their setting. Industrial installations for carrying gas, steam and hot water over 1ha in size would need to be screened for EIA and any PDR would not apply unless a negative screening opinion concludes there are no likely significant environmental effects. The EIA process may therefore reduce the adverse impacts of any developments over this scale. However the likely scale of development is unknown these effects are <b>uncertain</b>.</p> <p>Introducing PDR in relation to district heating is anticipated to result in potential <b>minor negative effects</b> on cultural heritage for non-designated locations however, these effects are <b>uncertain</b> given that the impacts depend on the siting of development.</p> <p>It is assumed for the purposes of this assessment that 'Grade A listed buildings' refers to the curtilage of such buildings. In these cases, the need for listed building consent will ensure that adverse impacts are mitigated. This said, it is important to note that district heating infrastructure outside the immediate curtilage would not be subject to listed building consent, however as this would be underground, <b>negligible</b> effects are identified.</p>

District heating	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>District heating pipes can be laid above or below ground. Pipes laid below ground will have negative short term landscape effects during construction. Pipes laid over ground will have long term negative landscape effects.</p> <p>As there are currently no PDR in relation to district heating at present, installation of the pipes and infrastructure requires planning permission. The planning process ensures consideration of potential adverse effects on landscape and therefore helps to avoid adverse impacts. As such the current situation is considered to result in <b>minor positive</b> effects in relation to this SA objective.</p> <p>It is anticipated that the development of underground pipes as per the proposed changes will have limited short term visual impacts associated only with the construction stage, however pipes may also be installed on the surface along with associated infrastructure. Also, there is the potential for pipes to affect geodiversity by interfering with important formations. The effects of providing district heating infrastructure within National Scenic Areas, National Parks, and Historic Gardens and Designed Landscapes is considered likely to result in greater impacts due to the increased sensitivity of these locations to landscape change. However, due to the likely scale and location of district heating pipework and other infrastructure the effects within these areas are judged to be <b>minor negative</b>. However, these effects are <b>uncertain</b> given that the impacts strongly depend on the local landscape / townscape, the amount of below or above ground infrastructure, and the extent of construction activity. Furthermore, industrial installations for carrying gas, steam and hot water over 1ha in size would need to be screened for EIA and any PDR would not apply unless a negative screening opinion concludes there are no likely significant environmental effects. The EIA process may therefore reduce the adverse impacts of any developments over this scale.</p>
To enhance landscape quality	No effect identified.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified.
To enhance material assets	<p>No effect identified.</p> <p>District heating schemes allow for the efficient use of fuel and distribution of heating and hot water. This is a long term <b>minor positive</b> effect.</p>
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>District heating can help to support sustainable economic growth through allowing businesses to generate additional income from their heat generation processes. This can occur in urban or rural areas.</p>
To support rural development	<p>There are currently no PDR in relation to district heating infrastructure and therefore <b>negligible</b> effects are identified in relation to this SA objective.</p> <p>Introducing PDR for district heating pipework and associated infrastructure is likely to result in <b>minor positive</b> effects on supporting and enhancing opportunities for sustainable economic growth as they help to support a more sustainable economy where this is powered by low carbon energy or where it uses waste heat from industrial processes. Extending the changes in PDR to include or exclude designated areas does not impact significantly on the overall scale or extent of overall effect and therefore this effect is anticipated for all of the proposed changes to PDR.</p>
To support smarter resourcing of the planning system	<p>There are currently no PDR in relation to district heating. As such, planning applications are required to be prepared, submitted and determined. This utilises resources in the planning sector, and therefore is considered to result in <b>minor negative</b> effect in relation to this SA objective. The effect is however, <b>uncertain</b>, as the number and scale of planning applications relating to district heating are unknown.</p> <p>The proposed changes to PDR would result in fewer planning applications, thereby resulting in <b>minor positive</b> effects in relation to this SA objective. However, the significance of these effects is <b>uncertain</b> due to a lack of data on the number of planning applications. Extending the changes in PDR to include or exclude designated areas does not impact significantly on the overall scale or extent of overall effect and therefore this effect is uncertain for all of the proposed changes to PDR.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p>The construction of the pipework and associated infrastructure for district heating systems could result in minor short term negative effects during construction.</p> <p>As there are currently no PDR in relation to district heating at present, installation of the pipes and infrastructure requires planning permission. The planning process provides scrutiny and therefore helps to avoid adverse impacts. As such the current situation is considered to result in <b>minor positive</b> effects in relation to this SA</p>

District heating	Justification of scores
SA Objectives	Narrative/justification
	<p>objective.</p> <p>It is not anticipated that the provision of district heating pipe work and associated infrastructure in accordance with the proposed changes will adversely influence human health. Therefore, a <b>negligible</b> effect is identified in relation to this SA objective. Extending the changes in PDR to include or exclude designated areas does not impact significantly on the overall scale or extent of overall effect and therefore a negligible effect is anticipated for all of the proposed changes to PDR.</p>
<p>To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity</p>	<p>It is anticipated that the provision of district heating pipe work and associated infrastructure in accordance with the proposed changes may indirectly support the provision of lower heating and hot water costs and could support alleviation of fuel poverty, supporting the health and living environment of people and communities.</p> <p>There are currently no PDR in relation to district heating infrastructure, however as the energy generating source associated with district heating already requires planning permission, the separate effect of the current requirement for planning permission for the underground elements of the development on improving the health and living environment is identified as <b>negligible</b>.</p> <p>Introducing PDR, and in the context of the likely future scale and extent of the development, <b>minor positive</b> effects are identified for this SA objective. Extending the changes in PDR to include or exclude designated areas does not impact significantly on the overall scale or extent of overall effect and therefore this effect is anticipated for all of the proposed changes to PDR.</p>
<p>To support community cohesion and vitality</p>	<p>No effect identified.</p>
<p>To support access to education and training</p>	<p>No effect identified.</p>



**Non-domestic energy storage**

**Energy storage (non-domestic)**

**Assessment table 1**

	PDR for the installation, alteration or replacement of battery facilities for statutory undertakers for the generation, transmission or supply of electricity.											PDR for the installation, alteration or replacement of battery facilities at generating sites.											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Biodiversity, flora and fauna</b>																							
To avoid adverse effects on all habitats and species	-	-	0	0	0	0	0	0	-	0	0	-	-	0	0	0	0	0	0	-	0	0	
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Climatic factors</b>																							
To avoid increasing greenhouse gas emissions	+	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

	PDR for the installation, alteration or replacement of battery facilities for statutory undertakers for the generation, transmission or supply of electricity.											PDR for the installation, alteration or replacement of battery facilities at generating sites.											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
known issue through the designation of AQMA																							
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-?	-?	0	0	0	0	0	0	-?	0	0	-?	-?	0	0	0	0	0	0	-?	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>																							
To avoid adverse effects on	-	0	0	0	--	--	--	--	0	-	-	-	0	0	0	--	--	--	--	0	-	-	-



	PDR for the installation, alteration or replacement of battery facilities for statutory undertakers for the generation, transmission or supply of electricity.											PDR for the installation, alteration or replacement of battery facilities at generating sites.											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
designated and undesignated heritage assets and their settings																							
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	0	--	--	0	0	0	0	0	0	-	0	--	--	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	+	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>																							

	PDR for the installation, alteration or replacement of battery facilities for statutory undertakers for the generation, transmission or supply of electricity.											PDR for the installation, alteration or replacement of battery facilities at generating sites.											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To support and enhance opportunities for sustainable economic growth	+	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0
To support rural development	+	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-?	0	0	0	0	0	0	0	0	0	0	-?	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	PDR for the installation, alteration or replacement of battery facilities for statutory undertakers for the generation, transmission or supply of electricity.											PDR for the installation, alteration or replacement of battery facilities at generating sites.											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
training																							

**Energy storage (non-domestic)**

**Assessment table 2**

	PDR for the installation, alteration or replacement of battery facilities at a distance from generating sites and equipment.											PDR for the installation, alteration or replacement of electric lines to connect batteries to the electricity network (NB: this would be for connections within the site where generation and storage are co-located. Connections to the wider network or between generating sources and remote storage would be for Class 40 PDR or energy consent for power lines)										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designated landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>																						
To avoid adverse effects on all habitats and species	-	-	0	0	0	0	0	0	-	0	0	-	-	0	0	0	0	0	0	-	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>																						

	PDR for the installation, alteration or replacement of battery facilities at a distance from generating sites and equipment.											PDR for the installation, alteration or replacement of electric lines to connect batteries to the electricity network (NB: this would be for connections within the site where generation and storage are co-located. Connections to the wider network or between generating sources and remote storage would be for Class 40 PDR or energy consent for power lines)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designated landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
To avoid increasing greenhouse gas emissions	+	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>																							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>																							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	PDR for the installation, alteration or replacement of battery facilities at a distance from generating sites and equipment.											PDR for the installation, alteration or replacement of electric lines to connect batteries to the electricity network (NB: this would be for connections within the site where generation and storage are co-located. Connections to the wider network or between generating sources and remote storage would be for Class 40 PDR or energy consent for power lines)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designated landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
<b>Soil</b>																							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-?	-?	0	0	0	0	0	0	-?	0	0	-?	-?	0	0	0	0	0	0	-?	0	0	
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Cultural heritage</b>																							
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	0	0	0	--	--	--	--	0	-	-	-	0	0	0	--	--	--	--	0	-	-	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Landscape and geodiversity</b>																							
To avoid adverse impacts on protected landscapes, wild	-	0	--	--	0	0	0	0	0	0	0	-	0	--	--	0	0	0	0	0	0	0	

	PDR for the installation, alteration or replacement of battery facilities at a distance from generating sites and equipment.											PDR for the installation, alteration or replacement of electric lines to connect batteries to the electricity network (NB: this would be for connections within the site where generation and storage are co-located. Connections to the wider network or between generating sources and remote storage would be for Class 40 PDR or energy consent for power lines)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designated landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
land, geodiversity and all landscapes																							
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>																							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	+	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>																							
To support and enhance opportunities for sustainable economic growth	+	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0
To support rural development	+	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Social, population and human health</b>																							
To avoid adverse effects on health and quality of life	-?	0	0	0	0	0	0	0	0	0	0	-?	0	0	0	0	0	0	0	0	0	0	0

	PDR for the installation, alteration or replacement of battery facilities at a distance from generating sites and equipment.											PDR for the installation, alteration or replacement of electric lines to connect batteries to the electricity network (NB: this would be for connections within the site where generation and storage are co-located. Connections to the wider network or between generating sources and remote storage would be for Class 40 PDR or energy consent for power lines)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic gardens or designated landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	
and reduce risks to health and quality of life and reduce risks to health and quality of life																							
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Energy storage: Non -domestic	Justification of scores
SA Objectives	Narrative/justification
Biodiversity, flora and fauna	
To avoid adverse effects on all habitats and species	The construction of energy storage facilities could result in the loss of habitats or protected species that rely on habitat in areas of future development. Introducing <b>PDR for the installation, alteration or replacement of energy storage facilities for statutory undertakers</b> , for the installation, alteration or replacement of energy storage facilities at generating sites, or <b>at distance from existing generating sites</b> , could result in loss of habitat with negative effects, and to a lesser extent changes <b>for the installation, alteration or replacement of electric lines to connect storage to the electricity network</b> due to the more limited footprint of this
To enhance biodiversity	

Energy storage: Non -domestic	Justification of scores
<b>SA Objectives</b>	<b>Narrative/justification</b>
	development. Therefore, only <b>minor negative</b> effects are identified for this potential change in PDR in relation to European sites and SSSI. However, these impacts are <b>uncertain</b> given that the significance of the impacts depends on the previous use of the site and the biodiversity associated with that use, including species characteristics, site character and features of the energy storage facility proposed.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Non-domestic energy storage facilities provide indirect <b>positive</b> effects on climate change and the associated SA objectives through the wider contribution they can make towards tackling climate change, especially in reducing greenhouse gas and carbon emissions compared to fossil fuel generated energy resources. Furthermore, they provide enhanced energy resilience and efficiency throughout the network, increasing balance supply, reducing overall energy demand as well as significantly reducing energy loss during transmission and distribution. Energy storage is particularly valuable in supporting the viability of renewable energy installations in more remote locations, such as the snow sports centres, which are more reliant on fossil fuel use for intensive energy needs for snow production. Introducing PDR for <b>all of the potential changes</b> is likely to have <b>minor positive</b> effects on climatic factors through supporting actions reflecting the likely scale and extent of future development.
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Non-domestic energy storage facilities would be expected to provide indirect positive effects on air quality through the contribution they can make towards reducing emissions of air pollutants, particularly in relation to enhanced energy resilience and efficiency, reducing overall reliance on fossil fuel generated energy. An indirect <b>minor positive</b> effect is identified for air quality for the introduction of PDR for <b>all of the potential changes</b> , reflecting the anticipated small scale of future development.
To improve air quality	
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The construction of energy storage facilities could result in the loss of soil resources, including high carbon soils and best and most versatile agricultural land, particularly in areas of previously undeveloped land or outwith existing generation sites, below the thresholds at which development may be subject to EIA screening. Therefore, <b>introducing PDR for the installation, alteration or replacement of energy storage facilities for statutory undertakers, at generating sites or at distance from existing generating sites</b> would be likely to have <b>minor negative</b> effects. This would be particularly true in areas of best and most versatile land or high carbon soils, such as upland environments where the snow sports centres are located. However, these impacts are <b>uncertain</b> given that the significance of the impacts depends on the scale, extent and type of future development. The effects of PDR for the installation, alteration or replacement of electric lines to connect storage to the electricity network are judged to be <b>negligible</b> reflecting the anticipated smaller footprint of this development.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	There is currently a lack of a specific definition of electricity storage in planning legislation and applications are usually treated as generation developments. Therefore, the statutory requirement for planning permission ensures consideration of cultural heritage impacts through the planning process in designated areas (i.e. areas designated for their heritage assets). The introduction of PDR for <b>the installation, alteration or replacement of energy storage facilities for statutory undertakers, or at distance from existing generating sites, or for the installation, alteration or replacement of electric lines to connect storage to the electricity network</b> will remove the need to apply for planning permission, potentially resulting in adverse effects on heritage assets and their settings. There are likely to be <b>significant negative</b> effects on Conservation Areas, Historic Gardens and Designed Landscapes, Historic Battlefields, World Heritage Sites and Scheduled Monuments because of potential adverse effects on setting, reflecting the national and international significance of these assets. Out with designated areas or where existing consenting processes apply, such as with scheduled monuments and listed buildings, direct effects on these resources would be identified and addressed. In non-designated areas, there could be potential effects on non-designated resources and unknown archaeology, with <b>minor negative</b> effects. The significance of the effects described above is uncertain, depending on local factors such as the sensitivity of the heritage assets in question, the previous use of the site and the topography of the wider landscape.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified.



Energy storage: Non -domestic	Justification of scores
SA Objectives	Narrative/justification
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>There is currently a lack of a specific definition of electricity storage in planning legislation and applications are usually treated as generation developments. Therefore, the statutory requirement for planning permission ensures consideration of landscape and geodiversity impacts through the planning process in designated areas (i.e. areas designated for their landscapes and geodiversity). The introduction of PDR for <b>the installation, alteration or replacement of energy storage facilities for statutory undertakers, or at distance from existing generating sites, or for the installation, alteration or replacement of electric lines to connect storage to the electricity network</b> will remove the need to apply for planning permission, potentially resulting in adverse effects on all landscapes and designated landscapes. Landscape impacts in locations with existing development such as the snow sports centres may be within the context of other build development associated with the operation of these areas. However, overall, there are likely to be <b>significant negative</b> effects on designated or sensitive landscapes and <b>minor negative</b> effects on non-designated landscapes reflecting the introduction of new structures into the landscape. Construction could result in impacts on important rocks, fossils, landforms, soils and land forming processes. Landscape impacts may also relate to wider impacts on the setting of cultural heritage resources.</p> <p>Impacts on geodiversity would be more significant in areas important for their geology or geomorphology. Where existing consenting processes apply, such as with SSSIs, direct effects on these resources would be identified and addressed.</p>
To enhance landscape quality	No effect identified.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	The <b>introduction of PDR for all of the potential changes</b> will positively support strengthening energy security and therefore sustainability for non-domestic enterprises, particularly in remote rural areas where extreme weather conditions can adversely impact upon the continuity of power supply. A <b>minor positive</b> effect is identified, reflecting the limited scale and extent of future development.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The <b>introduction of PDR for all of the potential changes</b> will enhance opportunities for sustainable economic growth through encouraging sustainable industries as well as improving energy security by optimising the supply and demand thus reducing the need to import electricity. Furthermore energy storage can enable the integration of more renewables (especially solar PV and wind) in the energy mix and create revenue streams from price arbitrage. A <b>minor positive</b> effect is identified, reflecting the limited scale and extent of future development.
To support rural development	<b>Introducing PDR for all of the potential changes</b> is likely to have indirect positive effects on rural development through increased energy security and therefore sustainability for businesses particularly in remote rural areas where extreme weather conditions can adversely impact upon the continuity of power supply. This is particularly relevant in more remote locations such as the snow sports centres which are important operators in the rural economy. System stability is also improved, providing increased stability during electricity outages by supplying energy at these times and reducing the financial costs of power outages. A <b>minor positive</b> effect is identified, reflecting the limited scale and extent of future development.
To support smarter resourcing of the planning system	<b>Introducing PDR for all of the potential changes</b> is likely to increase efficiency of the planning system by clarifying the circumstances in which planning permission is required as well as ensuring consistency between local authorities. PDR may also reduce bureaucratic burden for those applying for energy storage facilities. Overall, a <b>minor positive</b> effect is expected,.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<b>Introducing PDR for all of the potential changes</b> has the potential to adversely impact aviation safety, as new structures have the potential to impact upon the safe and efficient operation of an aerodrome or technical site through interference with navigation aids or the introduction of new structures. Due to the relatively low risk of these effects, <b>minor negative</b> effects have been identified. However, these effects are <b>uncertain</b> depending on the design of the proposed structures and their proximity to an aerodrome or technical site.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified.
To support community cohesion and vitality	No effect identified.
To support access to education and training	No effect identified.

