

SCOTLAND'S ENERGY EFFICIENCY PROGRAMME:
SECOND CONSULTATION ON LOCAL HEAT & ENERGY
EFFICIENCY STRATEGIES, AND REGULATION OF DISTRICT
AND COMMUNAL HEATING



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1. INTRODUCTION

1. In January 2017, as part of the broader Scotland's Energy Efficiency Programme, the Scottish Government published a high level policy scoping consultation paper on Local Heat & Energy Efficiency Strategies (LHEES), and regulation of district heating. It was part of a suite of consultations on the draft Climate Change Plan, the draft Energy Strategy and related activity¹.
2. Based on the evidence and views gathered from stakeholders, this consultation document sets out our more specific policy proposals for Local Heat & Energy Efficiency Strategies and regulation of district and communal heating. We are interested to hear your views on the proposals set out and we invite you to contribute to help inform how we develop these proposals further.

¹ Draft Climate Change Plan – the draft Third Report on Policies and Proposals 2017 - 2032 (<http://www.gov.scot/Publications/2017/01/2768>); Draft Scottish Energy Strategy: The Future of Energy in Scotland (<http://www.gov.scot/Publications/2017/01/3414>); National Infrastructure Priority for Energy Efficiency - Scotland's Energy Efficiency Programme (<http://www.gov.scot/Publications/2017/01/2195>)

2. BACKGROUND

3. The Scottish Ministers announced in June 2015 that they would take long-term action to reduce the energy demand of our residential, services and industrial sectors through designating energy efficiency as a national infrastructure priority, as subsequently confirmed in the Scottish Government's Infrastructure Investment Plan 2015.
4. Ministers announced that the cornerstone of this will be Scotland's Energy Efficiency Programme (SEEP) which is currently under development, prior to commencement from 2018, and on which we consulted in early 2017. It will be a co-ordinated programme to improve the energy efficiency of homes and buildings in the commercial, public and industrial sectors as well as supporting the decarbonisation of their heat supply.
5. The Scottish Government recognises that a central element of developing that coordinated programme for energy efficiency and heat decarbonisation through SEEP, is to consider the role that local strategies could play in helping local authorities coordinate local delivery programmes for SEEP. Likewise, considering the potential for regulation of district heating could play an important role in supporting the wider heat decarbonisation objectives of SEEP. Our consultation on the role that LHEES and district heating regulation could play in supporting the wider development of SEEP builds on the evidence gathered from our existing local, area-based energy efficiency programmes, and from experts in district heating development and regulation.
6. In June 2016, a Special Working Group of the Scottish Government's Expert Commission on District Heating (from here on 'the Expert Commission's SWG') made recommendations on the role that regulation could play in supporting the Scottish Government's vision and ambition for district heating in Scotland. The report concluded that regulation could play an important role in providing confidence for the district heating supply chain to invest in Scotland.
7. A Short Life Working Group on Heat Regulation (referred to from here on as 'the Working Group') was established by the Minister for Business, Innovation & Energy in September 2016, and advised on potential regulatory scenarios for district heating and for the introduction of LHEES under SEEP. This group informed our high level policy scoping consultation (published in January this year). The Scottish Government then commissioned an independent analysis of the responses to the high level policy scoping consultation and that report² is published alongside this consultation. Using this analysis of the views and evidence provided by stakeholders, the Working Group further supported and encouraged the Scottish Government to develop policy proposals using the full extent of its powers. This second consultation document now set out these proposals.

Purpose

8. The Scottish Government aims to ensure that its work to develop a policy and regulatory framework to support district heating, and the development of LHEES, is in line with the Scottish Government's purpose, objectives and targets. As set out in the draft Climate Change Plan, investment in energy

2 Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

efficiency to reduce energy demand can make one of the most significant contributions to reducing our greenhouse gas emissions and addressing fuel poverty. Likewise, appropriately-sited low carbon district heating is one of the 'low regrets' heat decarbonisation technologies that will support Scotland to meet emissions reduction targets as well as supporting our fuel poverty aims. This is in line with UK-wide Committee on Climate Change advice that 'low regrets' decarbonisation technologies³ should be deployed while the UK Government gathers evidence on options for wider heat infrastructure such as decarbonisation of the gas grid.

9. To support a coordinated approach to the local planning and delivery of energy efficiency and heat decarbonisation programmes within SEEP, we are consulting further on our proposal to create a statutory framework for Local Heat & Energy Efficiency Strategies which will:
 - help to drive SEEP across all local authorities, and will act as the foundation for 20 years of delivery programmes to meet our fuel poverty, energy efficiency and heat decarbonisation ambitions;
 - send clear investment signals to develop a strong and sustainable energy efficiency and heat decarbonisation supply chain for Scottish business; and
 - enhance Scotland's strategic capacity and expertise in the delivery of energy efficiency and heat decarbonisation.
10. To support appropriately-sited, low carbon, affordable district heating, the Scottish Government is consulting further on the development of a policy and regulatory system which will see district heating develop in a strategic manner, and provide appropriate conditions on the ground to accelerate delivery of district heating and to grow this market. In order to achieve this we are consulting further on a proposed regulatory framework in which:
 - district heating and communal heating providers will serve their customers well;
 - district heating and communal heating providers will deliver affordable and low carbon heat;
 - there is increased confidence in the investment in new and expanded district heating; and
 - wherever possible, Scotland secures the economic opportunity presented by both reducing costs to customers and, infrastructure investment opportunities for the Scottish supply chain.

Current situation

11. Currently local authorities are funded by the Scottish Government to deliver area-based energy efficiency programmes through the Home Energy Efficiency Programmes for Scotland: Area Based Schemes. Local authority Housing Strategies also include some high-level information on the authority's approach to addressing climate change and fuel poverty for the area's housing stock. These local programmes and strategies are supported by our national energy efficiency programmes such as Warmer Homes Scotland, which provides support to vulnerable private sector households, alongside support to businesses and the public sector through programmes such as Resource Efficient Scotland.

³ In Scotland the technologies that apply are renewables in off-gas-grid areas and low carbon district heating in appropriate areas such as heat dense areas.

12. Local authorities are also encouraged, with support from the Heat Network Partnership, on a voluntary basis, to develop district heating strategies, or to include a district heating element in wider strategies or plans such as Sustainable Energy Action Plans. Additionally, the Scottish Planning Policy sets out that Local Development Plans should use heat mapping to identify the potential for co-locating developments with a high heat demand with sources of heat supply and should identify where heat networks, heat storage and energy centres exist or would be appropriate and include policies to support their implementation. This has led to a wide range of approaches from local authorities with regard to district heating. Some are at the early stage of identifying opportunities and supporting development of district heating. Others have mapped areas of opportunity within their Local Development Plans and developed supportive policies and/or are developing district heating strategies setting out priority projects identified, mapped and with a delivery programme.

Towards a new regulatory framework

13. With the recommendation of the Expert Commission's SWG that district heating should be regulated, and that each local authority is required to develop and publish a strategic plan for developing district heating⁴, and in parallel, taking forward the wider development of integrated energy efficiency and heat decarbonisation programmes within SEEP, the Scottish Government believes that there is now an opportunity to create a new regulatory framework to support this, and we are consulting further on our proposed approach. Considering the delivery of energy efficiency and heat decarbonisation at the same time will also help to ensure that over-specification is avoided.
14. This coordinated, strategic approach will be key for Scotland to meet our climate change targets in line with the approach being finalised in our Climate Change Plan, in light of the best available evidence, including the recent advice from the Committee on Climate Change⁵ suggesting significant decarbonisation of buildings will be needed by 2032. It will also be key to our commitment to tackling fuel poverty as set out in our related Fuel Poverty Strategy Consultation⁶ and proposal to enshrine our ambition to eradicate fuel poverty in a new Warm Homes Bill.
15. Our Programme for Government, 2017-18⁷ commits the Scottish Government to introduce a Warm Homes Bill to set a new statutory fuel poverty target to help ensure that progress is made on tackling fuel poverty and improving the energy efficiency of Scotland's buildings, and that support is given to those who are most in need of help to heat their homes. The Programme for Government also commits us to consulting further on detailed proposals for Local Heat & Energy Efficiency Strategies and regulation of district heating and to develop, if appropriate, a wider SEEP Bill for later in this Parliament, which would make any legal provision needed to support our approach.

4 'Report of the Special Working Group on Regulation for the Scottish Government and the Expert Commission on District Heating', see: <http://www.gov.scot/Publications/2016/03/7493>

5 Committee on Climate Change, (2017), 'Reducing emissions in Scotland – 2017 progress report', see: <https://www.theccc.org.uk/publication/reducing-emissions-scotland-2017-progress-report/>

6 Consultation on a Fuel Poverty Strategy for Scotland, see <http://www.gov.scot/Publications/2017/11/6179>

7 Scottish Government, (2017) 'A Nation with Ambition: The Government's Programme for Scotland 2017-18', see: <http://www.gov.scot/Resource/0052/00524214.pdf>

High level policy scoping consultation (January to April 2017)

16. In early 2017, we sought evidence and stakeholder views on the recommendations made by the Expert Commission's SWG, plus wider evidence, in order to scope our policy for Local Heat & Energy Efficiency Strategies (LHEESs), and regulation of district heating, and also to support wider regulation on energy efficiency planned under Scotland's Energy Efficiency Programme (SEEP) (and in related consultations⁸).
17. That initial policy scoping consultation⁹ focused on two key areas. These were:
 - a. a proposal that local authorities would be required to create LHEES to support the delivery of heat decarbonisation and energy efficiency objectives of SEEP; and
 - b. obtaining feedback on a scenario for a regulatory framework for district heating. The scenario aimed to test stakeholder views on effectiveness of support for the development of district heating by: establishing designated district heating zones and within these creating exclusive concessions and provisions for connecting users and suppliers of surplus heat to district heating and introducing and enforcing minimum technical standards and consumer protection standards through a licensing system for all district heating.

This Consultation

18. In response to these recommendations, and in developing SEEP, the Scottish Government is now consulting further on our proposed approach to district (and communal) heating regulation, and to the development of Local Heat & Energy Efficiency Strategies (LHEES).
19. LHEES would set a framework and delivery programme for how each local authority would both reduce the energy demand and decarbonise the heat supply of buildings in its area, to ensure progress against the national objectives of SEEP. Our district heating proposals would introduce regulation on a proportionate basis, in order to set a clear framework for securing investment in new and expanding district heating in Scotland, and in providing protection for district and communal heating customers. This consultation document builds on the responses and evidence we received to our earlier high level policy scoping consultation (January-April 2017), as well as considering what can be achieved within the limits of the Scottish Ministers' legislative competence.

8 The Scottish Government, (2017) 'National Infrastructure Priority for Energy Efficiency - Scotland's Energy Efficiency Programme', see: <http://www.gov.scot/Publications/2017/01/2195>

9 Consultation on Local Heat and Energy Efficiency Strategies and District Heating Regulation, see: <http://www.gov.scot/Publications/2017/01/9139>