**Energy storage (domestic)**

**Domestic energy storage**

**Assessment table**

	PDR for the installation, alteration or replacement of domestic energy storage facilities										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	+	+	+	+	+	+	+	+	+	+	+
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>											

PDR for the installation, alteration or replacement of domestic energy storage facilities											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	0	0	0	0	-	0	0	0	0	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0

PDR for the installation, alteration or replacement of domestic energy storage facilities											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	+	+	+	+	+	+	+	+	+	+	+
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+
To support rural development	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	+	+	+	+	+	+	+	+	+	+	+
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0

PDR for the installation, alteration or replacement of domestic energy storage facilities											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Energy storage: domestic	Justification of scores
<b>SA Objective</b>	<b>Narrative/justification</b>
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Domestic energy storage facilities provide indirect <b>positive</b> effects on climate change and the associated SA objectives through the wider contribution they can make towards tackling climate change, especially in reducing greenhouse gas and carbon emissions compared to fossil fuel generated energy resources. Furthermore, they provide enhanced energy resilience and efficiency throughout the network, increasing balance supply, reducing overall energy demand as well as significantly reducing energy loss during transmission and distribution. Therefore, <b>introducing PDR</b> is likely to have <b>minor positive</b> effects on climatic factors and will contribute to the Scottish Government's targets for reducing greenhouse gas emissions and supporting climate adaptation. The scale of effect reflects the small scale of development associated with domestic energy storage.
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	Domestic energy storage facilities would be expected to provide indirect <b>positive</b> effects on air quality through the contribution they can make towards reducing emissions of air pollutants, particularly in relation to enhanced energy resilience and efficiency, reducing overall reliance on fossil fuel generated energy. A <b>minor positive</b> effect is identified for air quality for <b>the introduction of PDR</b> , reflecting the small scale of future domestic developments.
To improve air quality	
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified

Energy storage: domestic	Justification of scores
<b>SA Objective</b>	<b>Narrative/justification</b>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	There are no existing specific PDR for the installation, alteration or replacement of domestic (in relation to dwellings) energy storage facilities. Domestic energy storage facilities may be wall mounted or floor standing. Some may be located inside while others require to be installed outside within a weatherproof enclosure. The statutory requirement for planning permission ensures consideration of cultural heritage impacts through the planning process in designated areas (i.e. areas designated for their heritage assets). The <b>introduction of PDR</b> will remove the need to apply for planning permission, potentially resulting in adverse effects on heritage assets, their settings and the wider built environment. There are likely to be <b>minor negative</b> effects on conservation areas and World Heritage Sites because of potential adverse direct effects on the character of the area, reflecting the national and international significance of these assets. Within other heritage designations the association of the energy storage with a property and the scale of development means that effects are judged to be negligible. Where existing consenting processes apply, such as scheduled monuments and Listed Buildings, direct effects on these resources would be identified and addressed resulting in <b>negligible</b> effects.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified.
To enhance landscape quality	No effect identified.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified.
To enhance material assets	The <b>introduction of PDR</b> will positively support strengthening energy security particularly in remote rural areas where extreme weather conditions can adversely impact upon the continuity of power supply. A <b>minor positive</b> effect is identified, reflecting the limited scale and extent of future domestic development.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	The <b>introduction of PDR</b> will enhance opportunities for sustainable economic growth through encouraging sustainable industries as well as improving energy security by optimising supply and demand. Furthermore energy storage can enable the integration of more renewables (especially solar PV and wind) in the energy mix and create revenue streams from price arbitrage. A <b>minor positive</b> effect is identified, reflecting the limited scale and extent of future domestic development.
To support rural development	<b>Introducing PDR</b> is likely to have beneficial effects on rural development through increased energy security, balance and system stability. Rural communities will benefit from a more secure energy supply, particularly in remote areas where they can provide back up during electricity outages. A <b>minor positive</b> effect is identified, reflecting the limited scale and extent of future domestic development.
To support smarter resourcing of the planning system	<b>Introducing PDR</b> is likely to increase efficiency of the planning system by clarifying the circumstances in which planning permission is required as well as ensuring consistency between local authorities. PDR may also reduce bureaucratic burden for those applying for energy storage facilities. Overall, a <b>minor positive</b> effect is expected.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The <b>introduction of PDR</b> will positively impact upon health and quality of life through the potential to alleviate fuel poverty through improved energy efficiency and the associated reduction in energy costs, providing indirect benefits to the wider community by improved system stability during electricity outages. However the extent of this effect is likely to be limited, and a negligible effect is identified.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**Development relating to active travel**

**PDR for route creation**

**Assessment table**

	PDR for route creation										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	-/+	-/+	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-	-	-	-	-	-	-	-	-	-	-
To avoid and reduce flood risk	-	-	-	-	-	-	-	-	-	-	-
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	-	-	-	-	-	-	-	-	-
To reduce vacant and derelict land/buildings and contaminated land and	0	0	0	0	0	0	0	0	0	0	0

	PDR for route creation										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
contaminated land											
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	-	-	-	-	-	-	-	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+
To support rural development	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>											



	PDR for route creation										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0

## Justification of scores

Active travel: route creation	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	The creation of new access routes has the potential to affect existing habitats through loss and fragmentation. This is considered to be a <b>minor negative</b> effect. Depending on the design/siting of new routes, there could also be the potential for improving places for biodiversity through integrating active travel infrastructure into green networks. Therefore, a mixed minor negative and uncertain minor positive effect is identified in relation to this SA objective.
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<b>Extending PDR</b> for route creation is likely to have a <b>minor positive</b> effect in relation to avoiding an increase in greenhouse gas emissions. It is expected that this approach would help to promote modal shift and reduce dependency on travel by private vehicle in Scotland thereby limiting the potential for increases in greenhouse gases from this source as further development occurs across the country.
To support actions which contribute to targets for reducing greenhouse gas emissions	<b>Extending PDR</b> for route creation is likely to have a <b>minor positive</b> effect in relation to supporting actions which contribute to targets for reducing greenhouse gas emissions. Encouraging the widening of the walking and cycling network in Scotland may help to encourage an uptake of walking and cycling in the country which would help to reduce the contribution commuting and other journeys which otherwise would be made by private car make to national greenhouse gas emissions.
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<b>Extending PDR</b> for route creation is likely to have a <b>minor positive</b> effect in relation to avoiding significant effects on air quality. It is expected that that this approach would help to promote modal shift and reduce dependency on travel by private vehicle in Scotland thereby limiting the potential for increases in air pollution from this source.

Active travel: route creation	Justification of scores
To improve air quality	<b>Extending PDR</b> for route creation is likely to have a <b>minor positive</b> effect in relation to improving air quality. Encouraging the widening of the walking and cycling network in Scotland may help to encourage an uptake of walking and cycling in the country which would help to reduce the contribution commuting and other journeys which otherwise would be made by private vehicle make to air pollution.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	The creation of new access routes could increase the risk of localised increases in runoff, erosion and siltation, with implications for water quality. This is a potential <b>minor negative</b> effect.
To avoid and reduce flood risk	The creation of new access routes could increase the risk of localised increases in runoff, increasing the risk and severity of flood events. This is a potential <b>minor negative</b> effect.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	The creation of new access routes could result in loss and sealing of soils, representing a potential <b>minor negative</b> effect.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Extending PDR</b> for route creation is likely to have potential minor negative effects on cultural heritage from the construction of routes and on the setting of designated and undesignated cultural heritage assets
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	There is potential for negative effects on the landscape from route creation. The effects may be experienced in protected landscapes as well as non-designated landscapes such as open moorland or country hills. The scale of development is assumed to be suitable for shared walking/cycling use, and <b>minor negative</b> effects are identified.
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<b>Extending PDR</b> for route creation is likely to have a <b>minor positive</b> effect in relation to economic growth. The extension of the cycling and walking network in Scotland is likely to help improve accessibility to services and help to improve the vitality and viability of areas such as town centres due to increased footfall.
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<b>Extending PDR</b> for route creation is likely to have a <b>minor positive</b> effect in relation to health, quality of life and reducing risks to health. It is expected that extending the walking and cycling network in Scotland would help make walking and cycling safer as an activity. Furthermore the extension and improvement of the cycling and walking network will help to promote the attractiveness of cycling and walking as activities thereby helping to increase the number of people partaking of more active and healthier lifestyle choices.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Extending PDR</b> for route creation is likely to have a <b>minor positive</b> effect in relation to improving the health and living environment of Scotland's residents. The effect is expected in relation to the potential for an increased number of people undertaking more active lifestyles in the country as well as potentially improving access to services and facilities (including healthcare facilities and open spaces) which is likely to be to the benefit to health and well-being.
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**PDR for route surfacing**

**Assessment table**

	PDR for route surfacing										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	-	-	-	-	-	-	-	-	-	-	-
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0

	PDR for route surfacing										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	0	0	0	0	0	0	0	0	0	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+

	PDR for route surfacing										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To support rural development	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Active travel: route surfacing	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	Surfacing of access routes will facilitate higher levels of use (for example in poor weather), helping to support walking and cycling as an alternative to motorised transport. This is a <b>minor positive</b> effect.

Active travel: route surfacing	Justification of scores
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	Encouraging higher levels of active travel will help avoid pollution for motorised transport, contributing to improved air quality. This is a <b>minor positive</b> effect.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	Surfacing access routes will increase surface water run-off and could lead to an increase in flood risk. This is potential <b>minor negative</b> effect.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	No effect identified
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<b>Extending PDR</b> for route surfacing is likely to have a <b>minor positive</b> effect in relation to reducing risks to health and quality of life. Providing new surfaces for existing walking and cycle routes in Scotland is unlikely to improve the accessibility of services and facilities in the country given that it would not extend the existing cycle network. This approach is however likely to help make recreational walking and cycling safer. The approach will thereby not only help to reduce the number of accidents suffered by Scottish residents but will also help to encourage the uptake of this activity amongst the population. As such the approach is expected to help encourage healthier and more active lifestyle choices in Scotland.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**PDR for safe crossing points**

**Assessment table**

	PDR for safe crossing points										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0

	PDR for safe crossing points										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	0	0	0	0	0	0	0	0	0	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	0	0	0	0	0	0	0	0	0	0	0
To support rural development	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical	+	+	+	+	+	+	+	+	+	+	+



	PDR for safe crossing points										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
activity											
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Active travel: safe crossing points	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	By encouraging active travel, the provision of safe crossing points will help to support walking and cycling as alternatives to motorised transport, thereby helping to reduce greenhouse gas emissions. This is a <b>minor positive</b> effect.
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	By encouraging active travel, the provision of safe crossing points will help to support walking and cycling as alternatives to motorised transport, thereby helping to improve air quality. This is a <b>minor positive</b> effect.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	No effect identified
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified

Active travel: safe crossing points	Justification of scores
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<b>Extending PDR</b> for safe crossing points is likely to have a <b>minor positive</b> effect in relation to reducing risks to health and quality of life. This approach would not necessarily increase the attractiveness of cycling and walking in Scotland in a manner similar to the way that providing new active travel routes would, given that enhanced connectivity of these networks would be unlikely to result to the same degree. Providing new safe crossing points would however help to reduce the number of accidents which cyclists and other users of the road network would be subject to.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## PDR for other developments to support sustainable travel

### Assessment table

	PDR for other developments to support sustainable travel (e.g. car share parking spaces)										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+

	PDR for other developments to support sustainable travel (e.g. car share parking spaces)										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	+	+	+	+	+	+	+	+	+	+
To improve air quality	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	0	0	0	0	0	0	0	0	0	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0

	PDR for other developments to support sustainable travel (e.g. car share parking spaces)										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+
To support rural development	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	0	0	0	0	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Active travel: other developments to support sustainable travel (e.g. car share parking spaces)	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified

To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<b>Extending PDR</b> for further sustainable transport improvements is likely to have a <b>minor positive</b> effect in relation to avoiding increases to greenhouse gas emissions. This approach would allow increased flexibility for development such as car share parking which will help to alleviate the need for private vehicles to be owned by households which in turn may help to limit any increased contribution to greenhouse gas emissions in Scotland as the population grows. This approach could also potentially lead to greater control in terms of a promotion of sustainable fuel sources (such as electric vehicles) given the more central control over shared cars and other modes of public transport.
To support actions which contribute to targets for reducing greenhouse gas emissions	<b>Extending PDR</b> for further sustainable transport improvements is likely to have a <b>minor positive</b> effect in relation to supporting actions which contribute to targets for reducing greenhouse gas emissions. By allowing increased flexibility for the development of car share parking and other improvements relating to public transport it is expected that the percentage of the population which owns a private vehicle may be reduced. Given that the transport sector is one of the largest greenhouse gas emitters it is expected that this approach would help to contribute to the country's targets for reducing greenhouse gas emissions.
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<b>Extending PDR</b> for further sustainable transport improvements is likely to have a <b>minor positive</b> effect in relation to avoiding significant adverse effects on air quality. Allowing increased flexibility for developments to support sustainable transport such as car share parking is likely to reduce the dependency of residents on travel by private vehicle. By reducing the number of private vehicles on the roads of Scotland it is expected that congestion will be alleviated in many places which is likely to be of particular benefit for those areas which have been identified as having particularly poor levels of air quality.
To improve air quality	<b>Extending PDR</b> for further sustainable transport improvements is likely to have <b>minor positive</b> effects in relation to improving air quality. Allowing increased flexibility for developments to support sustainable transport such as car share parking is likely to reduce the dependency of residents on travel by private vehicle. Petrol and diesel-engine vehicles are responsible for many of the pollutants released into the atmosphere which has an impact on urban air quality. Reducing the number of private vehicles on the roads of Scotland is therefore likely to help limit the contribution which traffic makes to air pollution.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	Surfacing for car parking could result in the loss of garden habitat, increasing surface water run-off which could lead to an increase in flood risk. This is potential <b>minor negative</b> effect.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	No effect identified
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<b>Extending PDR</b> for further sustainable transport improvements is likely to have <b>minor positive</b> effects in relation to supporting and enhancing opportunities for sustainable economic growth. Allowing increased flexibility for developments to support sustainable transport such as car share parking is likely to not only help reduce congestion but is also likely to help maintain the connectivity of service centres. As such the vitality and viability of such locations will be supported through this approach.

To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**PDR for docking stations for E-bikes**

**Assessment table**

	PDR for docking stations for e-bikes										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	0	0	0	0	0	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	+	+	+	+	+	+	+	+	+	+	+
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0	0	0	0	0

	PDR for docking stations for e-bikes										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
and contaminated land											
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	0	0	0	0	0	0	0	0	0	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+	+	+	+	+
To support rural development	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+



	PDR for docking stations for e-bikes										
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Active travel: docking stations for e-bikes	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	The provision of docking stations could help increase the take up of e-bikes amongst those who might not otherwise cycle, helping to reduce dependence on motorised transport using fossil fuels. This is a potential <b>minor positive</b> effect.
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	The provision of docking stations could help increase the take up of e-bikes amongst those who might not otherwise cycle, helping to reduce pollution associated with motorised transport. This is a potential <b>minor positive</b> effect.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	

Active travel: docking stations for e-bikes	Justification of scores
To avoid adverse effects on designated and undesignated heritage assets and their settings	No effect identified
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<b>Extending PDR</b> for docking stations for e-bikes is likely to have a <b>minor positive</b> effect in relation to supporting and enhancing opportunities for sustainable economic growth. It is expected that allowing for increased flexibility in relation to this type of development would help to improve the connectivity of retail centres and town centre locations in particular. In addition to helping support the vitality and viability of these types of location, the provision of new e-bike docking stations may also help to support active tourism.
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<b>Extending PDR</b> for docking stations for e-bikes is likely to have a <b>minor positive</b> effect in relation to avoiding adverse effects on health and quality of life. It is not expected that this type of development would significantly increase the portion of the population travelling by bike and modal shift given that it would not extend the connectivity of the cycle network and considering other limiting factors involved, such as cost. However, this approach may help to encourage the uptake of more active modes of transport amongst specific sections of the population who might not otherwise be able use these modes of transport.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Extending PDR</b> for docking stations for e-bikes is likely to have a <b>minor positive</b> effect in relation to improving health and living environment. It is not expected that this type of development would significantly increase the portion of the population travelling by bike and modal shift given that it would not extend the connectivity of the cycle network and considering other limiting factors involved such as cost. However, this approach may help to encourage more active lifestyles amongst portions of the community which might otherwise not be able to partake of such activities. This type of development would also help to improve connectivity to services and facilities (including health care centres and sports facilities) for such groups.
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**Habitat pond creation**

**PDR for habitat pond creation for pond creation for wildlife purposes on agricultural land (excluding stocking with fish)**

**Assessment table**

	Introduce PDR for pond creation for wildlife purposes on agricultural land (excluding stocking with fish)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Excluding aerodrome safeguarding areas
<b>Biodiversity, flora and fauna</b>												
To avoid adverse effects on all habitats and species	-?	0	0	0	0	0	0	0	0	0	0	0
To enhance biodiversity	++	+?	++	++	0	0	0	0	++	0	0	0
<b>Climatic factors</b>												
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0
To support climate change adaptation	+	+	+	+	0	0	0	0	+	0	0	0
<b>Air</b>												
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>												
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+/-?	+/-?	0	0	0	0	0	0	-?	0	0	0
To avoid and reduce flood risk	+	+	+	+	+	+	+	+	+	+	+	+
<b>Soil</b>												
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
To reduce vacant and derelict land/buildings and contaminated land and	0	0	0	0	0	0	0	0	0	0	0	0

	Introduce PDR for pond creation for wildlife purposes on agricultural land (excluding stocking with fish)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Excluding aerodrome safeguarding areas
contaminated land												
<b>Cultural heritage</b>												
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?	-?	-?	-	-	-	-	-?	-	-	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>												
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?	-?
To enhance landscape quality	+	+	+	+	+	+	+	+	+	+	+	+
<b>Material assets</b>												
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>												
To support and enhance opportunities for sustainable economic growth	0	0	0	0	0	0	0	0	0	0	0	0
To support rural development	+	+	+	+	+	+	+	+	+	+	+	+
To support smarter resourcing of the planning system	+	+	+	+	+	+	+	+	+	+	+	+
<b>Social, population and human health</b>												
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	--?	--?	--?	--?	--?	--?	--?	--?	--?	--?	--?	0

	Introduce PDR for pond creation for wildlife purposes on agricultural land (excluding stocking with fish)											
	Non designated areas	European Sites (SPAs, SACs)	National Scenic Areas	National Parks	Conservation Areas	Historic Gardens and Designed Landscapes	Historic battlefields	World Heritage Sites	SSSIs	Category A Listed Building	Scheduled monument	Excluding aerodrome safeguarding areas
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Pond creation for wildlife purposes on agricultural land	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	Adverse effects could occur if water is diverted from existing habitats to feed the ponds, or if areas of valuable habitat are flooded or removed (e.g. hedgerows) to create the pond, although this is only expected to occur in limited circumstances. This could impact on non-designated sites, European sites or SSSI. Where there are PDR for a development which is likely to have a significant effect on the Natura site and which is not directly connected with or necessary to its management, specific approval for the development must be sought from the planning authority, with the associated requirement for Habitats Regulations Appraisal. This mitigates any likely significant effects from the PDR change alone, therefore only minor negative effects are identified for this potential change in PDR in relation to Natura sites. SSSI also each have a list of operations requiring consent and pond creation is expected to be considered through this process, mitigating adverse effects. Therefore <b>minor negative uncertain</b> effects are identified for non-designated areas and negligible effects are identified for European sites and SSSI.
To enhance biodiversity	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> is generally expected to have <b>significant positive</b> effects on enhancing biodiversity, as these will create new habitat, which could be important for notable and protected species, including great crested newts, Natterjack toads and wading birds. This significant positive effect is identified in relation to non-designated areas, European sites and SSSI, and also National Scenic Areas and National Parks. Furthermore, the introduction of PDR could have the secondary effect of supporting greater numbers of smaller ponds, with associated benefits for creating habitat networks. It is assumed that where habitat pond creation takes place on a European site or SSSI that this is in line with the management aims for the site, and that the associated requirement for HRA or approval from SNH for operations requiring consent would address any negative effects or uncertainty.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> is likely to support climate change adaptation, as ponds can provide water attenuation and reduction in local surface water flood risk. Introducing PDR for wildlife ponds could also lead to a more extensive network of such ponds, which could facilitate changes to species ranges as a result of climate change. Overall, <b>minor positive</b> effects are identified in relation to non-designated areas, European sites and SSSI, and also National Scenic Areas and National Parks.
<b>Air</b>	

Pond creation for wildlife purposes on agricultural land	Justification of scores
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could have short term adverse effects on water quality and quantity if water is diverted from existing waterbodies to feed the ponds, or through the construction process which could result in silting and changes to local hydrology. It could also result in longer term positive effects through providing attenuation for surface water and improvements to water quality once the habitat ponds are established with associated vegetation and therefore <b>mixed effects</b> are identified. These effects, particularly during construction would be most significant in areas designated for their biodiversity such as European sites or SSSI, however it is assumed that where habitat pond creation takes place on or affecting a European site that this is in line with the management aims for the site, and that the associated requirement for HRA is undertaken. For development that may impact on a SSSI <b>minor negative</b> effects could occur during the construction process.
To avoid and reduce flood risk	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> is likely to support climate change adaptation, as ponds can provide water attenuation and reduction in local surface water flood risk resulting in <b>minor positive</b> effects in all areas.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could result in <b>minor positive</b> effects on soil as this may improve local ground conditions by reducing issues associated with water logging from areas of poor drainage reducing associated issues of compaction and soil degradation. However, it may also have <b>minor negative</b> effects, as pond creation is likely to involve removal of soil and sterilisation of the soil resource within the area of the pond. Overall, <b>mixed minor positive, minor negative</b> effects are identified in all areas.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could affect designated and undesignated heritage assets and their settings. This could include direct effects through damage or removal of buried artefacts or by altering the water table, which could result in degradation of organic remains that were previously preserved by a wet environment. This depends on the location of the pond in relation to existing archaeology, but is more likely to occur within or near to existing historic assets. In addition, pond creation could result in loss of historic field boundaries and hedgerows and could alter the setting of historic assets. As such, <b>minor negative</b> effects are expected, with uncertainty for areas outside existing designations.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could alter landscape character by introducing a new feature. This could have minor negative effects if pond creation is not in keeping with the character of the area, particularly if it is not in keeping with the character of a designated landscape. However ponds are usually associated with low lying areas with limited prominence in the landscape. Negative effects could also arise as a result of inappropriate disposal of waste soil from creation of the pond, such as through the creation of bunds, therefore <b>minor negative uncertain</b> effects have been identified.
To enhance landscape quality	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could alter landscape character by introducing a new feature, which may result in landscape enhancement where this is in keeping with local landscape character. Habitat ponds typically include semi natural vegetation and can result in positive landscape features; therefore encouraging pond creation could enhance the visual amenity of an area, resulting in <b>minor positive</b> effects. These effects are identified as <b>uncertain</b> in relation to areas designated for their landscape quality where habitat pond creation may not be in keeping with the character of the landscape.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified

Pond creation for wildlife purposes on agricultural land	Justification of scores
To support rural development	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could support rural development through opening up funding to farmers through agri-environment schemes. In addition, pond creation may lead to other opportunities for rural development associated with recreation and education, therefore <b>minor positive</b> effects are expected.
To support smarter resourcing of the planning system	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> is likely to increase efficiency of the planning system by clarifying the circumstances in which planning permission is required for pond creation and ensuring consistency between local authorities. It may also reduce bureaucratic burden for those applying for pond creation and impacts on local planning authorities. Overall, a <b>minor positive</b> effect is expected in all areas.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could result in an increase in bird strike if such ponds are located within proximity of an aerodrome or technical site, as such habitats are likely to attract birds for feeding, nesting and loafing, particularly larger birds such as geese, ducks, swans and waders. As such, <b>significant negative uncertain</b> effects are expected, with the exception of PDR <b>excluding aerodrome Safeguarding Areas</b> , which removes this effect.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Introducing PDR for creating wildlife ponds on agricultural land</b> could have <b>minor positive</b> effects if it results in development of wildlife ponds that are publically accessible or otherwise available for use for recreation or educational opportunities. Such effects are uncertain as there is no guarantee that ponds will be publically accessible.
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**Peatland restoration**

**Peatland restoration**

**Assessment table**

	Introduce PDR for peatland restoration activities (excluding access tracks)
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	++
To enhance biodiversity	++
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	++
To support actions which contribute to targets for reducing greenhouse gas emissions	++
To support climate change adaptation	++
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0
To improve air quality	0
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	++
To avoid and reduce flood risk	++
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	++
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	+/-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0



	Introduce PDR for peatland restoration activities (excluding access tracks)
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	++
To enhance landscape quality	++
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0
To enhance material assets	0
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	+
To support rural development	+
To support smarter resourcing of the planning system	+
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+
To support community cohesion and vitality	0
To support access to education and training	+

## Justification of scores

Peatland restoration	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a significant positive effect on habitats and species as well as enhancing biodiversity through increasing habitats for uniquely adapted and often rare birds, plants, fungi, micro-organisms and invertebrates. Consequently this benefits grouse and wading bird populations through improved nesting habitat, in addition to reducing mortality rates through the removal of steep-sided ditches. Peatland also acts as an important regulator of water flow and quality, reducing suspended load and therefore positively impacting downstream fisheries.
To enhance biodiversity	
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a significant positive effect on climatic factors. The degradation and erosion of peatland can emit carbon and greenhouse gases, peatland also contributes to carbon sequestration; therefore the restoration of peatland is essential in the protection of what is a nationally significant and valuable carbon store. Peatlands restoration also supports climate change adaptation through the regulation of water flow helping to minimise the risk of flooding and drought as well as helping to prevent seawater intrusion. Peatland can also act as a natural defence against wildfires.
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a significant positive effect on the quality and quantity of watercourses and waterbodies as well as flood risk reduction and management. Peatland is an important regulator of water flow and water quality and is an important source of drinking water. Peatland also stores and slows surface water runoff, helping to maintain steady flow rates, thereby providing flood alleviation downstream.
To avoid and reduce flood risk	
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a positive effect on soils through the reduction of soil erosion and degradation by re-wetting. Peatland also provides a natural carbon store of national significance. The restoration of peatland can also improve livestock grazing extent, quality and access. Therefore, a significant positive effect would be expected.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their	Peatlands are culturally significant landscapes and a valuable natural historical archive of our past, preserving important ecological and archaeological

Peatland restoration	Justification of scores
settings	information such as pollen records and human artefacts. Peatland restoration would recreate historical natural landscapes. Therefore, introducing PDR for peatland restoration activities (excluding access tracks) would likely have a positive effect on reducing effects on designated and undesignated heritage assets and their settings. However, the restoration of peatland and the associated activities could also damage undesignated, unknown archaeology or compromise existing archaeological assets and the historic environment. Therefore, mixed minor positive, minor negative effects are likely.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a significant positive effect on the quality of the landscape, wild land and geodiversity, through the reinstatement and regeneration of the natural landscape resulting in the enhancement of the landscape character, in keeping with more historic land uses.
To enhance landscape quality	
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a positive effect on opportunities for sustainable economic growth and the development of rural areas. The restoration of Peatlands will help stimulate rural economies by promoting activities such as deer stalking, grouse shooting, and tourism as well as supporting salmonid fishing enterprises through the improvement to water quality in rivers with peatland catchments. Peatland also supports management of flood risk, with associated economic benefits. Peatland areas also provide raw ingredients for the whisky industry in Scotland. These industries will help generate tourism and generate investment opportunities throughout rural areas.
To support rural development	
To support smarter resourcing of the planning system	The introduction of PDR would likely have a positive effect on the planning system through increased efficiency and clarification, helping to drive peatland restoration by reducing the bureaucratic burden on applicants. Due to the importance of peatland in relation to climate, they are likely to play an important role in rural policy going forward. The promotion of restoration projects is seen as a likely catalyst for further restoration works. As such, a minor positive effect is expected.
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the of people and communities including support for access, recreation and physical activity	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a minor positive effect on health and the living environment through enhanced amenity, access and recreation. Peatland restoration would improve access to, and support recreational activities such as deer

Peatland restoration	Justification of scores
	stalking, grouse shooting, hillwalking, fishing and bird watching. Furthermore, restoration would create areas for learning and education.
To support community cohesion and vitality	No effect identified
To support access to education and training	Introducing PDR for peatland restoration activities (excluding access tracks) is likely to have a minor positive effect on education and training as peatland areas are important natural habitats affording opportunities for research, scientific study and fieldwork.

## Allotments and community growing schemes

### PDR for change in use of land for allotments and community growing schemes

#### Assessment table

	Introduce PDR for use of land for allotments and community growing where a change of use of land is required
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	-?
To enhance biodiversity	+?
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	-
To support actions which contribute to targets for reducing greenhouse gas emissions	+
To support climate change adaptation	+/-
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0/-
To improve air quality	
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+
To avoid and reduce flood risk	+
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	+?
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-
To enhance landscape quality	+?
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0
To enhance material assets	0
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	0
To support rural development	0
To support smarter resourcing of the planning system	0
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-?
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	++
To support community cohesion and vitality	+

	Introduce PDR for use of land for allotments and community growing where a change of use of land is required
To support access to education and training	+

## Justification of scores

Allotments and community growing: Use of land for allotments and community growing schemes	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<b>Introducing PDR to allotments and community growing schemes</b> could result in loss of protected habitats or protected species that rely on habitat at the existing site. These factors are likely to result in <b>minor negative effects</b> , but these are uncertain based on the existing biodiversity value of the site.
To enhance biodiversity	<b>Introducing PDR to allotments and community growing schemes</b> could enhance biodiversity, as allotments and community growing schemes often attract wildlife, leading to <b>positive effects</b> . This is uncertain, as whether biodiversity is enhanced depends on the previous use of the site and the biodiversity associated with that use.
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<b>Introducing PDR to allotments and community growing schemes</b> could lead to an increase in greenhouse gas emissions associated with vehicular transport due to users driving to and from the allotments. Given that allotments generally serve a local need, the scale of increased car use is likely to be relatively small, resulting in <b>minor negative effects</b> .
To support actions which contribute to targets for reducing greenhouse gas emissions	Creating opportunities for local food growing will help reduce food miles and associated greenhouse gas emissions. This is a <b>minor positive effect</b> .
To support climate change adaptation	<b>Introducing PDR to allotments and community growing schemes</b> could support adaptation to climate change through the green infrastructure functions of allotments. The presence of additional allotments and community growing schemes may help contribute to effects such as local cooling and surface water runoff, therefore resulting in <b>minor positive effects</b> .
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<b>Introducing PDR to allotments and community growing schemes</b> could lead to an increase in air pollutions associated with vehicular transport due to users driving to and from the allotments. Given that allotments generally serve a local need, the scale of increased car use is likely to be small, resulting in <b>negligible or minor negative effects</b> . These effects are uncertain, as whether this will contribute to poor air quality in AQMA will depend on the location of any new allotments or community growing schemes.
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<b>Introducing PDR to allotments and community growing schemes</b> could help avoid adverse effects on the quality of watercourses, as soil and vegetation can act to filter surface water runoff, therefore resulting in <b>minor positive effects</b> .
To avoid and reduce flood risk	<b>Introducing PDR to allotments and community growing schemes</b> could help avoid flood risk, as soil and vegetation can act to filter surface water runoff, therefore resulting in <b>minor positive effects</b> .
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<b>Introducing PDR to allotments and community growing schemes</b> could protect and increase soil quality at the site and maintain soil nutrients, resulting in <b>minor positive effects</b> .
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	<b>Introducing PDR to allotments and community growing schemes</b> could help to reduce vacant land, if vacant land were to be converted to allotments. As this depends on the existing land use prior to allotments or community growing schemes, a <b>minor positive</b> score, with uncertainty, has been identified.
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Introducing PDR to allotments and community growing schemes</b> could lead to <b>minor negative effects</b> on the settings of heritage assets, particularly due to features, such as sheds and fencing.

Allotments and community growing: Use of land for allotments and community growing schemes	Justification of scores
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<b>Introducing PDR to allotments and community growing schemes</b> could improve the settings of heritage assets, for example, if the site was previously vacant and overgrown. Therefore, <b>minor positive</b> effects are likely, although this is uncertain as it depends on the previous use of the site and site setting.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Introducing PDR to allotments and community growing schemes</b> could lead to <b>minor negative</b> effects on the landscape, particularly due to features, such as sheds and fencing etc.
To enhance landscape quality	<b>Introducing PDR to allotments and community growing schemes</b> could improve local landscape quality, for example, if the site was previously vacant and overgrown. Therefore, <b>minor positive</b> effects are likely, although this is uncertain as it depends on the previous use of the site and site setting.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<b>Introducing PDR to allotments and community growing schemes</b> could increase risk of bird strike if allotments are located within proximity of an aerodrome or technical site, which presents a potential health and safety risk. This is because birds may be attracted to allotments to feed, although the likelihood of such events is considered to be low. Built structures on the site could also pose a risk to aviation safety, depending on their height. Allotments and community growing schemes have potential for adverse impacts on amenity, as these uses may result in increased movements of people and vehicles in an area. In addition, users may keep animals, such as chickens, on their allotments, which could result in noise and odour. New allotments and community growing schemes could be provided within major hazard consultation zones, which could put users at risk. Risks to health may also arise if allotments and community growing schemes are located on contaminated land. Due to the relatively low risk of these effects, <b>minor negative</b> effects have been identified.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Introducing PDR to allotments and community growing schemes</b> could have positive effects on human health, as they provide an opportunity for individuals to spend time outdoors and exercise. Allotments and community growing schemes are also likely to increase opportunities for social interaction and can help create a sense of community, which is beneficial to mental and social wellbeing. In addition, allotments and community growing schemes can provide increased opportunity for healthy eating at low cost, having further positive effects on physical health. Overall, a <b>significant positive</b> effect is expected.
To support community cohesion and vitality	<b>Introducing PDR to allotments and community growing schemes</b> provide opportunities for social interaction and can help create a sense of community, although this may be limited to those who use the space, therefore having <b>minor positive</b> effects.
To support access to education and training	<b>Introducing PDR to allotments and community growing schemes</b> may provide informal educational opportunities, although these are likely to be limited, therefore resulting in <b>minor positive</b> effects.

## PDR for perimeter fencing for allotments and community growing schemes

### Assessment table

	No change in PDR	Remove height restriction of 1m within 20m of a road	Remove height restriction of 2m elsewhere

	No change in PDR	Remove height restriction of 1m within 20m of a road	Remove height restriction of 2m elsewhere
<b>Biodiversity, flora and fauna</b>			
To avoid adverse effects on all habitats and species	0	0	0
To enhance biodiversity	0	0	0
<b>Climatic factors</b>			
To avoid increasing greenhouse gas emissions	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0
To support climate change adaptation	0	0	0
<b>Air</b>			
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0
To improve air quality	0	0	0
<b>Water</b>			
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0
To avoid and reduce flood risk	0	0	0
<b>Soil</b>			
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0
<b>Cultural heritage</b>			
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	-?	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0
<b>Landscape and geodiversity</b>			
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+	-	-
To enhance landscape quality	0	0	0
<b>Material assets</b>			
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0
To enhance material assets	0	0	0
<b>Economy</b>			
To support and enhance opportunities for sustainable economic growth	0	0	0
To support rural development	0	0	0
To support smarter resourcing of the planning system	0	0	0
<b>Social, population and human health</b>			
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	0	0



	No change in PDR	Remove height restriction of 1m within 20m of a road	Remove height restriction of 2m elsewhere
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0	+/-	0
To support community cohesion and vitality	0	0	0
To support access to education and training	0	0	0

## Justification of scores

Allotments and community growing schemes: Perimeter fencing	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Existing PDR</b> could help to avoid or minimise adverse effects of fencing on the settings of heritage assets. <b>Extending PDR to increase the height permitted to greater than 2m within 20m of a road or elsewhere</b> could have <b>minor negative</b> effects on the settings of heritage assets, as it could create a more enclosed setting. However, this is uncertain as it depends on the location of the fence, the existing setting and the significance of setting to a specific asset.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Existing PDR</b> work to avoid adverse impacts on landscapes, by limiting the visual impact of fencing. <b>Extending PDR to increase the height permitted to 2m within 20m of a road or greater than 2m elsewhere</b> could have <b>minor negative</b> effects on this objective, as this introduces potential for greater visual intrusion of fences.

Allotments and community growing schemes: Perimeter fencing	Justification of scores
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p><b>Extending PDR to increase the height permitted to 2m within 20m of a road</b> could have minor positive effects by helping to improve the local living environment by reducing opportunities for anti-social behaviour on allotments, such as fly tipping, theft and vandalism. However, <b>extending PDR to increase the height permitted to 2m within 20m of a road</b> may constitute a road safety risk, mainly due to visual obstruction. Due to the relatively low risk, a minor negative effect is identified.</p> <p>Overall, a <b>mixed minor positive and minor negative</b> effect is identified in relation to this SA objective.</p>
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## PDR for sheds and composting toilets

### Assessment table

	Extend PDR for sheds (including structures housing composting toilets) on allotments and community growing schemes
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	0
To enhance biodiversity	0
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0
To support climate change adaptation	0
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0
To improve air quality	0
<b>Water</b>	

	Extend PDR for sheds (including structures housing composting toilets) on allotments and community growing schemes
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0
To avoid and reduce flood risk	0
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-
To enhance landscape quality	0
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0
To enhance material assets	0
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	0
To support rural development	0
To support smarter resourcing of the planning system	0
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+/-
To support community cohesion and vitality	+
To support access to education and training	0

### Justification of scores

Allotments and community growing schemes: Sheds and composting toilets	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	

Allotments and community growing schemes: Sheds and composting toilets	Justification of scores
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<b>Extending PDR to sheds and composting toilets</b> could have <b>minor positive</b> effects on avoiding adverse effects on soil resources, as it would provide a source of compost for tenants to use on their allotments and could therefore help maintain soil nutrients.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Extending PDR to sheds and composting toilets</b> could lead to <b>minor negative</b> effects on the settings of heritage assets, as sheds and toilet buildings can reduce the visual amenity of the site. However, this is uncertain as it depends on the location and design of the structures, and the importance of setting to any potentially affected heritage assets.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Extending PDR to sheds and composting toilets</b> could lead to <b>minor negative</b> effects on landscape, as sheds and toilet buildings can reduce the visual amenity of the site.
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Extending PDR to sheds and composting toilets</b> could encourage people to get involved in gardening opportunities and to spend more time on their allotments. Provision of storage and toilet facilities may give certain groups more confidence to use allotments and community growing schemes, such as those with young children or the elderly. As such, this could improve human health through the benefits allotments and community growing schemes bring, such as outdoor exercise and connecting with nature. However, extended PDR could have negative effects on the amenity of local residents, due to visual intrusion and odour, if they were poorly designed or not well maintained, resulting in overall <b>mixed effects</b> .

Allotments and community growing schemes: Sheds and composting toilets	Justification of scores
To support community cohesion and vitality	<b>Extending PDR to sheds and composting toilets</b> could encourage people to get involved in gardening opportunities and to spend more time on their allotments. Provision of storage and toilet facilities may give certain groups more confidence to use allotments and community growing schemes, such as those with young children or the elderly. As such, this could act to bring more people together, increasing community cohesion, therefore having a <b>minor positive</b> effect.
To support access to education and training	No effect identified

## PDR for greenhouses and polytunnels

### Assessment table

	Extend PDR to greenhouses and polytunnels as permanent structures on allotments and community growing schemes
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	0
To enhance biodiversity	0
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+
To support climate change adaptation	0
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0
To improve air quality	0
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0
To avoid and reduce flood risk	0
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-
To enhance landscape quality	0
<b>Material assets</b>	

	Extend PDR to greenhouses and polytunnels as permanent structures on allotments and community growing schemes
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0
To enhance material assets	0
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	0
To support rural development	0
To support smarter resourcing of the planning system	0
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+
To support community cohesion and vitality	+
To support access to education and training	+

### Justification of scores

Allotments and community growing schemes: Greenhouses and polytunnels	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	Greenhouses and polytunnels can help allotment holders and community growing schemes achieve both a wider range of crops and higher yields, further reducing food miles associated with dependence on imported produce.
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified

Allotments and community growing schemes: Greenhouses and polytunnels	Justification of scores
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Extending PDR to greenhouses and polytunnels</b> could lead to <b>minor negative</b> effects on the settings of heritage assets, as these features may reduce the visual amenity of the site. However, this is uncertain as it depends on the location and design of the structures, and the importance of setting to any potentially affected heritage assets.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Extending PDR to greenhouses and polytunnels</b> could lead to <b>minor negative</b> effects on landscape, as these features may reduce the visual amenity of the site.
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	Greenhouses and polytunnels can provide a focus for community growing projects
To support community cohesion and vitality	Greenhouses and polytunnels can provide a focus for community growing projects
To support access to education and training	Greenhouses and polytunnels can provide a focus for community growing projects and associated training and education.

## PDR for communal huts or clubhouses

### Assessment table

	Extend PDR to communal huts and club houses as permanent structures
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	0
To enhance biodiversity	0
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0
To support climate change adaptation	0
<b>Air</b>	

	Extend PDR to communal huts and club houses as permanent structures
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0
To improve air quality	0
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0
To avoid and reduce flood risk	0
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-
To enhance landscape quality	0
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0
To enhance material assets	0
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	0
To support rural development	0
To support smarter resourcing of the planning system	0
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0
To support community cohesion and vitality	+
To support access to education and training	0



## Justification of scores

Allotments and community growing schemes: : Communal huts and clubhouses	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Extending PDR to communal huts and clubhouses</b> could lead to <b>minor negative</b> effects on the settings of heritage assets, as these features may reduce the visual amenity of the site or alter the setting of a heritage asset. However, this is uncertain as it depends on the location, scale and design of the structures, and the importance of setting to any potentially affected heritage assets.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Extending PDR to communal huts and clubhouses</b> could lead to <b>minor negative</b> effects on landscape, as these features may reduce the visual amenity of the site and could alter its character, as a clubhouse may look more permanent than and be made of different materials to a shed or greenhouse.
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	

Allotments and community growing schemes: : Communal huts and clubhouses	Justification of scores
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<b>Extending PDR to communal huts and clubhouses</b> were noted by members of the VRG as posing a potential risk to aviation safety, if structures are tall and are located within proximity of aerodrome safeguarding zones. The presence of communal huts and clubhouses has potential for adverse impacts on amenity of local residents, as these may result in greater traffic movements and may increase the noise generated by users of the allotments, if they are used to hold events. In addition, development of communal huts and clubhouses could result in larger gatherings within major hazard consultation zones, presenting a risk to users. Due to the relatively low risk of these effects, <b>minor negative</b> effects have been identified.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	<b>Extending PDR to communal huts and clubhouses</b> could have positive effects on human health, as they provide greater opportunity for social interaction and community cohesion at allotment sites and community growing schemes. Overall, a <b>minor positive</b> effect is expected.
To support access to education and training	No effect identified

## PDR for car parking/vehicular and loading areas

### Assessment table

	Creation of PDR for car parking for allotments and community growing schemes	Creation of PDR for access and loading areas
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	-?	-?
To enhance biodiversity	0	0
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	-	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+?	+?
To support climate change adaptation	-	-
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	-	0
To improve air quality	+?	+?
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-	-
To avoid and reduce flood risk	-	-
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-?	-?