Overview of policy proposals set out in this consultation

20. We have reviewed the responses to the previous consultation and wider advice, and we are now proposing a strategy-led regulatory framework that comprises the following elements:
- a) Local authorities would have a **statutory duty to develop a Local Heat & Energy Efficiency Strategy (LHEES)** to cover a 15-20 year period, setting out the overall energy efficiency and heat decarbonisation strategy for SEEP, authority-wide. Prior to commencement of this duty, local authorities would be offered capacity and support to develop LHEES. The LHEES would determine **zones**, which set out the most appropriate energy efficiency and heat decarbonisation options for those areas to meet the overall decarbonisation and fuel poverty objectives of the LHEES. This would include identifying areas that would be appropriate for district heating, and identification of area-based energy efficiency programmes. Within the confines of Scottish public procurement regulations¹⁰, areas zoned for district heating development would have particular consideration of public sector buildings as the starting point for future network development.
 - b) Data for developing LHEES would be provided at national level on a voluntary basis and a **socio-economic assessment** would be used to assess the viability and impacts of the local strategy, and will determine the designation of the zones.
 - c) Developers would need to obtain a **district heating consent** to develop district heating. The consent would have conditions associated with it, including the requirement to have a licence and meet licensing conditions. We are also exploring options for ensuring that district heating operators have similar or the same rights as other statutory undertakers for **permitted development and wayleaves**. Consent to develop district heating could potentially confer permitted development rights¹¹ in relation to pipelines and associated infrastructure.
 - d) Developers would need to obtain a **licence** to develop and/or operate in addition to holding a district heating consent. The licence would ensure technical and operational quality standards, network compatibility, and would codify existing UK-wide consumer protection frameworks.
 - e) The Scottish Ministers would **require the public sector to assess potential connection to district heating in collaboration with local authorities preparing their LHEES**. Additionally the Scottish Ministers would encourage the public sector (within the confines of the public procurement regulations), when assessing the need for future low carbon heat supply and/or where they have surplus heat, to consider connection to district heating, where there was opportunity to do so, and it was socio-economically cost effective.

¹⁰ Public sector bodies (including Housing Associations) have to issue invitations to tender for the supply of utilities including heat. SFT have produced information on 'Powers of Scottish public bodies to generate/procure heat and electricity supplies, to supply heat and electricity to third parties, and the constraints on those powers' and 'Guidance on Delivery Structures for Heat Networks' for public sector bodies in Scotland wishing to develop district heating schemes with multiple heat users and/or heat sources and identifies the main delivery structures currently used and uses relevant case studies. Both are available at www.districtheatingscotland.com see section on 'Resources'. It should be noted, under normal circumstances where there is an existing district heating network it would need to bid along with other potential heat providers to provide heat to the public sector based on the tender.

¹¹ 'Permitted development rights' refers to planning permission specified in legislation and which removes the need to apply for planning permission. Such rights usually include restrictions and conditions on the permission.

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- f) The Scottish Ministers propose a system of **mediation to support discussions between non-domestic sectors with usable surplus heat and relevant third parties seeking to develop or extend district heating**. We propose that mediation would be carried out individually or jointly by relevant consenting bodies or regulators such as local authorities, the Scottish Environment Protection Agency (SEPA) or a national delivery mechanism for SEEP.
 - g) Planning authorities would continue to have their **existing discretionary planning powers**, to encourage the infrastructure needed to make connections to district heating. Future versions of Scottish Planning Policy will have regard to Scottish Government strategies and requirements on district heating in its preparation.
 - h) Provide **support for delivery** of LHEES and strategic district heating projects, considering in particular the needs of local authorities.

3. LOCAL HEAT & ENERGY EFFICIENCY STRATEGIES

3.A LOCAL HEAT & ENERGY EFFICIENCY STRATEGIES

Summary of previous consultation

21. In our previous consultation, we stated that we were considering placing a statutory duty upon local authorities to work with relevant stakeholders to produce a LHEES, and to use their powers to implement that strategy to support the delivery of SEEP.
22. We suggested that LHEES adopt an area-based approach and should cover a long-term period; reflect and support local and national policies, frameworks, strategies and targets; set out an understanding of current building stock and identify potential opportunities for energy efficiency improvements and heat decarbonisation; set long-term targets for both energy efficiency and heat decarbonisation; undertake area-based socio-economic assessment to identify the most appropriate heat decarbonisation solutions (including but not restricted to district heating); set out costed, phased delivery programmes for each strategy period; include the phased zoning for the installation of energy efficiency improvements, installation of low carbon heat supplies and development of district heating; and quantify the short-term benefits and impacts of delivery plans, including the impacts on the local economy and employment.
23. We also proposed that phased delivery programmes would take account of potential support from wider programmes, support the delivery of national standards, set out the early years' detail of the approach or 'offer' to properties in prioritised areas, and set out how the local authority would use its powers to help deliver its strategy.
24. We also stipulated that local authorities would be supported in developing these strategies, through national guidance and data sets.

Summary of consultation responses

25. The independent consultation analysis showed that the vast majority of respondents, including most local authorities who responded, agreed that a duty should be placed upon local authorities to produce and implement a Local Heat & Energy Efficiency Strategy. Many felt that this would be a vital step in progressing and raising the profile of energy efficiency and heat decarbonisation. Other common benefits cited were energy demand reduction, reduction of waste heat, promoting heat decarbonisation, and meeting targets on climate change, fuel poverty and affordable warmth.
26. In terms of the scope and content of a LHEES, most respondents agreed with our proposals, including a need to set targets for energy efficiency and heat decarbonisation and setting out a costed, phased delivery programme to meet such targets.
27. Various comments were received on the need for robust data.
28. Specific comments were received on local flexibility to account for local requirements and conditions. For example, in determining whether to implement separate or joint LHEES, or in zoning for local heat demand and sources.

29. A number of queries were raised, particularly relating to enforcement (penalties and non-compliance) and alignment with existing local plans and schemes.
30. A number of concerns were also raised on the availability of the necessary skills, funding, support and resources needed to enable local authorities to produce and implement a LHEES. More details are available in the published analysis¹².
31. While developing and refining these proposals through consultation we are also supporting the voluntary approach to LHEES through the SEEP Phase 2 pilots. 11 local authorities are being supported in piloting the development of LHEES from 2017-19, as part of a capacity support programme (see Section 4.E).

What we are proposing now

32. In the light of the evidence received during the consultation, the Scottish Government considers that it would be appropriate to place a statutory duty upon local authorities to produce a LHEES, aimed at improving the energy efficiency and decarbonising the heat supply of their areas under SEEP. Prior to commencement of a duty, local authorities would be offered capacity and support to develop LHEES.
33. Strategies would cover a 15-20 year period. They would also have a duty to report on progress. Development of a LHEES will include the following stages:
 - Stage 1:** An assessment of existing local and national strategies and data availability.
 - Stage 2:** Authority-wide assessment of existing building stock's energy performance and heat supply.
 - Stage 3:** Authority-wide setting of aggregate targets for heat demand reduction and decarbonisation of buildings – for the short-term strategy period and for the long-term duration of SEEP.
 - Stage 4:** Conduct a socio-economic assessment (see Section 3.C) of potential energy efficiency and heat decarbonisation solutions.
 - Stage 5:** Selection of areas/prioritisation of opportunities for energy efficiency and/or heat decarbonisation, leading to the designation of zones (see Section 3.B).
 - Stage 6:** Costing & phasing of delivery programmes that consider:
 - Requirement to prioritise delivery programmes in time-limited phases
 - Designation of area-based energy efficiency and heat decarbonisation delivery programmes using zoning powers if needed
 - Designation of other energy efficiency and heat decarbonisation delivery programmes (e.g. sectoral programmes)

¹² Para: 2.1.2 – 2.1.24, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

34. We propose that LHEES would be submitted to the Scottish Ministers (or designated national delivery mechanism for SEEP) (see Section 4.E) for approval, and for funding of associated delivery programmes. In delivering their LHEES function, we also propose that local authorities would do so in consultation with members of their local community planning partnership, and with reference to their wider community planning duties, and local outcomes improvement plans, as set out in the Community Empowerment (Scotland) Act 2015. We would also envisage that local authorities could discharge jointly their duty to produce an LHEES.

Q1. Do you agree with our proposed overall approach to LHEES? Y/N

Please explain your answer in the text box provided, including any available evidence or examples.

Statutory duty to report on tackling fuel poverty and climate change

35. The Housing (Scotland) Act 2001 places a statutory requirement on local authorities to produce a Local Housing Strategy (LHS) which sets out its strategy, priorities and plans for the delivery of housing and related services, including how the authority will ensure that, "so far as reasonably practicable, persons do not live in fuel poverty." This obligation relates to housing in all tenures. Local authorities, as public bodies, also have obligations relating to meeting statutory climate change targets and our Local Housing Strategy Guidance asks a local authority to set out how it will use all available resources to achieve the maximum contribution for tackling fuel poverty and reducing greenhouse gas emissions; and maximise uptake in the numbers of householders and property owners benefitting from eligible fuel poverty and energy efficiency programmes.
36. We believe that the duty to report on tackling fuel poverty and climate change aligns closely with local authorities' plans for improving the energy efficiency of buildings and decarbonising the heat supply and therefore propose moving that duty from the LHS to the LHEES. Subject to the outcome of this consultation and amending the relevant legislation, it would be for local authorities to report on how they are tackling fuel poverty and climate change in the LHEES rather than the LHS and we would welcome views on this.

Q2. What are your views on asking local authorities to report on tackling fuel poverty and climate change in the LHEES rather than the LHS?

3.B DISTRICT HEATING ZONES, CONCESSIONS AND CONSENTS

37. In our previous consultation (January 2017), we consulted on the scope of a series of regulatory scenarios for district heating, including: area-based zoning for district heating and energy efficiency through LHEES; granting of concessions for district heating networks; licensing of district heating networks; connecting supply; surplus industrial heat, and consumer protection.

Zoning – What we consulted upon

38. Our earlier consultation set out a scenario that in developing their LHEES, where local authorities identified that district heating would be the most cost-effective low carbon heat option over the long run (through socio-economic assessment), the area could be designated a statutory district heating zone by the LHEES and that a concession would be awarded, granting the developer exclusive rights to operate within that zone.
39. In that scenario, building owners in these zones would anticipate connection to a system in future and be able to make informed choices about appropriate low carbon heat technologies. District heating developers would also have a clearer picture than at present of how their systems would be expected to integrate with adjacent networks, and would adopt technical and organisational configurations accordingly. In the scenario, local authorities would also have powers to enforce connection.

Zoning - Summary of consultation responses

40. There was broad support for giving local authorities the power to zone areas for energy efficiency and heat decarbonisation. There was limited consensus on how to go about this. However, there was a recognition of the need to zone based on local heat sources or areas of demand, rather than strict geographical boundaries¹³.

What we are proposing

41. The Scottish Government proposes that LHEES would designate zones for energy efficiency and heat decarbonisation. These zones would help to phase the operation of area-based SEEP delivery programmes for energy efficiency. The zones would also set out the most appropriate heat decarbonisation options for specific areas.
42. Following analysis of the consultation, we are proposing that zones would be indicative, and would not prevent other forms of heating from being used in those zones through legislative means, but would instead help local authorities to communicate their strategic approach to energy efficiency and heat decarbonisation through SEEP. The identified zones may be considered within the planning system in the preparation of the local development plan and the determination of planning applications and we will look at opportunities to align LHEES with the planning system where appropriate (see Section 4.D).
43. In particular, zoning will signal to investors both where energy efficiency delivery programmes under SEEP will take place, and the most appropriate areas for future development of district heating, and if appropriate, communal heating. The zones will also highlight where local authorities will focus their action in energy efficiency delivery programmes and in delivery programmes to secure district heating developments. The information

13 Para: 3.2.1 – 3.2.13, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

provided in the LHEES on zoning, linked to SEEP delivery programmes, will enable investors and developers to seek to deliver new district heating development, and will enable the supply chain to prepare for multi-year energy efficiency delivery programmes.

44. Zoning would take into account, among other things:

- socio-economic assessment of potential energy efficiency and heat decarbonisation solutions, to identify zones, as set out in Section 3.A (Stages 4 and 5);
- known current, and expected future, heat demand and local conditions, including existing district and communal heating;
- local and national energy efficiency, heat decarbonisation and fuel poverty objectives; and
- local development planning.