	Creation of PDR for car parking for allotments and community growing schemes	Creation of PDR for access and loading areas
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+?	+?
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-
To enhance landscape quality	+?	+?
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0
To enhance material assets	0	0
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	0	0
To support rural development	0	0
To support smarter resourcing of the planning system	0	0
<b>Social, population and human health</b>		
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	-	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+?	+?
To support community cohesion and vitality	0	0
To support access to education and training	0	0

### Justification of scores

Allotments and community growing schemes: Car parking/vehicular access and loading areas	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<b>Introducing PDR for car parking for allotments and community growing schemes and access and loading areas</b> could have adverse effects on habitats and species if developed on or near to sensitive areas for wildlife, therefore having <b>minor negative</b> but uncertain effects.
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	

Allotments and community growing schemes: Car parking/vehicular access and loading areas	Justification of scores
To avoid increasing greenhouse gas emissions	<b>Introducing PDR for car parking for allotments and community growing schemes</b> could encourage users to drive to their allotment, therefore potentially increasing greenhouse gas emissions associated with cars and vans. Given that allotments usually serve a fairly local catchment, this is expected to result in <b>minor negative</b> effects.
To support actions which contribute to targets for reducing greenhouse gas emissions	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could help to reduce greenhouse gas emissions associated with congestion, as provision of car parking/loading areas may reduce the number of cars parked on the street, which could cause traffic congestion in narrower roads. As such, a <b>minor positive</b> effect is identified, although this is uncertain as it depends on existing characteristics of roads.
To support climate change adaptation	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could lead to an increase in impermeable surfaces, which would reduce the ability to adapt to the impacts of climate change, such as heavy rainfall and similar extreme weather events. This is expected to result in <b>minor negative</b> effects.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<b>Introducing PDR for car parking for allotments and community growing schemes</b> could encourage users to drive to their allotment, therefore potentially increasing emissions of air pollutants associated with cars and vans. Given that allotments usually serve a fairly local catchment, this is expected to result in <b>minor negative</b> effects.
To improve air quality	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could help to reduce emissions of air pollutants associated with congestion, as provision of car parking/loading areas may reduce the number of cars parked on the street, which could cause traffic congestion in narrower roads. As such, a <b>minor positive</b> effect is identified, although this is uncertain as it depends on existing characteristics of the area.
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could lead to an increase in impermeable surfaces and encourage more car use in and around allotments and community gardens. This could lead to an increase in contaminated surface water runoff into nearby waterbodies, leading to a decline in water quality. This is expected to result in <b>minor negative</b> effects.
To avoid and reduce flood risk	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could lead to an increase in impermeable surfaces, therefore increasing local flood risk. This is expected to result in <b>minor negative</b> effects.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could lead to an increase in hardstanding, which could result in loss of soil resources.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could have <b>minor negative effects</b> as this infrastructure could detract from the character of nearby heritage assets. This is uncertain as it depends on the location of development and the significance of setting to a particular asset.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could have <b>minor positive</b> effects as it may reduce the number of cars parked on the street, therefore improving the settings of heritage assets. However, this is uncertain as it depends on the location of development and the significance of setting to a particular asset.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could have <b>minor negative effects</b> as this infrastructure could adversely affect local landscape character.
To enhance landscape quality	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could have <b>minor positive</b> effects as it may reduce the number of cars parked on the street, therefore improving the local landscape character. However, this is uncertain as there is likely to be a trade-off between the visual and landscape impacts of a car park and the impacts of reducing cars parked on the street.
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified

Allotments and community growing schemes: Car parking/vehicular access and loading areas	Justification of scores
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<b>Introducing PDR for car parking for allotments and community growing schemes</b> could encourage users to drive to their allotment, therefore increasing vehicle movements, which could negatively affect the amenity of local residents. Therefore, <b>minor negative</b> effects have been identified.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Introducing PDR for car parking for allotments and community growing schemes</b> and <b>access and loading areas</b> could help to improve amenity of local residents, as provision of car parking/loading areas may reduce the number of cars parked on the street, which could cause traffic congestion in narrower roads.
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## PDR for water and drainage systems

### Assessment table

	PDR for water and drainage systems for allotments and community growing schemes
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	0
To enhance biodiversity	0
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0
To support climate change adaptation	+?
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0
To improve air quality	0
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-
To avoid and reduce flood risk	+
<b>Soil</b>	

	PDR for water and drainage systems for allotments and community growing schemes
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0
To enhance landscape quality	0
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0
To enhance material assets	0
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	0
To support rural development	0
To support smarter resourcing of the planning system	0
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0
To support community cohesion and vitality	0
To support access to education and training	0

### Justification of scores

Allotments and community growing schemes: Water and drainage systems	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified

Allotments and community growing schemes: Water and drainage systems	Justification of scores
To support climate change adaptation	<b>Introducing PDR for water and drainage systems for allotments and community growing schemes</b> would help to reduce risk of flooding, particularly if this consisted of SuDS, which are likely to bring additional benefits, such as filtering runoff. Therefore <b>minor positive</b> effects have been identified, but these are somewhat uncertain as effects depend on the type of drainage installed.
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<b>Introducing PDR for water and drainage systems for allotments and community growing schemes</b> will increase water use on the site, leading to greater risk of run off and <b>minor negative</b> effects on water quality.
To avoid and reduce flood risk	<b>Introducing PDR for water and drainage systems for allotments and community growing schemes</b> would help to reduce surface water flood risk on the site, with <b>minor positive</b> effects.
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<b>Introducing PDR for water and drainage systems for allotments and community growing schemes</b> could help to maintain soil quality as drainage may stop the ground becoming waterlogged and increase the productive area.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	No effect identified
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified



## PDR for portable buildings and containers

### Assessment table

	PDR for buildings and containers for the purposes of the allotment or community growing schemes
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	0
To enhance biodiversity	0
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0
To support climate change adaptation	0
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0
To improve air quality	0
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0
To avoid and reduce flood risk	0
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-
To enhance landscape quality	0
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0
To enhance material assets	0
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	0
To support rural development	0
To support smarter resourcing of the planning system	0
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0



	PDR for buildings and containers for the purposes of the allotment or community growing schemes
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	0
To support community cohesion and vitality	0
To support access to education and training	0

### Justification of scores

Allotments and community growing schemes: Portable buildings and containers	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>PDR to portable buildings and containers</b> could lead to <b>minor negative</b> effects on the settings of heritage assets, as these features may reduce the visual amenity of the site. However, this is uncertain as it depends on the location and design of the structures, and the importance of setting to any potentially affected heritage assets.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>PDR to portable buildings and containers</b> could lead to <b>minor negative</b> effects on landscape, as these features may reduce the visual amenity of the site.
To enhance landscape quality	No effect identified
<b>Material assets</b>	

Allotments and community growing schemes: Portable buildings and containers	Justification of scores
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**Householder developments**

**Single storey ground floor extensions**

**Assessment table**

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove requirement for extensions to be at rear of property – PDR applying at side or front of property		Remove restriction on height of the eaves		Remove restriction on footprint relative to size of original dwellinghouse		Remove restriction on footprint relative to curtilage		Remove restrictions on size within 1m of boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>													
To avoid adverse effects on all habitats and species	-	-	-	-	-	0	0	-	-	-	-	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>													
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>													
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>													
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>													

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove requirement for extensions to be at rear of property – PDR applying at side or front of property		Remove restriction on height of the eaves		Remove restriction on footprint relative to size of original dwellinghouse		Remove restriction on footprint relative to curtilage		Remove restrictions on size within 1m of boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	-	-	-	0	0	-	-	-	-	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>													
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	--	-	-	--	-	--	-	--	-	--	0	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>													
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-	-	-	-	-	-	-	-
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>													
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove requirement for extensions to be at rear of property – PDR applying at side or front of property		Remove restriction on height of the eaves		Remove restriction on footprint relative to size of original dwellinghouse		Remove restriction on footprint relative to curtilage		Remove restrictions on size within 1m of boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>													
To support and enhance opportunities for sustainable economic growth	+	-/+	+	+	-/+	0	-/+	+	-/+	+	-/+	+	-/+
To support rural development	0	0	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>													
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	+	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	-/+	-/+	-/+	-	-	-	-	-	-	--	--
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

Single Storey Ground Floor Extensions

<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for single storey ground floor extensions are likely to result in a <b>minor</b> effect on biodiversity as garden habitats for birds, small mammals and insects are lost.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might affect more well-established habitats, though it is likely the overall effect would be <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within the curtilage an extension can be built could provide flexibility to avoid more important elements of habitat (e.g. trees and shrubs), while granting PDR to large extensions would result in a slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for single storey ground floor extensions, the impact is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	<p><b>Existing PDR</b> for single storey ground floor extensions are likely to result in a <b>minor</b> adverse effect on flood risk as the run-off from sealed surfaces increases.</p> <p><b>Extending existing PDR to properties in conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within the curtilage an extension can be built is unlikely to have any effect, while granting PDR to larger extensions would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for single storey ground floor extensions, the impact on flood risk is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>Existing PDR</b> for single storey ground floor extensions are likely to result in a <b>minor</b> adverse effect on soil resources.</p> <p><b>Extending PDR to conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within the curtilage an extension can be built is unlikely to have any effect, while granting PDR to larger extensions would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for single storey ground floor extensions, the impact on soils is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	

Single Storey Ground Floor Extensions	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for single storey ground floor extensions are likely to result in <b>minor</b> impacts, particularly in terms of undesignated heritage assets and their settings.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for unsympathetic schemes that impacted in the appearance, structure and setting of buildings within conservation areas. This would, however, be limited by PDR being granted only for extensions to the rear of properties and in proportion to the building and wider curtilage. The overall effect would be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further increase in impact, particularly if unsympathetically designed extensions on period buildings become more visible by virtue of their size (footprint, massing) or location (on sides of front of properties). This effect is considered to be <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the appearance, structure and setting of buildings within conservation areas. This effect is considered to be <b>significant negative</b>.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for single storey ground floor extensions are likely to result in <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a slight increase in the scale of this impact, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in landscape impacts, though the overall effect would remain as <b>minor</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a further slight increase in the scale of impact on the landscape, though the overall effect would remain as <b>minor</b>.</p> <p>Overall, however, even with the maximum change in PDR for single storey ground floor extensions, the impact on the landscape is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> for single storey ground floor extensions are likely to result in <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade.</p> <p><b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b>. Making it easier to extend properties would allow people to invest in their homes and provide work for the building trade. The impact on property value and business activity is uncertain. Extensions to dwellings could increase property values, though unsympathetically designed schemes could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. Given the requirement for extensions to be located at the rear of properties, it is likely these effects would generally be <b>minor</b> in nature.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in <b>minor</b> economic benefits associated with investment and upgrading of properties.</p> <p>Applying <b>extended PDR within conservation areas</b> could increase mixed economic effects benefits associated with investment and upgrading of properties (<b>minor positive</b>), increasing property values but also the potential impact of poor quality development on the attractiveness of the conservation area as a place to live, work, visit or invest (<b>minor negative, uncertain</b>).</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	

Single Storey Ground Floor Extensions	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p><b>Existing PDR</b> for single storey ground floor extensions are likely to result in <b>minor positive</b> effects, allowing people to improve their living environment and support better quality of life.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this minor positive effect. It is however possible that increasing property values in conservation areas would make it even more difficult for people on lower incomes to live in historic parts of our villages, towns and cities.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would continue to improve people's living environment. However, it is also possible that larger extensions, closer to boundaries and alongside as well as to the rear of properties would result in a minor adverse effect on amenity and quality of life for neighbours.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in minor positive effects associated with improvements in people's living environment and quality of life and <b>minor negative</b> effects in terms of potential effects on neighbours' amenity and quality of life.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

### Ground floor extensions of more than one storey

#### Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove requirement for extensions to be at rear of property – PDR applying at side or front of property		Remove restriction on height		Remove restriction on footprint relative to size of original dwellinghouse		Remove restriction on footprint relative to curtilage		Remove or reduce restrictions on size within 10m of boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas		
<b>Biodiversity, flora and fauna</b>													
To avoid adverse effects on all habitats and species	-	-	-	-	-	0	0	-	-	-	-	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>													
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0



	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove requirement for extensions to be at rear of property – PDR applying at side or front of property		Remove restriction on height		Remove restriction on footprint relative to size of original dwellinghouse		Remove restriction on footprint relative to curtilage		Remove or reduce restrictions on size within 10m of boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>													
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>													
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	-	-	0	0	0	0	0	-	-	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>													
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	-	-	-	0	0	-	-	-	-	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>													
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	-	--	-	--	-	--	-	-	0	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove requirement for extensions to be at rear of property – PDR applying at side or front of property		Remove restriction on height		Remove restriction on footprint relative to size of original dwellinghouse		Remove restriction on footprint relative to curtilage		Remove or reduce restrictions on size within 10m of boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Landscape and geodiversity</b>													
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-	-	-	-	-	-	-	-
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>													
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>													
To support and enhance opportunities for sustainable economic growth	+	-/+	+	+	-/+	0	-/+	+	-/+	+	-/+	+	-/+
To support rural development	0	0	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>													
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	+	+	0	0	0	0	0	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove requirement for extensions to be at rear of property – PDR applying at side or front of property		Remove restriction on height		Remove restriction on footprint relative to size of original dwellinghouse		Remove restriction on footprint relative to curtilage		Remove or reduce restrictions on size within 10m of boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	-/+	-/+	-/+	-	-	-	-	-	-	-	-
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0	0

## Justification of scores

Ground Floor Extensions of More Than One Storey	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for ground floor extensions of more than one storey are likely to result in a <b>minor</b> effect on biodiversity as garden habitats for birds, small mammals and insects are lost. Extensions of more than one storey are also more likely to affect bat roosts and nesting birds within existing roof structures.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might affect more well-established habitats (including bat roosts in older properties), though it is likely the overall affect would be <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within the curtilage an extension can be built could provide flexibility to avoid more important elements of habitat (e.g. trees and shrubs), while granting PDR to large extensions would result in a slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for ground floor extensions of more than one storey, the impact is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	<p><b>Existing PDR</b> for ground floor extensions of more than one storey are likely to result in a <b>minor</b> negative effect on flood risk as the run-off from sealed surfaces increases.</p> <p><b>Extending existing PDR to properties in conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within the curtilage an extension can be built is unlikely to have any effect, while granting PDR to larger extensions would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for ground floor extensions of more than one storey, the impact on flood risk is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>Existing PDR</b> for ground floor extensions of more than one storey of more than one storey are likely to result in a <b>minor</b> negative effect on soil resources.</p> <p><b>Extending PDR to conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within the curtilage an extension can be built is unlikely to have any effect, while granting PDR to larger extensions would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for ground floor extensions of more than one storey, the impact on soils is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	

Ground Floor Extensions of More Than One Storey	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for ground floor extensions of more than one storey are likely to result in <b>minor</b> impacts, particularly in terms of undesignated heritage assets and their settings.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for unsympathetic schemes that impacted in the appearance, structure and setting of buildings within conservation areas. This would, however, be limited by PDR being granted only for extensions to the rear of properties and in proportion to the building and wider curtilage. The overall effect would be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further increase in impact, particularly if unsympathetically designed extensions on period buildings become more visible by virtue of their size (footprint, massing, relationship with existing building) or location (on sides or front of properties). This effect is considered to be <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the appearance, structure and setting of buildings within conservation areas. This could result in extensions that are out of proportion to the original building in terms of footprint and height, which occupy a large proportion of the historic curtilage and which are more visible by virtue of their location on the sides or front of buildings, or because of their size. This effect is considered to be <b>major negative</b>.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for ground floor extensions of more than one storey are likely to result in <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a slight increase in the scale of this impact, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in landscape impacts, though the overall effect would remain as <b>minor</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a further slight increase in the scale of impact on the landscape, though the overall effect would remain as <b>minor</b>.</p> <p>Overall, however, even with the maximum change in PDR for ground floor extensions of more than one storey, the impact on the landscape is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> for ground floor extensions of more than one storey are likely to result in <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade.</p> <p><b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b>. Making it easier to extend properties would allow people to invest in their homes and provide work for the building trade. The impact on property value and business activity is uncertain. Extensions to dwellings could increase property values, though unsympathetically designed schemes could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. Given the requirement for extensions to be located at the rear of properties, it is likely these effects would generally be <b>minor</b> in nature.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in <b>minor</b> economic benefits associated with investment and upgrading of properties.</p> <p>Applying <b>extended PDR within conservation areas</b> could increase mixed economic effects benefits associated with investment and upgrading of properties (<b>minor positive</b>), increasing property values but also the potential impact of poor quality development on the attractiveness of the conservation area as a place to live, work, visit or invest (<b>minor negative, uncertain</b>).</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	

Ground Floor Extensions of More Than One Storey	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p><b>Existing PDR</b> for ground floor extensions of more than one storey are likely to result in minor positive effects, allowing people to improve their living environment and support better quality of life.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this positive effect. It is however possible that increasing property values in conservation areas would make it even more difficult for people on lower incomes to live in historic parts of our villages, towns and cities.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would continue to improve people's living environment. However, it is also possible that larger extensions, closer to boundaries and alongside as well as to the rear of properties would result in a <b>minor adverse</b> effect on amenity and quality of life for neighbours.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in minor positive effects associated with improvements in people's living environment and quality of life and <b>minor negative</b> effects in terms of potential effects on neighbours' amenity and quality of life.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Porch

### Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove restriction on the footprint of the porch		Remove restriction on the height of the porch		Remove minimum distance between porch and any boundary / road	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>									
To avoid adverse effects on all habitats and species	-	-	-	-	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>									
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0	0	0
<b>Air</b>									

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove restriction on the footprint of the porch		Remove restriction on the height of the porch		Remove minimum distance between porch and any boundary / road	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0
<b>Water</b>									
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	-	-	0	-	0	0	0	0	0
<b>Soil</b>									
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	0	-	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>									
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	-	--	-	--	-	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>									
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-	-	-	-
To enhance landscape quality	0	0	0	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove restriction on the footprint of the porch		Remove restriction on the height of the porch		Remove minimum distance between porch and any boundary / road	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Material assets</b>									
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0
<b>Economy</b>									
To support and enhance opportunities for sustainable economic growth	+	-/+	+	+	-/+	0	-/+	+	-/+
To support rural development	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>									
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	-/+	-/+	-	-	-	-
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0



## Justification of scores

Porch	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for porches are likely to result in a very <b>minor</b> effect on biodiversity as garden habitats for birds, small mammals and insects are lost.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might affect more well-established habitats, though it is likely the overall affect would be <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by would result in a very slight increase in impacts due to the further marginal loss of existing garden habitats. Overall, however, even with the maximum change in PDR for porches, the impact is unlikely to be significantly different from the present situation, with very <b>minor</b> effects on biodiversity overall.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	<p><b>Existing PDR</b> for porches are likely to result in a <b>minor</b> positive effect on reducing carbon emissions as a consequence of improving energy efficiency and reducing the loss of heat from domestic properties.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might help improve the energy efficiency of older, less well insulated buildings, though the overall effect would be <b>minor</b>.</p> <p>It is unlikely that <b>extending PDR outside conservation areas</b> would have a further, noticeable effect.</p> <p>It is unlikely that <b>extending PDR within conservation areas</b> to allow larger porches would have a further, noticeable effect.</p>
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	<p><b>Existing PDR</b> for porches are likely to result in a very <b>minor</b> adverse effect on flood risk as the run-off from sealed surfaces increases.</p> <p><b>Extending existing PDR to properties in conservation areas</b> would marginally increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in larger porches, resulting in a further, marginal increase in the likely scale of impact. <b>Extending PDR within conservation areas</b> would result in a further, marginal increase in the scale of impact. Overall, however, even with the maximum change in PDR for porches, the impact on flood risk is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>Existing PDR</b> for porches extensions are likely to result in a <b>minor</b> adverse effect on soil resources.</p> <p><b>Extending PDR to conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by allowing the construction of larger porches would result in a further slight increase in the likely scale of impact. <b>Extending PDR within conservation areas</b> would result in a further, marginal increase in the scale of impact. Overall, however, even with the maximum change in PDR for porches, the impact on soils is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	