45. Within the confines of Scottish public procurement regulations¹⁴, areas zoned for district heating would have particular consideration of public sector buildings as a starting point for future network development (see Section 4.D).

Q3. Do you agree with our proposed overall approach to zoning? Y/N

Please explain your answer in the text box provided.

Concessions – What we consulted upon

46. In the previous consultation, the Scottish Government recognised that in order to underpin LHEES and the development of heat networks in district heating zones, there would need to be a means to allow network developers to exercise rights to construct and operate heat networks in these zones. To enable this, we considered the need for regulation to create a system of district heating concessions, which would allow a range of different kinds of organisation to deliver part of the overarching district heating strategy, and could be awarded by competitive tender. The scenario on which we consulted, suggested that a concession would grant its holder exclusive rights to develop and operate new district heating within the concession zone in line with the LHEES.

47. To support investment in district heating, the scenario also suggested that these exclusive rights would have prevented another district heating developer from developing in that concession area, and could also have excluded other forms of heat supply in that area. The scenario also considered that a concession holder could be given certain responsibilities – some of which would be common across heat networks and handled through a licensing system (Section 4.B), and others that would be specific to the concession area and would act as key performance indicators against which the concession holder's activities would be judged.

¹⁴ Public sector bodies (including Housing Associations) have to issue invitations to tender for the supply of utilities including heat. SFT have produced information on 'Powers of Scottish public bodies to generate/ procure heat and electricity supplies, to supply heat and electricity to third parties, and the constraints on those powers' and 'Guidance on Delivery Structures for Heat Networks' for public sector bodies in Scotland wishing to develop district heating schemes with multiple heat users and/or heat sources and identifies the main delivery structures currently used and uses relevant case studies. Both are available at www.districtheatingscotland.com see section on 'Resources'. It should be noted, under normal circumstances where there is an existing district heating network it would need to bid along with other potential heat providers to provide heat to the public sector based on the tender.

Concessions- Summary of consultation responses¹⁵

48. There was general support amongst respondents for establishing some form of exclusive concessions for district heating, with a common benefit cited being a reduced risk to developers and local authorities in terms of the development and maintenance of district heating systems. Further benefits included the encouragement of supply investment, certainty of supply and providing long-term network development opportunities.
49. The majority of respondents (including most local authorities) agreed that if a system of concessions was established, local authorities should take a lead role in enforcing concessions in their areas as they hold the necessary local knowledge to do so. Additionally, local authorities already have powers to procure district heating schemes (e.g. under the Concession Contracts regulations¹⁶ or Public Contract regulations¹⁷). In terms of concession attributes, most respondents felt that:
- Concessions should be long term, to allow recovery of capital (concession lengths suggested by respondents ranged from 10 to 40 years);
 - Areas where district heating is the most suitable technology needs to be a key deciding factor in determining concession areas; and
 - anchor loads (e.g. public buildings, large industrial centres, social housing) are a key consideration.
50. Concerns were raised, over consumer protection and the need for regulation, monitoring and review. The need for consistency across Scotland was also highlighted, and the potential need for a central body to monitor concession design and progress, and to provide regulation and guidance.
51. Respondents also noted the need for flexibility in the system of concessions, to allow LHEES to respond to unforeseen challenges and changes to implementation, such as emerging low carbon and renewable technologies.
52. In terms of long-term ownership of district heating assets, post-concession, many respondents felt this should revert to the local authority or local authority-owned company, such as an energy service company (ESCO).

What we are proposing now – District Heating Consents

53. In analysing the consultation responses and wider advice, the Scottish Government has now looked in more detail at potential options that would allow district heating developers to exercise rights to construct and operate heat networks, and to support local authorities in securing these developments.
54. The Scottish Government wants to support local authorities to ensure district heating develops in a strategic manner in their area through our proposal for statutory LHEES. We see the LHEES as a key tool in providing information to the market on the most suitable areas for district heating, helping to secure greater investment from developers by identifying opportunities of which they might otherwise be unaware.

15 Details are available in para: 3.2.19 – 3.2.57, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

16 The Concession Contracts (Scotland) Regulations 2016. <http://www.legislation.gov.uk/ssi/2016/65/contents/made>

17 The Public Contracts (Scotland) Regulations 2015. <http://www.legislation.gov.uk/ssi/2015/446/contents/made>

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55. In addition to the LHEES, in order to further strengthen local authorities' existing powers, within and beyond the planning system, and to encourage local authorities to also use their existing powers to procure concessions or award contracts for district heating, we are proposing to introduce a new district heating consent system, which would be managed and enforced by the local authority.
56. Under our proposed approach, development of district heating would require the consent of the local authority. Local authorities would be given a new statutory power to award this consent, subject to the applicant meeting certain requirements set by the Scottish Ministers. This would ensure that district heating development was subject to a similar consenting regime as that for other energy utilities such as under the Electricity Act 1989 consents process, though with different requirements and thresholds. Requirements or conditions of the consent for applicants could include:
- the requirement to have a licence and meet licensing conditions (see Section 4.B) prior to any works taking place;
 - consideration of national heat, energy efficiency, renewable energy, emissions reduction, fuel poverty targets, etc;
 - strategic considerations for energy efficiency and heat decarbonisation within LHEES;
 - other local targets, plans, obligations and/or objectives;
 - socio-economic criteria and assessment;
 - a specified duration within which construction of the development must commence; and
 - any other conditions set out by the Scottish Ministers, or which the local authority may wish to specify.
57. The Scottish Ministers would develop national guidance for applicants seeking district heating consent and for local authorities who would be responsible for assessing applications and issuing consents. This guidance would include expected timescales for decisions, could include thresholds to which the consenting regime applied and could include details of any appeals process which might be appropriate. Where appropriate, it would be a requirement of applicants to provide evidence of customer engagement to ensure that there is a sufficient demand from customers to sign up to connect to district heating once it is available. In district heating zones, this would build on the socio-economic assessments that will have been carried out by the local authority to identify the zone as well as signalling to potential customers that district heating is an option and thus allow customers, a choice regarding upgrading their existing heat systems.
58. In a situation where a district heating consent has been awarded, but the district heating developer is not able to complete construction of the development as specified in the conditions of the consent, we are seeking views on the appropriateness of any potential options for a relevant body to act as the 'developer of last resort' to ensure completion of development. This could for example be a direct power of the relevant local authority or a power for the Scottish Ministers, who may delegate this to another body. As an alternative route to ensure completion of development we are also considering the potential to introduce performance standards (means of incentivising or penalising non-completion of work) through licence conditions (see Section 4.B).

59. Any conditions associated with a district heating consent could be set out in perpetuity or could be subject to variation or review, as set out by the Scottish Ministers.
60. 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 LHEES) 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.
61. In developing our proposals for a district heating consent, we will explore the options for ensuring that district heating operators have similar or the same rights as other statutory undertakers for permitted development and wayleaves. At this stage we envisage energy centres and heat storage facilities would continue to need to apply for planning permission before they are constructed to enable all the proposal and site specific matters to be addressed. We recognise that if statutory wayleaves are introduced for district heating, that thought will need to be given to compensation for the use of the land and to wider issues in relation to property rights.
62. We therefore envisage that under our proposed district heating consent system, development of district heating would be initiated in two ways:
- a) 'Strategy driven' – by a local authority identifying an area as suitable for district heating through zoning within its LHEES, and then:
 - i. inviting third parties to apply to develop and operate this through use of existing procurement powers and then granting them consent, following that procurement process; or
 - ii. developing the network itself using its existing powers to construct, lay and maintain pipes and associated works for the purpose of conveying heat¹⁸ subject to conditions that would be equivalent to those provided for in a consent; or
 - iii. initiating a collaboration with other third parties (i.e. public or private bodies)¹⁹.

Local authorities would still need to ensure that the consenting procedure had been fulfilled, either after or during one of the above options being completed, and that relevant conditions are met, such as licences being held.
 - b) 'Speculative' – by a third party *making* an application to develop district heating in any area (either zoned in an LHEES or not zoned in an LHEES) – e.g. a private district heating developer.
63. By proposing this approach, the Scottish Government envisages a more proactive, strategic approach being taken towards district heating

18 Section 170A of the Local Government (Scotland) Act 1973.
<http://www.legislation.gov.uk/ukpga/1973/65/section/170A>

19 Where public sector bodies (including Housing Associations) are involved they would have to issue invitations to tender for the supply of utilities including heat. SFT have produced information on 'Powers of Scottish public bodies to generate/procure heat and electricity supplies, to supply heat and electricity to third parties, and the constraints on those powers' and 'Guidance on Delivery Structures for Heat Networks' for public sector bodies in Scotland wishing to develop district heating schemes with multiple heat users and/or heat sources and identifies the main delivery structures currently used and uses relevant case studies. Both are available at www.districtheatingscotland.com see section on 'Resources'. It should be noted, under normal circumstances where there is an existing district heating network it would need to bid along with other potential heat providers to provide heat to the public sector based on the tender.

development by local authorities through the LHEES – identifying potential areas for development, and then initiating processes to secure that district heating, in both areas of existing buildings, or in areas where new building development is anticipated. In particular, public sector buildings could be identified in discussion with the local authority, and as part of the procurement of utilities²⁰, as ‘first movers’ helping to develop these networks (see Section 4.D), making them more attractive to the market. The process of preparing the LHEES would help to overcome lack of market information which may prevent developers identifying potential areas suitable for district heating, and would signal to investors future areas for development.

64. Our proposed approach would also continue to allow developers to make speculative proposals for district heating either partially or entirely outwith district heating zones, for example where major changes to a building with a significant heat load might provide the opportunity to install a new heating system that could connect to district heating. Where a developer is requesting consent for a speculative proposal outwith district heating zones, there may be a greater burden on the developer to provide the evidence to demonstrate that their proposal is the most socio-economically appropriate solution in that area since the local authority will presumably hold no information to show this outside district heating zones. Developers would be required to provide any evidence as may be required by the local authority. The decision to award a consent ultimately lies with the local authority and the fact that the potential district heating scheme may be outwith designated district heating zones may be considered in making that decision.
65. Overall, through our proposed consenting approach, the Scottish Government wants to find a balance between ensuring that district heating development grows in a strategic, planned manner, guided by LHEES, and that it can continue to be dynamic, responding to new and unanticipated proposals for development. Our proposed dual approach consenting process aims to achieve this balance between strategy-driven and market-driven development through a dedicated consenting process which will be both responsive to the wishes of developers, and driven by the wider objectives of local authorities in securing their LHEES objectives for energy efficiency, heat decarbonisation and fuel poverty under SEEP.

Q4. What are your views on the proposed district heating consent process?

In particular, what are your views on:

a) the appropriateness of any potential options for a relevant body to act as ‘the developer of last resort’, to ensure completion of development?