Porch	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for porches are likely to result in <b>minor</b> impacts, particularly in terms of undesignated heritage assets and their settings. The addition of unsympathetically designed porches could have an impact on the structure and appearance of older, traditional or vernacular dwellings, particularly where they affect properties of similar or uniform design.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for porches that are out of keeping with the historic character of an individual building and that visibly affect the appearance, structure and setting of buildings within a wider conservation area. The overall effect would be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further increase in impact, particularly if porches become larger, occupying an increase proportion of the building façade or extending closer to the property boundary. This effect is considered to be <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the appearance and setting of buildings within conservation areas. This effect is considered to be <b>significant negative</b>.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for porches are likely to result in very <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a marginal increase in the scale of this impact, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further very slight increase in landscape impacts, though the overall effect would remain as <b>minor</b></p> <p><b>Applying extended PDR within conservation areas</b> could result in a further very slight increase in the scale of impact on the landscape, though the overall effect would remain as <b>minor</b>.</p> <p>Overall, however, even with the maximum change in PDR for porches, the impact on the landscape is unlikely to be significantly different from the present situation, with very <b>minor</b> effects overall.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> for porches are likely to result in very <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade.</p> <p><b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b>. Making it easier to improve their properties would allow people to invest in their homes and provide some work for the building trade. The impact on property value and business activity is uncertain. The addition of porches could increase property values, though unsympathetically designed schemes could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. It is likely these effects would generally be <b>minor</b> in nature. It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in <b>minor</b> economic benefits associated with investment and upgrading of properties.</p> <p>Applying <b>extended PDR within conservation areas</b> could increase mixed economic effects benefits associated with investment and upgrading of properties (<b>minor positive</b>), increasing property values but also the potential impact of poor quality development on the attractiveness of the conservation area as a place to live, work, visit or invest (<b>minor negative, uncertain</b>).</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	

Porch	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p><b>Existing PDR</b> for porches are likely to result in minor positive effects, allowing people to improve their living environment and support better quality of life.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a marginal increase in this minor positive effect.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would continue to improve people's living environment.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in minor positive effects associated with improvements in people's living environment and quality of life and <b>minor negative</b> effects in terms of potential effects on neighbours' amenity and quality of life.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Roof enlargement

### Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow dormers on front and sides		Allow height enlargement higher than the existing dwelling house		Allow roof enlargement covering more than half of the roof		Remove restriction on the distance between the enlargement and the edge of the roof		Reduce or remove the requirement for at least 10m between enlargement and boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas		
<b>Biodiversity, flora and fauna</b>													
To avoid adverse effects on all habitats and species	-	-	-	-	-	-	-	-	-	-	-	-	-
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>													
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	+	+	+	+	+	+	+	+	+	+	+	+	+
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>													

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow dormers on front and sides		Allow height enlargement higher than the existing dwelling house		Allow roof enlargement covering more than half of the roof		Remove restriction on the distance between the enlargement and the edge of the roof		Reduce or remove the requirement for at least 10m between enlargement and boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>													
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Soil</b>													
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	+	+	+	+	+	+	+	+	+	+	+	+	+
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>													
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	--	-	-	--	-	--	-	--	-	--	0	0
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>													

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow dormers on front and sides		Allow height enlargement higher than the existing dwelling house		Allow roof enlargement covering more than half of the roof		Remove restriction on the distance between the enlargement and the edge of the roof		Reduce or remove the requirement for at least 10m between enlargement and boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-	-	-	-	-	-	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>													
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>													
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+/-	+	+/-	+	+/-	+	+/-	0	0
To support rural development	0	0	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>													
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	+	+	+	+	+	+	+	+	+	+	+	+/-	+/-

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow dormers on front and sides		Allow height enlargement higher than the existing dwelling house		Allow roof enlargement covering more than half of the roof		Remove restriction on the distance between the enlargement and the edge of the roof		Reduce or remove the requirement for at least 10m between enlargement and boundary	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To improve the health and living environment of people and communities including support for access, recreation and physical activity	0	0	0	0	0	0	0	0	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0	0	0

## Justification of scores

Roof enlargement	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for roof enlargement are likely to result in <b>minor</b> effects on biodiversity where improvements affect bat roosts and bird nesting locations.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might affect more well-established roosts and nests though it is likely the overall affect would be <b>minor</b>.</p> <p>It is possible that <b>extending PDR in areas outside conservation areas</b> would result in a larger proportion of the roof structure being affected by enlargement, with a consequential increase in the impact on existing roost and nest sites. Extended PDR could also allow previously unviable schemes to come forward. Overall, however, even with the maximum change in PDR for roof enlargement, the impact is unlikely to be significantly different from the present situation, with <b>minor</b> effects on biodiversity overall.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	<p><b>Existing PDR</b> for roof enlargements are likely to result in a <b>minor</b> positive effect on reducing carbon emissions as a consequence of current building standards which result in improving energy efficiency and reducing the loss of heat from domestic properties.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might help improve the energy efficiency of older, less well insulated buildings, though the overall effect would be <b>minor</b>.</p> <p>It is likely that <b>extending PDR outside conservation areas</b> would have a further, slight increase in this effect as some previously unviable schemes were implemented.</p> <p>It is that <b>extending PDR within conservation areas</b> to allow more extensive roof enlargement would have a further marginal effect. The overall effect is likely to remain as minor positive.</p>



Roof enlargement	
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>Existing PDR</b> for roof enlargement is likely to result in a <b>minor</b> positive effect on soil resources as it will result in the enlargement of existing properties, reducing the need to construct larger new properties.</p> <p><b>Extending PDR to conservation areas</b> would marginally increase this positive effect, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by allowing larger roof enlargement schemes would result in a further slight increase in this effect. <b>Extending PDR within conservation areas</b> would result in a further, marginal increase in the scale of impact. Overall, however, even with the maximum change in PDR for roof enlargement, the impact on soils is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for roof enlargement are likely to result in very <b>minor</b> impacts on older but undesignated properties. Impacts are mitigated by limiting the size of enlargements and requiring planning applications for proposals affecting the side or front of buildings. Restricting proximity of dormers to the edge of the roof, and keeping the enlarged structure below the existing roof height means that schemes are likely to be in proportion to the existing building.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for roof enlargements that are out of keeping with the historic character of an individual building and that visibly affect the appearance, structure and setting of buildings within a wider conservation area. While such enlargements would be limited to the rear of the property, and in proportion to the roof, the elevated location of the enlargement would increase the likelihood that it would be visible from within the wider conservation area. The overall effect would be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further increase in impact, particularly if roof enlargements become larger, and out of proportion to the existing roof structure, extending to the edge of the roof and resulting in an increase in the overall height of the roof, and a significant change in the visual relationship between the building and its roof structure. This could have an adverse impact on townscape quality, particularly in more historic, but undesignated areas. This effect is considered to be <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for schemes that prominently impact on the appearance and setting of buildings within conservation areas. This effect is considered to be <b>significant negative</b>.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for roof enlargement are likely to result in <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a marginal increase in the scale of this impact, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further increase in landscape impacts, resulting in roof structures whose appearance is out of proportion with the original building and where the legibility of the original structure is lost. The overall effect would be <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a further increase in the scale of impact on the landscape resulting in <b>minor negative effects</b>.</p>

Roof enlargement	
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> for roof enlargement are likely to result in <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade.</p> <p><b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b>. Making it easier to improve their properties would allow people to invest in their homes and provide some work for the building trade. The impact on property value and business activity is uncertain. Roof enlargements could increase property values, though unsympathetically designed schemes could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. It is likely these effects would generally be <b>minor</b> in nature.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in <b>minor</b> economic benefits associated with investment and upgrading of properties.</p> <p>Applying <b>extended PDR within conservation areas</b> could increase mixed economic effects benefits associated with investment and upgrading of properties (<b>minor positive</b>), increasing property values but also the potential impact of very visible, poor quality development on the attractiveness of the conservation area as a place to live, work, visit or invest (<b>minor negative, uncertain</b>).</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p><b>Existing PDR</b> for roof enlargement is likely to result in minor positive effects, allowing people to improve their living environment and support better quality of life.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a marginal increase in this minor positive effect.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would continue to improve people's living environment, though removing the restriction on enlargement within 10m of the property boundary could increase the likelihood of impacts (loss of light, overlooking) on neighbours.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in minor positive effects associated with improvements in people's living environment and quality of life and <b>minor negative</b> effects in terms of potential effects on neighbours' amenity and quality of life.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified



**Access ramps**

**Assessment table**

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flattened properties	Allow ramps longer than 5m (total length of flights)		Allow ramps longer than 9m (total length of flights and landings)		Allow height of the access ramp, including associated handrails to be greater than 1.5m		Allow platform height greater than 0.4m	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	-	-	-	-	-	-	-	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	-	-	-	-	-	-	-	0	0	0	0
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	-	-	-	-	-	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flattened properties	Allow ramps longer than 5m (total length of flights)		Allow ramps longer than 9m (total length of flights and landings)		Allow height of the access ramp, including associated handrails to be greater than 1.5m		Allow platform height greater than 0.4m	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>											
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	-	-	-	-	-	-	-	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	0	0	0	0	0	0	0	0	0	0	0
To support rural development	0	0	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flattened properties	Allow ramps longer than 5m (total length of flights)		Allow ramps longer than 9m (total length of flights and landings)		Allow height of the access ramp, including associated handrails to be greater than 1.5m		Allow platform height greater than 0.4m	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	+	+	+	+	+	+	+	+	+	+	+
To support access to education and training	+	+	+	+	+	+	+	+	+	+	+

### Justification of scores

Access ramps	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for access ramps are likely to result in very <b>minor</b> effects on biodiversity where improvements affect existing garden habitats.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might result in a very slight increase in this effect which will remain of <b>minor</b> significance.</p> <p>It is possible that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in this effect, but it will remain of only <b>minor</b> importance. Granting extended PDR to properties within conservation areas would also result in a further very slight increase in this effect, but it will remain of only <b>minor</b> importance.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	

Access ramps	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>Existing PDR</b> for access ramps are likely to have a very minor negative effect on soil, particularly where such ramps are constructed on previously undeveloped garden ground.</p> <p><b>Extending PDR to conservation areas</b> would marginally increase this negative effect, which would remain as of <b>minor importance</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by allowing larger access ramps would result in a further slight increase in this effect. <b>Extending PDR within conservation areas</b> would result in a further, marginal increase in the scale of impact. Overall, however, even with the maximum change in PDR for access ramps, the impact on soils is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for access ramps is likely to result in <b>minor</b> impacts on older but undesignated properties. Impacts are mitigated by limiting the overall size and height of ramps and their component parts.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for unsympathetically designed access ramps in prominent positions, potentially impacting on historic structures and affecting the historic character of an individual building and the appearance, structure and setting of buildings within a wider conservation area. Given that it is likely that such access ramps would be limited in number, the overall effect is judged likely to be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in the potential for further slight increases in impact on undesignated historic buildings and their settings, particularly where changes of height require extensive ramp structures to be put in place. This effect is considered to be a <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in more significant impacts on designated heritage assets and their settings, with increased potential for schemes that prominently impact on the protected townscape. This effect is considered to be <b>minor negative</b>.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for access ramps are likely to result in very <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a marginal increase in the scale of this impact, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a marginal further increase in landscape impacts, though the overall effect would remain as <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a further very slight increase in effect on the landscape resulting, though the overall effect would remain as <b>minor negative</b>.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	

Access ramps	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p><b>Existing PDR</b> for access ramps allows improved access for people with reduced mobility, including those using push chairs and wheel chairs. This represents a <b>minor positive</b> benefit.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this <b>minor positive</b> effect. It is likely that <b>extending PDR in areas outside conservation areas</b> would lead to further benefits for people with reduced mobility, providing improved access in areas where large differences in level currently make it particularly difficult. This is a <b>minor positive</b> effect.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in <b>minor positive</b> effects associated with improvements in access for people with reduced mobility.</p>
To support community cohesion and vitality	<p><b>Existing PDR</b> for access ramps helps ensure that all members of the community have access to public facilities. This represents a <b>minor positive</b> benefit.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this <b>minor positive</b> effect. It is likely that <b>extending PDR in areas outside conservation areas</b> would lead to further benefits for people with reduced mobility, providing improved access in areas where large differences in level currently make it particularly difficult for some members of the community. This is a <b>minor positive</b> effect.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in <b>minor positive</b> effects associated with equality of access to community facilities.</p>
To support access to education and training	<p><b>Existing PDR</b> for access ramps helps ensure good physical access to premises providing education and training. This represents a <b>minor positive</b> benefit.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this <b>minor positive</b> effect. It is likely that <b>extending PDR in areas outside conservation areas</b> would lead to further improvements in access to premises providing education and training. This is a <b>minor positive</b> effect.</p> <p>Applying <b>extended PDR within conservation areas</b> would lead to further slight improvements in access to premises providing education and training. This is a <b>minor positive</b> effect.</p>

## Improvements or alterations that are not enlargement

### Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow development to project more than 1 metre from wall or roof		Allow development of balconies, roof terraces or raised platforms	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>							
To avoid adverse effects on all habitats and species	-	-	-	-	-	-	-
To enhance biodiversity	0	0	0	0	0	0	0
<b>Climatic factors</b>							

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow development to project more than 1 metre from wall or roof		Allow development of balconies, roof terraces or raised platforms	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0
<b>Air</b>							
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0
<b>Water</b>							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0	0
<b>Soil</b>							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0
<b>Cultural heritage</b>							
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	--	-	-	--	--	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0	0
<b>Material assets</b>							

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow development to project more than 1 metre from wall or roof		Allow development of balconies, roof terraces or raised platforms	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0
<b>Economy</b>							
To support and enhance opportunities for sustainable economic growth	+	+	+	+	+	+	+
To support rural development	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0
<b>Social, population and human health</b>							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+/-	+/-
To support community cohesion and vitality	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0

### Justification of scores

Improvements or alterations that are not enlargement	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	Existing PDR for improvements and alterations that are not enlargement may have a <b>minor negative</b> impact on biodiversity as a consequence of the effects on roost and nesting sites. It is unlikely that the extension of existing PDR to conservation areas, or the extension of PDR in areas outwith conservation areas would have anything more than a marginal influence on this effect.
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	



Improvements or alterations that are not enlargement	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for improvements and alterations that are not enlargement are likely to result in <b>minor</b> impacts on older but undesignated properties, for example through the addition of solar panels or replacement of windows. Impacts are mitigated by limiting the such improvements to a 1m 'bubble' around the building and excluding the development of balconies or roof terraces.</p> <p><b>Extending existing rights to conservation areas</b> could result in a notable increase in the scale of this impact since there would be potential a range of changes affecting the appearance of individual buildings and the wider conservation area. The overall effect is judged likely to be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in the potential for further impacts on undesignated historic buildings and their settings, for example though the retrofitting of roof terraces or balconies. This effect is considered to be a <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in more significant impacts on designated heritage assets and their settings, with increased potential for schemes that prominently impact on the protected townscape. This effect is considered to be <b>significant negative</b>.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for improvements and alterations that are not enlargement are likely to result in <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a marginal increase in the scale of this impact, though the overall effect on the landscape would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a marginal further increase in landscape impacts, though the overall effect would remain as <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a further very slight increase in effect on the landscape, though the overall effect would remain as <b>minor negative</b>.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	



Improvements or alterations that are not enlargement	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> for improvements and alterations that are not enlargement allow people to invest in and improve their homes, providing work for the building industry. This represents a <b>minor positive</b> benefit.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this effect, though there is some potential for visually prominent development to affect the attractiveness of a Conservation Area as somewhere to live, visit or invest. Overall, the effects are likely to be <b>minor and mixed</b> in nature.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would lead to further <b>minor benefits</b>.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further increase in these effects. Benefits would be <b>minor positive</b>, possible economic impacts of unsympathetic or otherwise inappropriate development would be of <b>minor negative</b>.</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p><b>Existing PDR</b> for improvements and alterations that are not enlargement allow people to invest in and improve their homes. This represents a <b>minor positive</b> benefit.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this <b>minor positive</b> effect.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would lead to further benefits though any change to grant balconies and roof terraces PDR could have adverse effects for neighbours who might be overlooked. This is a <b>minor, mixed</b> effect.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in these <b>minor, mixed</b> effects.</p>
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Ancillary buildings

### Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove restriction to rear curtilage		Remove requirement for at least 50% of curtilage remaining undeveloped		Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m		Allow ancillary buildings of more than 4m2 within a conservation area or the curtilage of a listed building	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>											
To avoid adverse effects on all habitats and species	-	-	-	-	-	-	-	0	0	-	0
To enhance biodiversity	0	0	0	0	0	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove restriction to rear curtilage		Remove requirement for at least 50% of curtilage remaining undeveloped		Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m		Allow ancillary buildings of more than 4m2 within a conservation area or the curtilage of a listed building	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Climatic factors</b>											
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0	0	0	0	0
<b>Air</b>											
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0	0	0
<b>Water</b>											
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	-	-	-	-	-	-	-	0	0	-	0
<b>Soil</b>											
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	-	-	-	-	-	0	0	-	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>											

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove restriction to rear curtilage		Remove requirement for at least 50% of curtilage remaining undeveloped		Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m		Allow ancillary buildings of more than 4m2 within a conservation area or the curtilage of a listed building	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	--	-	-	--	-	--	-	--	--	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>											
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-	-	-	-	-	0
To enhance landscape quality	0	0	0	0	0	0	0	0	0	0	0
<b>Material assets</b>											
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0	0	0
<b>Economy</b>											
To support and enhance opportunities for sustainable economic growth	+	-/+	+	+	-/+	+	-/+	+	-/+	-/+	0
To support rural development	0	0	0	0	0	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Remove restriction to rear curtilage		Remove requirement for at least 50% of curtilage remaining undeveloped		Allow buildings more than 4m in height (2.5m within 1m of boundary) with an eaves height of more than 3 m		Allow ancillary buildings of more than 4m2 within a conservation area or the curtilage of a listed building	
				Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>											
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	-/+	+	-/+	+	-/+	-/+	
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0	0	0

### Justification of scores

<b>Ancillary buildings</b>	
<b>Biodiversity, flora and fauna</b>	

Ancillary buildings	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for ancillary buildings are likely to result in a <b>minor</b> effect on biodiversity as garden habitats for birds, small mammals and insects are lost.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might affect more well-established habitats, though it is likely the overall affect would be <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within the curtilage ancillary buildings can be built could provide flexibility to avoid more important elements of habitat (e.g. trees and shrubs), while granting PDR to large ancillary buildings would result in a slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for ancillary buildings, the impact is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	<p><b>Existing PDR</b> for ancillary buildings are likely to result in a <b>minor</b> adverse effect on flood risk as the run-off from sealed surfaces increases.</p> <p><b>Extending existing PDR to properties in conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for ancillary buildings, the impact on flood risk is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>Existing PDR</b> for ancillary buildings are likely to result in a <b>minor</b> adverse effect on soil resources.</p> <p><b>Extending PDR to conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for ancillary buildings, the impact on soils is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for ancillary buildings are likely to result in <b>minor</b> impacts, particularly in terms of undesignated heritage assets and their settings.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for unsympathetically designed ancillary buildings that impacted in the appearance, structure and setting of buildings within conservation areas. This would, however, be limited by PDR being granted only for ancillary buildings to the rear of properties and in proportion to the curtilage. The overall effect would be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further increase in impact, particularly if unsympathetically designed ancillary buildings become more visible by virtue of their number, size or location (to the sides of front of properties). This effect is considered to be <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the setting of buildings within conservation areas. This effect is considered to be <b>significant negative</b>.</p>