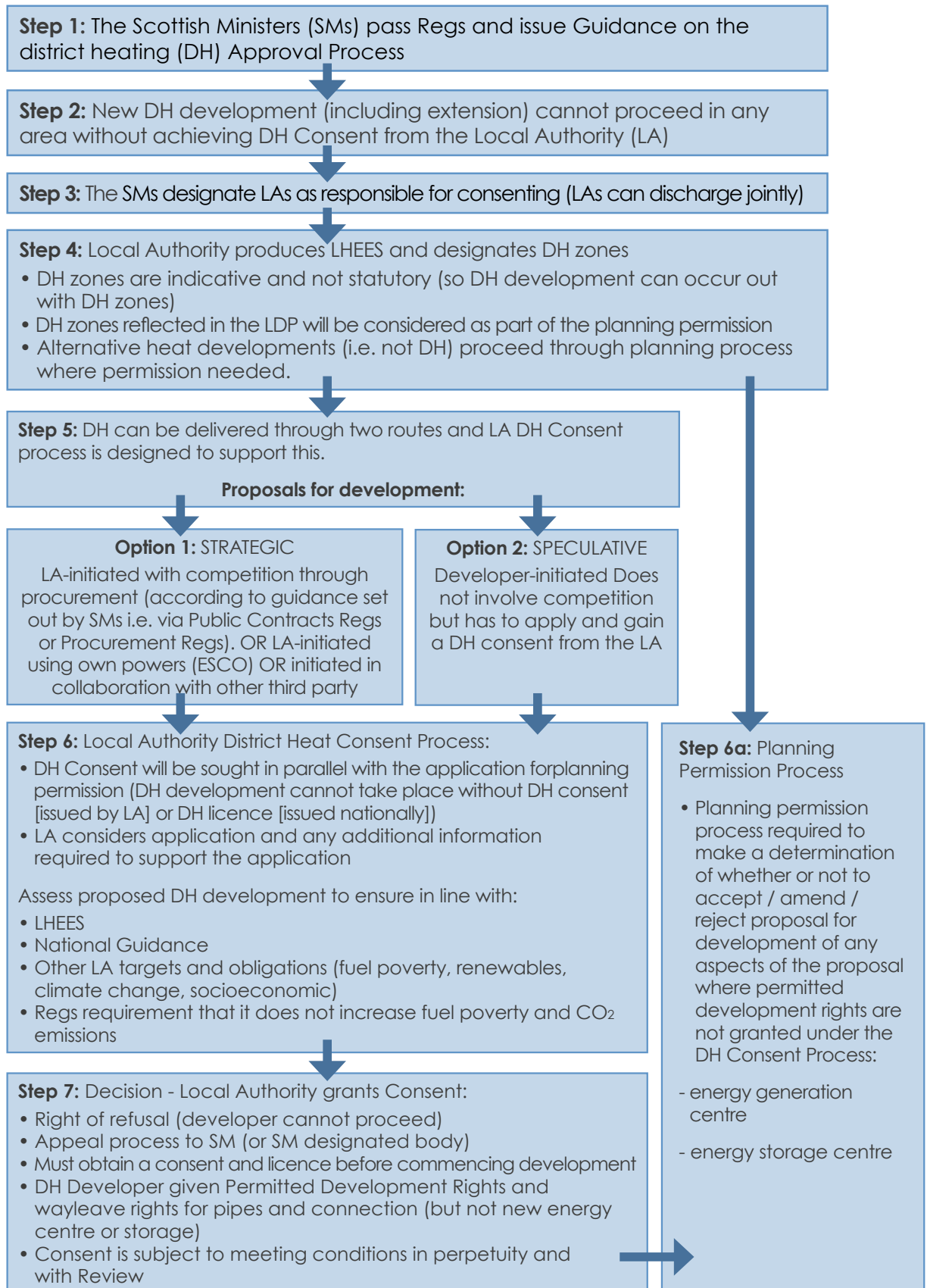
b) options for ensuring that district heating operators have similar or the same rights as other statutory undertakers for permitted development and wayleaves

Please provide any appropriate evidence to explain your answer.

²⁰ Refer to footnote 19.

District Heating Consenting Process

This diagram provides an illustrative indication of how the consenting process might work – our consultation document recognises that further evidence will be required to finalise the detail of these processes.



3.C SOCIO-ECONOMIC ASSESSMENT

Summary of previous consultation

66. In the previous consultation, we set out how socio-economic assessment would be used in the LHEES to assess the energy efficiency interventions, to identify the most appropriate heat technology for an area, designate zones (including district heating zones) and award concessions, ensuring consistency with national objectives. Our scenario also set out how project and individual building level socio-economic assessment could be used to determine minimum thresholds for connections to district heating, such as an affordability threshold to measure impact on consumer energy bills and fuel poverty.

Summary of consultation responses

67. There was fairly broad support for socio-economic assessment at project level to include an assessment of the impacts on consumers of the requirements to connect with the customer; again reducing fuel poverty was seen as a priority. Socio-economic assessment was also seen as an important element in identifying district heating zones in LHEES and awarding concessions. In relation to the socio-economic assessment, there were a number of approaches suggested by respondents; these included standardised methodology; heat tariff being cost effective for customers; social benefits being key (not just financial benefits); distributional benefits being included; inclusion of emissions reduction, health benefits, air quality improvements and fuel poverty reduction among others. More details are available in the consultation analysis²¹.

What we are proposing

68. We propose that socio-economic assessment would be a statutory requirement at three levels: of LHEES (strategy level), of district heating developments (project level) and for use during mediation for connecting individual buildings (heat users and surplus heat suppliers).
69. The Scottish Government would provide statutory guidance for socio-economic assessment in the form of a detailed methodology, laying out the overarching process and standard assumptions.

Role within LHEES (strategy level)

70. We propose that local authorities would be required to undertake a strategy level socio-economic assessment, following the statutory guidance, in developing their LHEES. This assessment should demonstrate that the zones have been designated appropriately according to national and local objectives, including fuel poverty, and are consistent with neighbouring local authorities. The assessment should be publically available alongside the LHEES.
71. The strategy level socio-economic assessment would, along with the LHEES, be used by district heating developers, heat users, and surplus heat suppliers to inform their project plan / business cases / investment decisions.
72. The strategy level socio-economic assessment would also be used by an approvals body to help determine approval of LHEES, and by the local authority to monitor the impacts of implementation.

21 Para: 3.2.22 – 3.2.28, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

Role within district heating consenting process (project level)

73. We proposed that district heating developers would be required to undertake a project level socio-economic assessment and submit it as part of the application process for district heating consent. The local authority would use the project level socio-economic assessment submitted by the district heating developer to decide on district heating consent applications. It would also use assessments as part of the criteria to judge tenders.
74. The project level socio-economic assessment would also be used within any appeals process (see Section 3.B) to help determine challenges to contracts and concessions awarded for projects.