<b>Ancillary buildings</b>	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for ancillary buildings are likely to result in <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a slight increase in the scale of this impact, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in landscape impacts, though the overall effect would remain as <b>minor</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a further slight increase in the scale of impact on the landscape, though the overall effect would remain as <b>minor</b>.</p> <p>Overall, however, even with the maximum change in PDR for ancillary buildings, the impact on the landscape is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> for single ancillary buildings are likely to result in very <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade.</p> <p><b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b>. Making it easier to construct ancillary buildings would allow people to invest in their homes and provide work for the building trade. The impact on property value and business activity is uncertain. Ancillary buildings could increase property values, though a proliferation of unsympathetically designed schemes could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. Given the requirement for extensions to be located at the rear of properties, it is likely these effects would generally be <b>minor</b> in nature.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in <b>minor</b> economic benefits associated with investment and upgrading of properties.</p> <p>Applying <b>extended PDR within conservation areas</b> could increase mixed economic effects benefits associated with investment in properties (<b>minor positive</b>), increasing property values but also the potential impact of poor quality development on the attractiveness of the conservation area as a place to live, work, visit or invest (<b>minor negative, uncertain</b>).</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p><b>Existing PDR</b> for ancillary buildings are likely to result in minor positive effects, allowing people to improve their living environment and support better quality of life.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this minor positive effect.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would continue to improve people's living environment. However, it is also possible that larger ancillary buildings, closer to boundaries and alongside as well as to the rear of properties would result in a minor adverse effect on amenity and quality of life for neighbours.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in minor positive effects associated with improvements in people's living environment and quality of life and <b>minor negative</b> effects in terms of potential effects on neighbours' amenity and quality of life.</p>
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

Any building, engineering, installation or other operation

Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Allow in all parts of the curtilage		Allow structures higher than 3m		Allow development of more than 50% of curtilage	
				Not CA/Flatted properties	All areas	Not CA/Flatted properties	All areas	Not CA/Flatted properties	All areas
<b>Biodiversity, flora and fauna</b>									
To avoid adverse effects on all habitats and species	-	-	-	0	0	0	0	-	-
To enhance biodiversity	0	0	0	0	0	0	0	0	0
<b>Climatic factors</b>									
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0	0	0	0
<b>Air</b>									
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0	0	0
<b>Water</b>									
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0	0	0	0
To avoid and reduce flood risk	-	-	-	0	0	0	0	-	-
<b>Soil</b>									
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	-	0	0	0	0	-	-
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0	0	0	0
<b>Cultural heritage</b>									
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	-	-	-	--	-	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0	0	0	0
<b>Landscape and geodiversity</b>									
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-	-	-	-
To enhance landscape quality	0	0	0	0	0	0	0	0	0
<b>Material assets</b>									



To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0	0	0	0
<b>Economy</b>									
To support and enhance opportunities for sustainable economic growth	+	+/-	+	+	+/-	+	+/-	+	+/-
To support rural development	0	0	0	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0	0	0	0
<b>Social, population and human health</b>									
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+	+	+	+
To support community cohesion and vitality	0	0	0	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0	0	0	0

### Justification of scores

<b>Any building, engineering, installation or other operation</b>	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for engineering and other operations are likely to result in a <b>minor</b> effect on biodiversity as garden habitats for birds, small mammals and insects are lost.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might affect more well-established habitats, though it is likely the overall affect would be <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by removing restrictions on where within engineering and other operations can be take place could provide flexibility to avoid more important elements of habitat (e.g. trees and shrubs), while granting PDR to larger schemes would result in a slight increase in the likely scale of impact. However, even with the maximum change in PDR for engineering and other operations, the impact is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	



Any building, engineering, installation or other operation	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	<p><b>Existing PDR</b> for engineering and other operations are likely to result in a <b>minor</b> adverse effect on flood risk if an increase in sealed surfaces resulted in greater run-off.</p> <p><b>Extending existing PDR to properties in conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for engineering and other operations, the impact on flood risk is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>Existing PDR</b> for engineering and other operations are likely to result in a <b>minor</b> adverse effect on soil resources.</p> <p><b>Extending PDR to conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in the likely scale of impact. Overall, however, even with the maximum change in PDR for engineering and other operations, the impact on soils is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for engineering and other operations are likely to result in <b>minor</b> impacts, particularly in terms of undesignated heritage assets and their settings.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for unsympathetically designed projects that impacted on the setting of buildings within conservation areas. This would, however, be limited by PDR being granted only for engineering and other operations to the rear of properties and in proportion to the curtilage. The overall effect would be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further increase in impact, particularly if unsympathetically designed engineering and other operations become more visible by virtue of their number, size or location (to the sides of front of properties). This effect is considered to be <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a significant increase in the scale of impact on designated heritage assets and their settings, with increased potential for unsympathetic schemes that prominently impacted in the setting of buildings within conservation areas. This effect is considered to be <b>significant negative</b>.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for engineering and other operations are likely to result in <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a slight increase in the scale of this impact, though the overall effect would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in landscape impacts. , though the overall effect would remain as <b>minor</b></p> <p><b>Applying extended PDR within conservation areas</b> could result in a further slight increase in the scale of impact on the landscape, though the overall effect would remain as <b>minor</b>.</p> <p>Overall, however, even with the maximum change in PDR for engineering and other operations, the impact on the landscape is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified

Any building, engineering, installation or other operation	
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p><b>Existing PDR</b> for single engineering and other operations are likely to result in very <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade.</p> <p><b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b>. Making it easier to undertake engineering and other operations would allow people to invest in their homes and provide work for the building trade. The impact on property value and business activity is uncertain. Engineering and other operations could increase property values, though a proliferation of unsympathetically designed schemes could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. Given the requirement for works to be located at the rear of properties, it is likely these effects would generally be <b>minor</b> in nature.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a further slight increase in <b>minor positive</b> economic benefits associated with investment and upgrading of properties.</p> <p>Applying <b>extended PDR within conservation areas</b> could increase mixed economic effects benefits associated with investment in properties (<b>minor positive</b>), increasing property values but also the potential impact of poor quality development on the attractiveness of the conservation area as a place to live, work, visit or invest (<b>minor negative, uncertain</b>).</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p><b>Existing PDR</b> for engineering and other operations are likely to result in minor positive effects, allowing people to improve their living environment and support better quality of life.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this minor positive effect.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would continue to improve people's living environment. However, it is also possible that larger engineering and other operations, alongside as well as to the rear of properties would result in a minor adverse effect on amenity and quality of life for neighbours.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in minor positive effects associated with improvements in people's living environment and quality of life and <b>minor negative</b> effects in terms of potential effects on neighbours' amenity and quality of life.</p>
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Hard surfaces

### Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to flatted properties	Removal of requirement for porous materials	
				Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>					
To avoid adverse effects on all habitats and species	-	-	-	0	0
To enhance biodiversity	0	0	0	0	0
<b>Climatic factors</b>					
To avoid increasing greenhouse gas emissions	0	0	0	0	0

To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0
<b>Air</b>					
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0
To improve air quality	0	0	0	0	0
<b>Water</b>					
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0
To avoid and reduce flood risk	-	-	-	0	0
<b>Soil</b>					
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	-	-	-	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0
<b>Cultural heritage</b>					
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	-	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0
<b>Landscape and geodiversity</b>					
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0
<b>Material assets</b>					
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0
To enhance material assets	0	0	0	0	0
<b>Economy</b>					
To support and enhance opportunities for sustainable economic growth	0	+/-	0	0	0
To support rural development	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0
<b>Social, population and human health</b>					
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+/-	+/-	+/-	+/-
To support community cohesion and vitality	0	0	0	0	0
To support access to education and training	0	0	0	0	0

### Justification of scores

<b>Hard surfaces</b>	

Hard surfaces	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	<b>Existing PDR</b> for hard surfaces are likely to result in a <b>minor</b> effect on biodiversity as garden habitats for birds, small mammals and insects are lost. <b>Extending existing PDR to properties in conservation areas</b> might affect more well-established habitats, though it is likely the overall affect would be <b>minor</b> . It is likely that <b>extending PDR in areas outside conservation areas</b> by removing the requirement to use porous materials would have no significant effect on the scale of biodiversity impacts. Overall, however, even with the maximum change in PDR for engineering and other operations, the impact is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	<b>Existing PDR</b> for hard surfaces are likely to result in a <b>minor positive</b> effect on flood risk, since the risk of greater run-off from sealed surfaces is avoided. The requirement to use porous surface materials means that <b>extending existing PDR to properties in conservation areas</b> should not increase the risk of flooding. Removing the requirement for the use of porous surface materials will increase the risk of flooding from surface water run-off whether this is inside or outside a conservation area, resulting in <b>minor negative effects</b> .
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<b>Existing PDR</b> for hard surfaces are likely to result in a <b>minor</b> adverse effect on soil resources. <b>Extending PDR to conservation areas</b> would increase this impact, though this would be of marginal significance and the overall effect would remain as <b>minor</b> . Removing the requirement for the use of porous surface materials would lead to an increase in the impact on soil resources, though this would be a <b>minor negative</b> effect.
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Existing PDR</b> hard surfaces are likely to result in <b>minor</b> impacts, particularly in terms of undesignated heritage assets and their settings – with areas of hard standing for car parking replacing areas previously used for garden grounds. <b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential for new areas of hard standing that impact on the setting of buildings within conservation areas. This would be exacerbated by the use of the hard standing to park vehicles. The overall effect would be <b>minor negative</b> . Removing the requirement for the use of porous surface materials would not have a significant effect on designated or undesignated assets, other than increasing the risk of damage through surface water flooding.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified

Hard surfaces	
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<b>Existing PDR</b> for hard surfaces are likely to result in very <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade. <b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b> . Making it easier to construct hard surfaces would allow people to invest in their homes and provide work for the building trade. The impact on property value and business activity is uncertain. New hard surfaces could increase property values, though the loss of vernacular setting to buildings could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. When the likely prominence of parked vehicles is taken into consideration, this could have a <b>significant negative</b> effect. It is likely that removing the requirement to use porous surfacing could have a <b>minor negative impact</b> on the local economy if this leads to an increase in the risk of surface water flooding.
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Existing PDR</b> for hard surfaces are likely to result in <b>minor positive</b> effects, allowing people to improve their living environment and support better quality of life. <b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this <b>minor positive</b> effect. It is likely that removing the requirement to use porous surfacing could have a negative impact on people's quality of life if this leads to an increase in the risk of surface water flooding.
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Decking and raised platforms

### Assessment table

	No Change to PDRs	Increase the max size of decking in conservation areas or curtilage of listed buildings	Extend existing PDRs to Conservation Areas, curtilage of LB	Extend existing PDRs to flatted properties	Allow taller structures	
					Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>						
To avoid adverse effects on all habitats and species	-	-	-	-	0	0
To enhance biodiversity	0	0	0	0	0	0
<b>Climatic factors</b>						

	No Change to PDRs	Increase the max size of decking in conservation areas or curtilage of listed buildings	Extend existing PDRs to Conservation Areas, curtilage of LB	Extend existing PDRs to flatted properties	Allow taller structures	
					Not CA/flatted properties	All areas
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0
<b>Air</b>						
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0
<b>Water</b>						
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0
<b>Soil</b>						
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0
<b>Cultural heritage</b>						
To avoid adverse effects on designated and undesignated heritage assets and their settings	0	-	-	0	-	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0
<b>Landscape and geodiversity</b>						
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0	0	0
To enhance landscape quality	0	0	0	0	0	0
<b>Material assets</b>						

	No Change to PDRs	Increase the max size of decking in conservation areas or curtilage of listed buildings	Extend existing PDRs to Conservation Areas, curtilage of LB	Extend existing PDRs to flatted properties	Allow taller structures	
					Not CA/flatted properties	All areas
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0
<b>Economy</b>						
To support and enhance opportunities for sustainable economic growth	+	+/-	+/-	0	0	0
To support rural development	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0
<b>Social, population and human health</b>						
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+	+/-
To support community cohesion and vitality	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0

### Justification of scores

<b>Decking</b>	
<b>Biodiversity, flora and fauna</b>	



Decking	
To avoid adverse effects on all habitats and species	<p><b>Existing PDR</b> for decking are likely to result in very <b>minor</b> effects on biodiversity as garden habitats for birds, small mammals and insects are lost.</p> <p><b>Extending existing PDR to properties in conservation areas</b> might affect more well-established habitats, though it is likely the overall affect would be <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> by allowing larger or taller structures would have no significant effect on the scale of biodiversity impacts. Overall, however, even with the maximum change in PDR for decking, the impact is unlikely to be significantly different from the present situation, with <b>minor</b> effects overall.</p>
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> decking are likely to result in <b>negligible</b> impacts on undesignated heritage assets and their settings.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in negative impacts since it would allow the introduction of new structures into the setting of buildings within the conservation area, as well as the loss of previous historic landscape features. The overall effect would be <b>minor negative</b>.</p> <p>Allowing the use of larger or taller structures would not have a significant effect on designated assets outwith conservation areas, but could have a minor negative effect within conservation areas since it would allow the introduction of new structures into the setting of buildings within the conservation area, as well as the loss of previous historic landscape features.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	



Decking	
To support and enhance opportunities for sustainable economic growth	<b>Existing PDR</b> for decking are likely to result in very <b>minor positive</b> economic effects, allowing people to invest in their homes and providing work for the building trade. <b>Extending existing rights to conservation areas</b> could result <b>mixed effects</b> . Making it easier to construct decking would allow people to invest in their homes and provide work for the building trade. The impact on property value and business activity is uncertain. New outside space could increase property values, though the loss of vernacular setting to buildings could impact on the attractiveness of the conservation area as a place to live, work, visit or invest. This could be a minor mixed effect.
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<b>Existing PDR</b> for decking are likely to result in <b>minor positive</b> effects, allowing people to improve their living environment and support better quality of life. <b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this <b>minor positive</b> effect. It is possible that removing height restrictions on new decking could have an adverse effect on neighbours.
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## Gates, fences or other enclosures

### Assessment table

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to the curtilage of Listed Buildings	Extend existing PDRs to flatted properties	Additional PDRs in all areas	Additional PDRs in areas except Conservation Areas and flatted properties
<b>Biodiversity, flora and fauna</b>						
To avoid adverse effects on all habitats and species	0	0	0	0	0	0
To enhance biodiversity	0	0	0	0	0	0
<b>Climatic factors</b>						
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0
<b>Air</b>						

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to the curtilage of Listed Buildings	Extend existing PDRs to flatted properties	Additional PDRs in all areas	Additional PDRs in areas except Conservation Areas and flatted properties
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0
<b>Water</b>						
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0
<b>Soil</b>						
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0
<b>Cultural heritage</b>						
To avoid adverse effects on designated and undesignated heritage assets and their settings	0	-	-	-	-	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	-	0	0	0
<b>Landscape and geodiversity</b>						
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes		-	0	-	-	-
To enhance landscape quality	0	0	0	0	0	0
<b>Material assets</b>						

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Extend existing PDRs to the curtilage of Listed Buildings	Extend existing PDRs to flatted properties	Additional PDRs in all areas	Additional PDRs in areas except Conservation Areas and flatted properties
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0
<b>Economy</b>						
To support and enhance opportunities for sustainable economic growth	0	0	0	0	0	0
To support rural development	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0
<b>Social, population and human health</b>						
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	0	+/-	+/-	+/-	+/-	+/-
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	0	0	0	0	0
To support community cohesion and vitality	0	0	0	0	0	0
To support access to education and training	0	0	0	0	0	0

**Justification of scores**

<b>Gates, fences or other enclosures</b>	
<b>Biodiversity, flora and fauna</b>	

Gates, fences or other enclosures	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<b>Existing PDR</b> support the quality of designated and undesignated heritage assets and their setting. <b>Extending existing PDRs to Conservation Areas</b> could result in <b>minor negative</b> effects on undesignated buildings within Conservation Areas. Extending existing PDR to the curtilage of Listed buildings could result in <b>minor negative</b> effects on listed buildings. <b>Extending PDRs in all areas</b> would increase the potential scale of these negative effects. In particular these impacts could be greatest in terms of impacts on the character of townscape and impacts on the setting and views to other cultural heritage resources. Potential changes to listed buildings and their curtilage are identified as negligible due to the requirement for listed building consent
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<b>Existing PDR</b> support landscape quality, particularly at the edge of settlements where garden boundaries can be prominent. Extending existing PDRs to Conservation Areas and extending PDR in all areas would result in <b>minor negative</b> effects.
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	

Gates, fences or other enclosures	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<b>Existing PDR</b> support the quality of life for residents with <b>minor positive</b> effects. <b>Extending PDR within Conservation Areas or within all areas</b> would increase potential negative effects on quality of life as a result of overshadowing by tall gates, fences and other enclosures, and a <b>minor negative</b> effect is identified.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	No effect identified
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**Appearance of flats**

**Assessment table**

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Allow development to project more than 1 metre from wall or roof		Allow development of balconies, roof terraces or raised platforms	
			Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Biodiversity, flora and fauna</b>						
To avoid adverse effects on all habitats and species	-	-	-	-	-	-
To enhance biodiversity	0	0	0	0	0	0
<b>Climatic factors</b>						
To avoid increasing greenhouse gas emissions	0	0	0	0	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0	0	0	0	0
To support climate change adaptation	0	0	0	0	0	0
<b>Air</b>						
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0
<b>Water</b>						
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0	0	0
To avoid and reduce flood risk	0	0	0	0	0	0

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Allow development to project more than 1 metre from wall or roof		Allow development of balconies, roof terraces or raised platforms	
			Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
<b>Soil</b>						
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0	0	0
<b>Cultural heritage</b>						
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-	-	--	-	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0	0	0	0	0
<b>Landscape and geodiversity</b>						
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	-	-	-	-	-	-
To enhance landscape quality	0	0	0	0	0	0
<b>Material assets</b>						

	No Change to PDRs	Extend existing PDRs to Conservation Areas	Allow development to project more than 1 metre from wall or roof		Allow development of balconies, roof terraces or raised platforms	
			Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0	0	0
To enhance material assets	0	0	0	0	0	0
<b>Economy</b>						
To support and enhance opportunities for sustainable economic growth	0	0	0	0	0	0
To support rural development	0	0	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0	0	0
<b>Social, population and human health</b>						
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	0	0	0	0	0
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+	+/-	+/-



	No Change to PDRs	Extend existing PDRs to Conservation Areas	Allow development to project more than 1 metre from wall or roof		Allow development of balconies, roof terraces or raised platforms	
			Not CA/flatted properties	All areas	Not CA/flatted properties	All areas
To support community cohesion and vitality	0	0	0	0	0	0
To support access to education and training	0	0	0		0	

### Justification of scores

Appearance of flats	
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	Existing PDR for improvements to the appearance of flat may have a <b>minor negative</b> impact on biodiversity as a consequence of the effects on roost and nesting sites for protected species.  It is unlikely that the extension of existing PDR to conservation areas, or the extension of PDR in areas outwith conservation areas would have anything more than a marginal influence on this effect.
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified
To support climate change adaptation	No effect identified
<b>Air</b>	

Appearance of flats	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p><b>Existing PDR</b> for improvements to the appearance of flats are likely to result in <b>minor</b> impacts on older but undesignated properties, for example through the addition of solar panels or replacement of windows. Impacts are mitigated by limiting such improvements to a 1m 'bubble' around the building and excluding the development of balconies or roof terraces.</p> <p><b>Extending existing rights to conservation areas</b> could result in an increase in the scale of this impact since there would be potential a range of changes affecting the appearance of individual buildings and the wider conservation area. The overall effect is judged likely to be <b>minor negative</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in the potential for further impacts on undesignated historic buildings and their settings, for example through the retrofitting of roof terraces or balconies. This effect is considered to be a <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in more significant impacts on designated heritage assets and their settings, with increased potential for schemes that prominently impact on the protected townscape. This effect is considered to be <b>significant negative</b>.</p>

Appearance of flats	
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p><b>Existing PDR</b> for improvements to the appearance of flats could result in <b>minor</b> landscape impacts, particularly where properties are located on the edge of settlements or in the open countryside.</p> <p><b>Extending existing rights to conservation areas</b> could result in a marginal increase in the scale of this impact, though the overall effect on the landscape would remain as <b>minor</b>.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would result in a marginal further increase in landscape impacts, though the overall effect would remain as <b>minor negative</b>.</p> <p><b>Applying extended PDR within conservation areas</b> could result in a further very slight increase in effect on the landscape, though the overall effect would remain as <b>minor negative</b>.</p>
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	No effect identified

Appearance of flats	
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p><b>Existing PDR</b> for improvements to the appearance of flats allow people to invest in and improve their homes. This represents a <b>minor positive</b> benefit.</p> <p><b>Extending existing PDR to conservation areas</b> is likely to result in a slight increase in this <b>minor positive</b> effect.</p> <p>It is likely that <b>extending PDR in areas outside conservation areas</b> would lead to further benefits though any change to grant balconies and roof terraces PDR could have adverse effects for neighbours who might be overlooked. This is a <b>minor, mixed</b> effect.</p> <p>Applying <b>extended PDR within conservation areas</b> would result in a further slight increase in these <b>minor, mixed</b> effects.</p>
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

### Electric vehicle charging infrastructure

#### PDR for electrical outlets mounted on walls

##### Assessment table

	No change in PDR	Increase the volume of the electrical outlets in all areas	Increase the volume of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas
<b>Biodiversity, flora and fauna</b>				
To avoid adverse effects on all habitats and species	0	0	0	0
To enhance biodiversity	0	0	0	0
<b>Climatic factors</b>				

	No change in PDR	Increase the volume of the electrical outlets in all areas	Increase the volume of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas
To avoid increasing greenhouse gas emissions	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	++	++	++
To support climate change adaptation	+	+	+	+
<b>Air</b>				
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	++	++	++
To improve air quality	+	++	++	++
<b>Water</b>				
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0
To avoid and reduce flood risk	0	0	0	0
<b>Soil</b>				
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0
<b>Cultural heritage</b>				

	No change in PDR	Increase the volume of the electrical outlets in all areas	Increase the volume of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	--	+	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	--	0	--
<b>Landscape and geodiversity</b>				
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0
To enhance landscape quality	0	0	0	0
<b>Material assets</b>				
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0
To enhance material assets	0	0	0	0
<b>Economy</b>				
To support and enhance opportunities for sustainable economic growth	+	+	+	+
To support rural development	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0
<b>Social, population and human health</b>				

	No change in PDR	Increase the volume of the electrical outlets in all areas	Increase the volume of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+
To support community cohesion and vitality	0	0	0	0
To support access to education and training	0	0	0	0

### Justification of scores

Electric vehicle charging infrastructure: Electrical outlets mounted on walls	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	

Electric vehicle charging infrastructure: Electrical outlets mounted on walls	Justification of scores
To avoid increasing greenhouse gas emissions	<p>The existing PDR are likely to result in <b>minor positive</b> effects on the avoidance of increasing greenhouse gases because they encourage the uptake of plug in vehicles which can use electricity from renewable sources.</p> <p>Each of the proposed changes to PDR would contribute to the availability of electric vehicle charging points and faster / more powerful charging points, supporting the use of electric vehicles and avoiding increases in greenhouse gases. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b>.</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	<p>The existing PDR are likely to positively support actions which contribute to targets for reducing greenhouse gas emissions as they encourage the use of plug in vehicles which can use electricity generated from renewable sources. The overall effect of the existing PDR is likely to be <b>minor positive</b>.</p> <p>Each of the proposed changes to PDR would contribute to the availability of electric vehicle charging points and faster / more powerful charging points, supporting the use of electric vehicles and reducing greenhouse gas emissions. By supporting the wider deployment of electric vehicles, these changes would make a <b>significant positive</b> effect.</p>
To support climate change adaptation	<p>The existing PDR are likely to have <b>minor positive</b> effects on climate change adaptation as vehicle charging infrastructure offers a dispersed pattern of supplying renewable energy which will reduce the risk of electric vehicles being unable to obtain any power in the event of disruption from climate change impacts.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and will therefore result in a slight increase in the positive effects, although not so as to result in significant positive effects. The effects of each of the proposed changes are therefore likely to remain <b>minor positive</b>.</p>
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<p>The existing PDR are likely to result in <b>minor positive</b> effects on the avoidance of significant adverse effects on air quality because they encourage the uptake of electric vehicles which result in lower levels of air pollution.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and faster / more powerful charging points, supporting the use of electric vehicles and reducing air pollution, By supporting the wider deployment of electric vehicles, these changes would make a <b>significant positive</b> effect.</p>



Electric vehicle charging infrastructure: Electrical outlets mounted on walls	Justification of scores
To improve air quality	<p>The existing PDR would have a positive effect on improving air quality as they encourage the uptake of electric vehicles which result in lower levels of air pollution than conventional vehicles. The effect is expected to be <b>minor positive</b>.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and faster / more powerful charging points, supporting the use of electric vehicles and reducing air pollution. By supporting the wider deployment of electric vehicles, these changes would make a <b>significant positive</b> effect</p>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	

Electric vehicle charging infrastructure: Electrical outlets mounted on walls	Justification of scores
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>The existing PDR will have <b>minor positive</b> effect on the avoidance of adverse effects on designated and undesignated heritage assets and their settings. This is because charging points are currently not permitted within a site of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site. This restriction has a minor positive effect on avoiding adverse effects in these areas.</p> <p>However the current PDR do not necessarily avoid adverse effects on undesignated heritage assets outside these areas, resulting in adverse effects in relation to these.</p> <p>Extending existing PDR to allow an increase in the volume of wall mounted charging points in all areas is likely to result in <b>significant negative</b> effects on designated and undesignated heritage assets and their settings as charging points could then be located within a site of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site. It is considered likely that the outlets may result in adverse effects to these heritage assets. Due to the potential demand for the outlets, it is possible that a significant number of them could be provided in one area – this is a key factor in determining a significant effect.</p> <p>Extending existing PDR to allow an increase in the volume of wall mounted charging points but restricting this to areas outside of sites of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site, is likely to result in <b>minor positive</b> effects on the avoidance of adverse effects on designated and undesignated heritage assets. This because restricting charging points in these locations will help to safeguard them from adverse effects (resulting in minor positive effects), however it is possible that adverse effects to undesignated heritage assets, may occur.</p> <p>Negligible effects are identified for Listed Buildings and their settings, and Scheduled Monuments (excluding their setting) because direct effects on these resources would be identified and addressed through the existing consent regime. Therefore, the effects would be very similar to those of the existing PDR.</p> <p>Extending existing PDR to remove the restriction on development within 2 metres of a road in all areas is likely to result in <b>significant negative</b> effects on designated and undesignated heritage assets and their settings as charging points could then be located within a site of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site, or on an undesignated heritage asset. It is considered likely that the outlets may result in adverse effects to these heritage assets. Due to the potential demand for the outlets, it is possible that a significant number of them could be provided in one area</p>

Electric vehicle charging infrastructure: Electrical outlets mounted on walls	Justification of scores
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	The existing PDR will have a <b>negligible</b> effect on the enhancement of heritage assets and their settings and the quality of the wider built environment.
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>The existing PDR are likely to result in <b>minor positive</b> effects regarding supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating a take up of electric vehicles, as well as facilitating an increase in electric vehicle purchases.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and faster / more powerful charging points facilitating an increase in electric vehicle use and purchases and supporting a transition to a low carbon economy. However, the positive economic effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b>.</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	

Electric vehicle charging infrastructure: Electrical outlets mounted on walls	Justification of scores
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The existing PDR are likely to result in <b>minor positive</b> effects on the avoidance of adverse effects on health and quality of life because they encourage the uptake of electric vehicles which results in a reduction in air pollution and noise. Each of the proposed changes to PDR will contribute to the availability of charging points and faster / more powerful charging points facilitating an increase in electric vehicle use and reducing air pollution and noise. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b> .
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The existing PDR are likely to result in <b>minor positive</b> effects on the health and living environment of people and communities because they encourage an uptake of electric vehicles which result in less air pollution and noise. Each of the proposed changes to PDR will contribute to the availability of charging points and faster / more powerful charging points facilitating an increase in electric vehicle use and therefore improving air quality and reducing noise. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b> .
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

## PDR for upstands with electrical outlets

### Assessment table

	No change in PDR	Increase the height of the electrical outlets in all areas	Increase the height of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas

	No change in PDR	Increase the height of the electrical outlets in all areas	Increase the height of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas
<b>Biodiversity, flora and fauna</b>				
To avoid adverse effects on all habitats and species	0	0	0	0
To enhance biodiversity	0	0	0	0
<b>Climatic factors</b>				
To avoid increasing greenhouse gas emissions	+	+	+	+
To support actions which contribute to targets for reducing greenhouse gas emissions	+	++	++	++
To support climate change adaptation	+	+	+	+
<b>Air</b>				
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	+	++	++	++
To improve air quality	+	++	++	++
<b>Water</b>				
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0	0	0
To avoid and reduce flood risk	0	0	0	0
<b>Soil</b>				

	No change in PDR	Increase the height of the electrical outlets in all areas	Increase the height of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0	0	0
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0	0	0
<b>Cultural heritage</b>				
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	--	+	--
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	--	0	--
<b>Landscape and geodiversity</b>				
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0	0	0
To enhance landscape quality	0	0	0	0
<b>Material assets</b>				
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0	0	0

	No change in PDR	Increase the height of the electrical outlets in all areas	Increase the height of the electrical outlets in all areas, except where PDR do not currently apply	Remove the restriction on development within two metres of a road in all areas
To enhance material assets	0	0	0	0
<b>Economy</b>				
To support and enhance opportunities for sustainable economic growth	+	+	+	+
To support rural development	0	0	0	0
To support smarter resourcing of the planning system	0	0	0	0
<b>Social, population and human health</b>				
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+	+	+
To support community cohesion and vitality	0	0	0	0
To support access to education and training	0	0	0	0

### Justification of scores

Electric vehicle charging infrastructure: upstands with electrical outlets	Justification of scores
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<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<p>The existing PDR are likely to result in <b>minor positive</b> effects on the avoidance of increasing greenhouse gases because they encourage the uptake of plug in vehicles which can use electricity from renewable sources.</p> <p>Each of the individual proposed changes to PDR would contribute to the availability of electric vehicle charging points and faster / more powerful charging points, supporting the use of electric vehicles and avoiding increases in greenhouse gases. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b>.</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	<p>The existing PDR are likely to positively support actions which contribute to targets for reducing greenhouse gas emissions as they encourage the use of plug in vehicles which can use electricity generated from renewable sources. The overall effect of the existing PDR is likely to be <b>minor positive</b>.</p> <p>Each of the proposed changes to PDR would contribute to the availability of electric vehicle charging points and faster / more powerful charging points, supporting the use of electric vehicles and reducing greenhouse gas emissions. By supporting the wider deployment of electric vehicles, these changes would make a <b>significant positive</b> effect.</p>
To support climate change adaptation	<p>The existing PDR are likely to have <b>minor positive</b> effects on climate change adaptation as vehicle charging infrastructure offers a dispersed pattern of supplying renewable energy which will reduce the risk of electric vehicles being unable to obtain any power in the event of disruption from climate change impacts.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and will therefore result in a slight increase in the positive effects, although these are not judged to be significant. The effects of each of the proposed changes are therefore likely to remain <b>minor positive</b>.</p>
<b>Air</b>	



Electric vehicle charging infrastructure: upstands with electrical outlets	Justification of scores
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	<p>The existing PDR are likely to result in <b>minor positive</b> effects on the avoidance of significant adverse effects on air quality because they encourage the uptake of electric vehicles which result in lower levels of air pollution. The demand for greater numbers of charging points is also likely to be in urban locations with air quality issues, such as AQMA.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and faster / more powerful charging points, supporting the use of electric vehicles and reducing air pollution. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b>.</p>
To improve air quality	<p>The existing PDR would have a positive effect on improving air quality as they encourage the uptake of electric vehicles which result in lower levels of air pollution. The effect is expected to be <b>minor positive</b>.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and faster / more powerful charging points, supporting the use of electric vehicles and reducing air pollution. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b>.</p>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	

Electric vehicle charging infrastructure: upstands with electrical outlets	Justification of scores
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>The existing PDR will have <b>mixed minor positive</b> effects on the avoidance of adverse effects on designated and undesignated heritage assets and their settings. This is because charging points are currently not permitted within a site of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site, and therefore contribute in a minor positive manner to avoiding adverse effects in these areas.</p> <p>Extending existing PDR to allow an increase in the height of charging points in all areas is likely to result in <b>significant negative</b> effects on designated and undesignated heritage assets and their settings as charging points could then be located within a site of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site. Due to the potential demand for the outlets, it is possible that a significant number of them could be provided in one area with a significant effect.</p> <p>Extending existing PDR to allow an increase in the height charging points but restricting this to areas outside of sites of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site, is likely to result in <b>mixed minor positive</b> effects on the avoidance of adverse effects on designated and undesignated heritage assets. This because restricting charging points from these locations will help to safeguard them from adverse effects (resulting in minor positive effects), however it is possible that adverse effects on undesignated heritage assets, may occur (resulting in minor negative effects). In short, the effects would be very similar to those of the existing PDR.</p> <p>Extending PDR to remove the restriction on development within 2 metres of a road in all areas is likely to result in <b>significant negative</b> effects on designated and undesignated heritage assets and their settings as charging points could then be located within a site of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site, on Scheduled Monuments, within the setting of a listed building or on an undesignated heritage asset. It is considered likely that the outlets may result in adverse effects to these heritage assets. Due to the potential demand for the outlets, it is possible that a significant number of them could be provided in one area – this is a key factor in determining a significant effect.</p>

Electric vehicle charging infrastructure: upstands with electrical outlets	Justification of scores
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>The existing PDR will have a <b>negligible</b> effect on the enhancement of heritage assets and their settings and the quality of the wider built environment.</p> <p>Extending existing PDR to allow an increase in the height of charging points in all areas is likely to result in <b>significant negative</b> effects on the enhancement of heritage assets and their settings and the quality of the wider built environment. Due to the potential demand for the outlets, it is possible that a significant number of them could be provided in one area with a significant effect.</p> <p>Extending existing PDR to allow an increase in the height of charging points but restricting this to areas outside of sites of archaeological interest; a National Scenic Area; a historic garden or designed landscape; a historic battlefield; a Conservation Area; a National Park; or a World Heritage Site, is unlikely to change effects from those which result from existing PDR. As such, effects are likely to remain <b>negligible</b> on the enhancement of heritage assets and their settings and the quality of the wider built environment.</p> <p>Extending existing PDR to remove the restriction on development within 2 metres of a road in all areas is likely to result in <b>significant negative</b> effects on the enhancement of heritage assets and their settings and the quality of the wider built environment. Due to the potential demand for the outlets, it is possible that a significant number of them could be provided in one area with a significant effect.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	

Electric vehicle charging infrastructure: upstands with electrical outlets	Justification of scores
To support and enhance opportunities for sustainable economic growth	<p>The existing PDR are likely to result in minor positive effects regarding supporting and enhancing opportunities for sustainable economic growth as they help to support a transition to a low carbon economy by facilitating a take up of electric vehicles, as well as facilitating an increase in electric vehicle purchases.</p> <p>Each of the proposed changes to PDR would contribute to the availability of charging points and faster / more powerful charging points facilitating an increase in electric vehicle use and purchases and supporting a transition to a low carbon economy. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain minor positive. However, relaxing height restrictions near roads could result in road safety risks, mainly due to visual obstruction. Due to the relatively low risk, potential adverse effects on road safety are judged to be minor. Overall, <b>mixed</b> effects are identified.</p>
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	<p>The existing PDR are likely to result in <b>minor positive</b> effects on the avoidance of adverse effects on health and quality of life because they encourage the uptake of electric vehicles which results in a reduction in air pollution and noise.</p> <p>Each of the proposed changes to PDR will contribute to the availability of charging points and faster / more powerful charging points facilitating an increase in electric vehicle use and reducing air pollution and noise. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b>.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	<p>The existing PDR are likely to result in <b>minor positive</b> effects on the health and living environment of people and communities because they encourage an uptake of electric vehicles which result in less air pollution and noise.</p> <p>Each of the proposed changes to PDR will contribute to the availability of charging points and faster / more powerful charging points facilitating an increase in electric vehicle use and therefore improving air quality and reducing noise. However, the effects resulting from a change in PDR would be similar to those provided by existing PDR, and the effects of the proposed changes would therefore remain <b>minor positive</b>.</p>

Electric vehicle charging infrastructure: upstands with electrical outlets	Justification of scores
To support community cohesion and vitality	No effect identified
To support access to education and training	No effect identified

**Defibrillator cabinets**

**PDR for defibrillator cabinets**

**Assessment table**

	Introduce PDR for defibrillator cabinets on buildings and existing structures except listed buildings or structures	Introduce PDR for defibrillator cabinets on all buildings and existing structures
<b>Biodiversity, flora and fauna</b>		
To avoid adverse effects on all habitats and species	0	0
To enhance biodiversity	0	0
<b>Climatic factors</b>		
To avoid increasing greenhouse gas emissions	0	0
To support actions which contribute to targets for reducing greenhouse gas emissions	0	0
To support climate change adaptation	0	0
<b>Air</b>		
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0
To improve air quality	0	0
<b>Water</b>		
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	0	0
To avoid and reduce flood risk	0	0
<b>Soil</b>		
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	0	0

	Introduce PDR for defibrillator cabinets on buildings and existing structures except listed buildings or structures	Introduce PDR for defibrillator cabinets on all buildings and existing structures
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	0	0
<b>Cultural heritage</b>		
To avoid adverse effects on designated and undesignated heritage assets and their settings	-	-
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	0	0
<b>Landscape and geodiversity</b>		
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	0	0
To enhance landscape quality	0	0
<b>Material assets</b>		
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	0	0
To enhance material assets	0	0
<b>Economy</b>		
To support and enhance opportunities for sustainable economic growth	0	0
To support rural development	0	0
To support smarter resourcing of the planning system	0	0
<b>Social, population and human health</b>		

	Introduce PDR for defibrillator cabinets on buildings and existing structures except listed buildings or structures	Introduce PDR for defibrillator cabinets on all buildings and existing structures
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	+	+
To support community cohesion and vitality	0	0
To support access to education and training	0	0

### Justification of scores

Defibrillator cabinets on buildings and existing structures	Justification of scores
<b>Biodiversity, flora and fauna</b>	
To avoid adverse effects on all habitats and species	No effect identified
To enhance biodiversity	No effect identified
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	No effect identified
To support actions which contribute to targets for reducing greenhouse gas emissions	No effect identified



Defibrillator cabinets on buildings and existing structures	Justification of scores
To support climate change adaptation	No effect identified
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	No effect identified
To improve air quality	No effect identified
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	No effect identified
To avoid and reduce flood risk	No effect identified
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	No effect identified
To reduce vacant and derelict land/buildings and contaminated land and contaminated land	No effect identified
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	The introduction of PDR for defibrillator cabinets on all buildings and existing structures is likely to result in <b>minor negative</b> effects on designated and undesignated heritage assets and their settings. Development would be subject to listed building consent, and therefore no additional negative effects are identified. The potential change would, similarly, be likely to result in <b>minor negative</b> effects on designated and undesignated heritage assets and their settings.
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	No effect identified
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	No effect identified
To enhance landscape quality	No effect identified

Defibrillator cabinets on buildings and existing structures	Justification of scores
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste through the loss of resources such as soil or the generation of waste	No effect identified
To enhance material assets	No effect identified
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	No effect identified
To support rural development	No effect identified
To support smarter resourcing of the planning system	No effect identified
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life and reduce risks to health and quality of life	The introduction of PDR for defibrillator cabinets on all buildings and existing structures, whether listed or not (both proposed changes), is likely to result in <b>minor positive</b> effects on the avoidance of adverse effects on health and quality of life through enhanced medical support and improved response facilities. Particularly this pertains to the management of sudden cardiac arrest outside of a hospital setting, where it is shown that defibrillators significantly improve the chances of survival. Consultation responses noted that defibrillators should not be located in areas where their use could result in other risks and hazards e.g. in the presence of combustible gases or wet areas, however these issues are identified as a wider health and safety consideration and not a planning issue.
To improve the health and living environment of people and communities including support for access, recreation and physical activity including support for access, recreation and physical activity	The introduction of PDR for defibrillator cabinets on all buildings and existing structures, whether listed or not (both proposed changes), is likely to result in <b>minor positive</b> effects in relation to the improvement of health and the living environment of people and communities through improved medical facilities and equipment and by providing potentially lifesaving equipment to local communities to provide emergency life support.
To support community cohesion and vitality	No effect identified

Defibrillator cabinets on buildings and existing structures	Justification of scores
To support access to education and training	No effect identified



**Snow sports**

**Assessment table**

	No change in PDR	Concrete platforms for fixed snow guns/fans plus towers	Water pumping station/ pump houses	Generator houses	Water storage reservoirs	Underground water pipes and electricity cables	Access tracks
<b>Biodiversity, flora and fauna</b>							
To avoid adverse effects on all habitats and species	+	-	-	-	+/-	-	-
To enhance biodiversity	0	0	0	0	+/-	0	0
<b>Climatic factors</b>							
To avoid increasing greenhouse gas emissions	-	-	-	-	-	-	-
To support actions which contribute to targets for reducing greenhouse gas emissions	-	-	-	-	-	-	-
To support climate change adaptation	+	+	+	+	+	+	+
<b>Air</b>							

	No change in PDR	Concrete platforms for fixed snow guns/fans plus towers	Water pumping station/ pump houses	Generator houses	Water storage reservoirs	Underground water pipes and electricity cables	Access tracks
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMA	0	0	0	0	0	0	0
To improve air quality	0	0	0	0	0	0	0
<b>Water</b>							
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	+	+/-	-	-	+/-	-	-
To avoid and reduce flood risk	+	-	0	0	+/-	0	-
<b>Soil</b>							
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural	+	-	-	-	-	-	-

	No change in PDR	Concrete platforms for fixed snow guns/fans plus towers	Water pumping station/pump houses	Generator houses	Water storage reservoirs	Underground water pipes and electricity cables	Access tracks
land							
To reduce vacant and derelict land/buildings and contaminated land	0	0	0	0	0	0	0
<b>Cultural heritage</b>							
To avoid adverse effects on designated and undesignated heritage assets and their settings	+	-?	-?	-?	-	-	-?
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	+	-?	-?	-?	-	-	-
<b>Landscape and geodiversity</b>							
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	+	-	-	-	-	-	-

	No change in PDR	Concrete platforms for fixed snow guns/fans plus towers	Water pumping station/pump houses	Generator houses	Water storage reservoirs	Underground water pipes and electricity cables	Access tracks
To enhance landscape quality	+	-	-	-	-	-	-
<b>Material assets</b>							
To avoid adversely impacting on material assets through the loss of resources such as soil or the generation of waste	+	-	-	-	-	-	-
To enhance material assets	+	-	-	-	-	-	-
<b>Economy</b>							
To support and enhance opportunities for sustainable economic growth	-	+	+	+	+	+	+
To support rural development	-	+	+	+	+	+	+
To support smarter resourcing of the planning system	0	0	0	0	0	0	0



	No change in PDR	Concrete platforms for fixed snow guns/fans plus towers	Water pumping station/pump houses	Generator houses	Water storage reservoirs	Underground water pipes and electricity cables	Access tracks
<b>Social, population and human health</b>							
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	0	+	+	+	+	+	+
To improve the health and living environment of people and communities including support for access, recreation and physical activity	-	+	+	+	+	+	+
To support community cohesion and vitality	0	+	+	+	+	+	+
To support access to education and training	-	+	+	+	+	+	+

## Justification of scores

	Justification of scores
SA Objectives	Narrative/justification
Biodiversity, flora and fauna	
To avoid adverse effects on all habitats and species	<p>All five of the ski centres are located in sensitive environments and have already experienced disturbance and human activity due to the established development and annual attraction of the sites, with many sites being operational for a number of decades. In particular, the three ski centres located within the Cairngorms National Park have potential impacts on important SPA, SSSI, and SAC sites. These designations mean that <b>no change in PDR</b> will have a <b>minor positive</b> effect on the avoidance of adverse effects upon all habitats and species as development of snow making infrastructure will ensure the consideration of impacts upon the environment in line with local and national planning policy.</p> <p><b>Introducing PDR within these designated areas</b> will still require consideration of potential impacts on Natura sites through the Habitats Regulations. For European Sites or SSSI, EIA requirements would ensure the consideration of potential negative effects on these sites prior to any development taking place. Effects on habitats and species are dependent on the type of development proposed at the site. Concrete platforms may have a <b>minor negative</b> effect due to habitat loss and physical disturbance associated with the construction of the platforms and operation of the snow guns they would host. Similar to the impacts associated with the construction of concrete platforms, the development of pump and generator houses will result in localised ground disturbance during construction, and habitat loss in line with the footprint of the building, and <b>minor negative</b> effects are therefore identified. The development of water storage reservoirs, based on the expansion of existing lochans, may have a <b>mixed</b> effect due to the negative impacts during construction, loss of existing water margin habitat, and creation of new larger areas of marginal habitat. However, these habitats may be affected by abrupt changes in water levels due to abstraction, with potential negative effects on biodiversity value.</p>

	Justification of scores
To enhance biodiversity	<p>It is not anticipated that planning permission for developments associated with snow making facilities could result in biodiversity enhancement, leading to an overall <b>negligible effect</b> as a result of <b>no change in PDR</b>.</p> <p><b>Changes to PDR</b> may result in a <b>mixed</b> effect. Several of the developments such as access tracks, underground cables, and generator and pump houses will not actively contribute to the enhancement of biodiversity. However, the construction of water storage reservoirs may increase the area of marginal habitat by increasing the area of water bodies, although the construction and operation of such reservoirs may also have negative environmental effects including habitat loss.</p>
<b>Climatic factors</b>	
To avoid increasing greenhouse gas emissions	<p>Snow making equipment is energy intensive and is currently powered by non-renewable sources (typically diesel generators). It is understood from discussions with stakeholders that the intensive energy demand for snow making is unlikely to be feasibly sourced from renewable sources, although the ski centres have other energy requirements for general site operation which are suitable for renewable energy. The proposed changes to PDR support increased levels of snow making, and enable new development which would make existing activities which support snow making permanent.</p>
To support actions which contribute to targets for reducing greenhouse gas emissions	
To support climate change adaptation	<p><b>No change in PDR</b> will likely result in the continued use of temporary structures and equipment in snow making, but with a move towards developing more permanent structures requiring planning permission to support this activity. No change in PDR is not expected to affect the energy sources used for snow making, and will therefore not affect the future carbon emissions associated with snow making activities in Scotland. Diesel powered generators are the main source of power for snow making, and due to their use of fossil fuels, a <b>minor negative</b> effect on greenhouse gas emissions is identified.</p> <p>Development to support snow making is a climate change adaptation response. It is likely such changes will continue to be developed in response to predicted changes in snowfall even without changes in PDR.</p> <p><b>Changes in PDR</b> including for concrete platforms for snow guns, pump houses, generator houses, storage</p>

	Justification of scores
	<p>reservoirs, underground cables and pipes, and access tracks will support the provision of infrastructure for the manufacture of artificial snow and may increase the demand for non-renewable energy sources for snow making. Development supporting these features may also result in greenhouse gas emissions due to the disturbance of high carbon soils. As such, changes in PDR will result in indirect <b>minor negative</b> effects on greenhouse gas emissions as energy for snow making is derived from fossil fuels and the soils that will be impacted by such development are high in carbon.</p> <p>Snow making is a form of climate change adaptation but can also has negative implications for greenhouse gas emissions. Snow making may result in minor <b>positive effects</b> in terms of climate change adaptation as it will allow snow sports centres to adapt to a changing climate. Specifically, it is predicted that Scotland is likely to experience milder, wetter winters and hotter, drier summers in the future, resulting in an overall reduction of naturally occurring snow. During the operation phase, the use of concrete platforms for fixed guns and fans will allow ski centres to target key areas of the slope while generator houses and underground water pipes and electricity cables will improve the reliability of water and electrical supply.</p> <p>Water storage reservoirs will reduce the stress placed on surrounding waterbodies during periods of low flow during drier months. However, during the construction phase, there may be a <b>minor negative effects</b> associated with the release of greenhouse gas emissions, particularly if high carbon soils are impacted. In addition, there will be a need for construction vehicles to operate on site during the construction of generator houses and fixed platforms which will also release CO<sub>2</sub> due to the use of concrete. However, it is considered that the net impact from changes in PDR will remain <b>minor positive</b> overall for climate change adaptation.</p>
<b>Air</b>	
To avoid significant adverse effects on air quality, particularly where air quality is a known issue through the designation of AQMAs	<b>No change in PDR</b> is judged to have a <b>negligible effect</b> on avoiding significant adverse effects on air quality. While current operations attract a large number of visitors during the winter months, air quality near the five ski centres is generally good, with AQMA zones located in larger, more densely populated settlements some distance away. Additionally, the current use of diesel-powered generators to enable snow-

	Justification of scores
To improve air quality	<p>making facilities will contribute to air pollutants but this effect is judged to be localised. A <b>negligible effect</b> is also expected in terms of the improvement of air quality near the sites.</p> <p>The potential <b>changes to PDR</b> are not expected to affect the energy sources used for snow making, and will not impact on the emission of air pollutants associated with snow making activities, and as such a <b>negligible effect</b> on air quality is identified. The potential changes in PDR will support the viability of the snow centres by supporting artificial snow production, increasing the period over which visitors may come to the centres, with associated air quality impacts from traffic. However, these effects are identified as negligible overall.</p>
<b>Water</b>	
To improve the water environment and to avoid adverse effects on the quality and quantity of watercourses and waterbodies	<p>The snow sports centres currently abstract water from water bodies in the vicinity for snow making and other operational purposes. SEPA control this activity through abstraction licenses which are strictly regulated to a daily level of surface water abstraction. <b>No change in PDR</b> is not expected to change the future demand for water related developments (e.g. storage reservoirs), but may affect the rate at which these developments come forward due to the timescales involved in the planning system. The planning process ensures the consideration of impacts upon the environment, in line with local and national planning policy and therefore no change in PDR is therefore expected to have a <b>positive effect</b> on the water environment.</p> <p>Fixed snow gun locations are more water efficient than temporary structures as current practices require the abstraction of water from nearby streams whereas development of concrete platforms and towers providing a fixed location with a guaranteed water supply may reduce stress on surrounding waterbodies, producing a <b>minor positive effect</b>. The same effect would be seen through the construction of water storage reservoirs and pump houses which could divert stored water supplies to higher regions of the ski slopes without losing excess water. However, the construction of water storage reservoirs could affect the quality of any existing water bodies which are modified to increase storage capacity, with potential overall <b>mixed effects</b>.</p> <p>The construction of underground cables and pipes, concrete platforms, pump houses, generator houses, and access tracks could potentially have temporary <b>minor negative</b> impacts upon the water environment as a</p>

	Justification of scores
	result of sedimentation or contamination, if good construction practices are not followed.
To avoid and reduce flood risk	<p><b>No change in PDR</b> would not change the type or demand for development, but may affect the rate at which applications come forward. Further, flood risk would need to be considered as part of the planning application process for developments requiring planning permission. A <b>minor positive effect</b> on the avoidance and reduction of flood risk is therefore identified.</p> <p>The construction of concrete platforms, pump and generator houses, and access tracks will increase the amount of impervious surface area. The manufacture of snow could also potentially increase the amount of surface water, particularly if water is moved between catchments. Individually these effects are negligible, however these factors combined could subsequently increase run off, resulting in increased potential flood risk. This is particularly relevant for the Nevis Range ski centre which is situated in close proximity to the Fort William Potentially Vulnerable Area. Water storage reservoirs could store excess water in periods of heavy rainfall, but could potentially overflow with this outcome dependent on the scale of the reservoir, creating an overall <b>mixed effect</b>. The installation of underground cables is unlikely to have a significant impact upon flood risk as it will not lead to an increase in impermeable surface area. Therefore, the effect is deemed to be <b>negligible</b>.</p>
<b>Soil</b>	
To protect and avoid adverse effects on valuable soil resources, including carbon soils and best & most versatile agricultural land	<p><b>No change in PDR</b> would not change the type or demand for development, but may affect the rate at which applications come forward. The protection and avoidance of adverse effects on valuable soil resources would be considered as part of the planning application process for developments requiring planning permission. The soils in the ski centre areas are largely comprised of peaty gleyed and sub alpine podzols, typically suitable for rough grazing and with a high carbon content. As such, no change in PDR may therefore result in <b>positive impacts</b> in terms of the protection and avoidance of adverse effect on valuable soil resources.</p> <p>The construction and subsequent excavation works associated with the implementation of <b>underground</b></p>

	Justification of scores
	<p><b>water pipes and electricity cables</b> and the construction of <b>access tracks</b> and <b>water storage reservoirs</b> will have <b>negative</b> effects on soils as soil will be lost or disturbed in order to construct these developments, and these developments are likely to have a larger footprint than the development of concrete platforms. While the soil surrounding the ski centres is of comparatively low agricultural value (i.e. only suitable for rough grazing), it is largely comprised of peaty gleyed and sub alpine podzols with high carbon content and loss or damage to these soils would be permanent, with <b>minor negative</b> effects.</p>
To reduce vacant and derelict land/buildings and contaminated land	<p>Both <b>no change in PDR</b> or a <b>change in PDR</b> may mean existing buildings and land within the footprint of the ski centres could be adapted and developed to accommodate generators and pump houses, however the overall effect on this objective is negligible. Other developments such as water storage reservoirs, access tracks, and concrete platforms are not deemed to have an impact upon vacant and derelict land, resulting in a <b>negligible effect</b>.</p>
<b>Cultural heritage</b>	
To avoid adverse effects on designated and undesignated heritage assets and their settings	<p>There are undesignated cultural heritage sites found near all five ski centres. In addition, Glencoe ski centre is situated in close proximity to a scheduled monument and a Category B Listed Building. <b>No change in PDR</b> would ensure the continued consideration of effects upon both designated and undesignated cultural heritage assets through the planning application process and a <b>minor positive effect</b> is identified.</p>
To enhance, where appropriate, heritage assets and their settings and to improve the quality of the wider built environment	<p>Potential minor negative effects of development due to <b>changes in PDR</b> are linked to visual impacts on the setting of cultural heritage resources. There are also potential physical impacts which could arise during the construction and operation phases of these developments.</p> <p>In relation to direct disturbance, the construction phase associated with underground water and electricity cables and access tracks could result in the loss of archaeological features due to the more extensive area of development for these features, although similar effects may also arise from the construction of concrete platforms, water storage reservoirs, pump houses, or generator houses. A <b>minor negative</b> effect is</p>

	Justification of scores
	<p>identified.</p> <p>Impacts on setting may be associated with developments with the potential for greater visual impact such as access tracks, pump houses and generator buildings. However, these developments are likely to be located within the footprint of the existing infrastructure of the ski centres, and their individual effect on setting is therefore reduced. The likelihood and magnitude of these adverse effects are also deemed to be uncertain, given that the presence and extent of any archaeological features is unknown.</p>
<b>Landscape and geodiversity</b>	
To avoid adverse impacts on protected landscapes, wild land, geodiversity and all landscapes	<p>There are currently no PDR for development undertaken in areas such as the Ben Nevis and Glencoe National Scenic Areas and the Cairngorms National Scenic Areas and National Park. All five ski centres are located within these designated landscapes. As such, <b>no change in PDR</b> would result in formal planning applications being submitted to the relevant local authority and consideration of impacts upon protected landscapes, wild land, geodiversity, and all landscapes. <b>No change in PDR</b> would likely result in a <b>minor positive effect</b> on protected landscapes.</p>
To enhance landscape quality	<p><b>Changes in PDR</b> may result in concrete platforms for fixed guns/fans with towers creating adverse visual impacts while water storage reservoirs may impact on nationally important "wild land" and the overall character of the landscape. Construction activities, particularly those associated with underground cables and pipes, may lead to short term landscape impacts and widespread disturbance of geologically important sites. All of the development types will largely be confined to the footprint of the five ski centres and as such are deemed to have only <b>minor negative</b> effects due to the already developed character of the ski centres, with existing built features.</p>
<b>Material assets</b>	
To avoid adversely impacting on material assets through the loss of resources such as	<p><b>No change in PDR</b> would be expected to have a minor <b>positive effect</b> on material assets as it ensures the</p>



	Justification of scores
soil or the generation of waste	consideration of impacts on valuable soil resources through the planning process.
To enhance material assets	The potential changes in PDR may reduce the consideration of impacts regarding the loss of resources such as soil, with potential permanent <b>minor negative</b> effects.
<b>Economy</b>	
To support and enhance opportunities for sustainable economic growth	<p>No change in PDR may potentially affect the rate of development coming forward to support snow making due to the additional time requirement of needing to submit a planning application. However, the rate of development will also be influenced by the need for some of the snow sports centres to remain economically viable and respond to pressures associated with the weather fluctuations in a particular snow sport season. <b>No change in PDR</b> would likely have a <b>minor negative</b> effect on the support and enhancement of sustainable economic growth associated with the snow sports centres. While the temporary infrastructure used throughout the ski centres supports their operation, continued use may not be feasible in the long term as these temporary features may result in higher maintenance costs.</p> <p><b>Changes in PDR</b> for the installation of <b>concrete platforms for fixed snow guns/fans plus towers, water pumping stations/pump houses, generator houses, water storage reservoirs, underground water pipes and electricity cables and access tracks</b> may result in long term <b>minor positive</b> effects with respect to supporting and enhancing opportunities associated with sustainable economic growth. This infrastructure would enable ski centres to guarantee a start date to the skiing season and ultimately reduce the problems associated with unpredictable weather patterns, resulting in skiers having more confidence in planning trips/visits to the area. This would also allow the surrounding rural communities to better prepare for the upcoming skiing season through seasonal employment, leading to greater job creation within the area.</p>
To support rural development	<b>No change in PDR</b> is expected to have a <b>minor negative</b> effect in supporting rural development. Currently, permanent infrastructure or development related to the manufacture of snow requires planning applications to be submitted and approved by relevant local authorities. This may result in development which will support the snow sports industry and surrounding rural areas being viewed as too costly and time-consuming.

	Justification of scores
	<p>Ultimately, these factors may deter developers from pursuing these types of development due to the financial and time constraints.</p> <p>The potential <b>changes in PDR</b> will support the role of snow sports in the rural economy and may result in a boost of visitors to the area through the increased attraction of a longer and more guaranteed snow sports season. This may have a long term <b>minor positive</b> impact upon rural development in these areas as an increase in visitors may facilitate greater investment within the area.</p>
To support smarter resourcing of the planning system	<p><b>No change in PDR</b> may result in a <b>negligible effect</b> in terms of supporting smarter resourcing of the planning system, reflecting the limited number and extent of planning applications related to the snow sports centres in relation to the total volume of applications received by the planning system.</p> <p><b>Similarly, reflecting the likely limited number and extent of planning applications associated with snow sports, a change in PDR</b> would have a <b>negligible effect</b> on supporting smarter resourcing of the planning system as a whole.</p>
<b>Social, population and human health</b>	
To avoid adverse effects on health and quality of life and reduce risks to health and quality of life	<p><b>No change in PDR</b> is expected to have a <b>negligible effect</b> on the avoidance of adverse effects upon health and the quality of life. While consideration to health impacts would be given under the current planning procedure, the ski centres are situated in rural areas which are sparsely populated while larger settlements (e.g. Aviemore, Fort William) are located some distance away. Similarly, <b>no change in PDR</b> is expected to have a <b>negligible effect</b> on community cohesion and vitality.</p>
To improve the health and living environment of people and communities including support for access, recreation and physical activity	<p>Continuing with the <b>current PDR</b> may result in <b>minor negative</b> effects upon access to education and training and the improvement on the health and living environment of people and communities. The five ski centres currently provide the only outdoor snow sports facilities in the UK. If development of snow making infrastructure is delayed due to the processing of planning permission and subsequent impacts arising from</p>
To support community cohesion and vitality	

	Justification of scores
To support access to education and training	<p>unpredictable weather patterns, those who are keen to improve upon their snow sports skills may be limited to indoor ski slopes which may not provide a sufficient training base. In the long term, this may reduce the number of people who are interested in taking up or learning how to ski which, in turn, would reduce the domestic market of the five ski centres.</p> <p><b>A change in PDR</b> may have a <b>minor positive</b> effect in the improvement of the health and living environments of people and communities by supporting a longer snow season. Visitors and local residents will be able to take advantage of the ski centre facilities and enable them to take part in an active sport over a longer season, reducing congestion associated with more limited snow availability. Additionally, this would also produce positive effects in terms of access to education and training. The greater accessibility of snow sports facilities means those who wish to take up skiing or improve their skills can do so in a well-equipped outdoor environment.</p>