Role for connecting heat users and surplus heat suppliers (building level)

75. We propose that building level socio-economic assessment would also be used by third parties to inform decisions to connect individual buildings to district heating schemes to take heat or supply surplus heat.
76. Where there is a dispute between these parties over connecting to a district heating scheme, we propose that any appointed mediation body (see Section 4.E) would use the building level socio-economic assessment in its determination.

Q5. What are your views on the proposals for socioeconomic assessment?

3.D DATA FOR LOCAL HEAT & ENERGY EFFICIENCY STRATEGIES**Summary of previous consultation***Heat demand*

77. In the previous consultation, we set out a scenario whereby local authorities would be supported in developing LHEES with the provision of national guidance and data sets, such as the Scotland Heat Map. We also set out where data on surplus heat from industrial sites could be made available to local authorities in supporting them with development of LHEES and in connecting industrial sites to district heating.

Surplus Heat

78. A scenario was described where industry would be required to make data on surplus heat available to public authorities. Scottish Environment Protection Agency (SEPA) would use the data to investigate efficiency and onsite heat recovery, with data on remaining available heat (which could be exported), used by local authorities to inform the development of their LHEES.

Summary of consultation responses*Heat demand²²*

79. Respondents to the consultation commented that local authorities would need more data to develop LHEES than is currently available in Scotland's Heat Map and the Energy Performance Certificate (EPC) Register, in particular, data on

²² Details are available in para: 2.2.15 – 2.2.22, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating'. See: http://www.gov.scot/LHEES_and_DHR_Analysis

electricity and gas consumption. Potential sources of these data suggested included the Department of Business, Energy and Industrial Strategy (BEIS), or network operators or suppliers (perhaps making use of SMART meter data).

80. Some respondents commented that existing available data in Scotland's Heat Map and the EPC Register needs to be more robust and 'real time' in order to develop LHEES.
81. The voluntary nature of data provided was seen as potentially limiting its accuracy. Respondents also identified **gaps in data** including data collection from district heating schemes. However, respondents indicated that any requirement to provide such data should not place any unnecessary burden on local authorities or others.

Surplus Heat

82. Respondents' views were mixed over whether industry should be mandated to make data on their surplus heat available to public authorities or whether it should remain voluntary. Local authority stakeholders consider that it should be mandatory, as the data are required to develop LHEES, whereas industry stakeholders are concerned about commercial confidentiality and the expertise and resources to provide data²³.

What we are proposing

Heat demand

83. Local authorities already have access to some data on energy use and factors that influence heat demand through existing sources such as Scotland's Heat Map and the Energy Performance Certificate (EPC) register. Wherever possible, we propose that this should be supplemented with data on gas and electricity consumption with improved accuracy to enable local authorities to develop LHEES. This data would be subject to strict data sharing agreements.

Local authorities would continue to seek other voluntary agreements from large heat users and other third parties so that local authorities have access to as much relevant data as possible, that would be necessary to develop LHEES.

Surplus Heat

84. We propose to continue to encourage industry with surplus heat to provide data about potential off-site heat provision on a voluntary basis to local authorities for the development of LHEES. In order to facilitate this, we are now calling for further evidence from stakeholders on how data on surplus industrial heat could be made available to develop LHEES or a detailed district heating project
85. We understand that one of the major barriers to industry providing data is its commercial sensitivity and are keen to better understand how these could be overcome.

²³ Details are available in para: 3.4.18 - 3.4.28, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

86. Industry receives support from a number of partners such as Scottish Enterprise and SEPA as set out in the Scottish Manufacturing Action Plan. For example, Resource Efficient Scotland are trialling Energy Measurement and Quantification support²⁴ to assess energy flows and waste heat streams at energy intensive industrial sites in Scotland identify opportunities for heat recovery and reuse, both on site and for export off site.

Q6. What are your views on the proposals for data for LHEES?

Please explain your answer, including any available evidence or examples.

Further call for evidence

87. We are also calling for further evidence and would like your views on the following questions.

Q7. What types of data information would industry be willing to provide a local authority or national delivery mechanism to develop LHEES, so that they can identify opportunities (potentially in aggregate) for heat demand reduction and heat recovery, both on and off site?

Q8. What data from industry would be most helpful in developing district heating projects?

Q9. What data could be provided without compromising competitiveness of these organisations.

Please explain your answers, including any available evidence or examples.

²⁴ Companies interested in this support should contact calum.robertson@zerowastescotland.org.uk if they wish to participate. As a trial support service availability is limited and the trial aims to test the approach across a range of industrial sectors, focus on sites with high potential for the identification of large scale heat recovery opportunities and coordinate support activity with partner organisations such as Scottish Enterprise. Support to date has consists of 10-15 days consultancy time with outputs including a Sankey diagram identifying energy inputs, heat flows and waste heat streams and identified opportunities for heat recovery and reuse.

4. DISTRICT HEATING LICENSING AND CONNECTION

4.A BROAD PRINCIPLES FOR DISTRICT HEATING REGULATION

What we consulted upon

88. In our policy scoping consultation in January 2017 we set out a possible regulatory scenario aimed at helping district heating to achieve its full potential. This regulatory scenario would:
- establish district heating zones;
 - create concessions and provisions for connecting users to district heating networks within these zones;
 - set minimum technical and consumer protection standards, enforced by licensing of district heating operators; and
 - look at opportunities to make use of low cost, low carbon surplus heat from industry.

Summary of consultation responses²⁵

89. The broad principles for regulation outlined in the consultation were generally accepted and while there were various suggestions for priority areas, a key theme was the importance of tackling fuel poverty.
90. Consumer protection was another key principle identified by respondents and this included ensuring security of supply.
91. The regulation of technical standards, perhaps in a way similar to that seen for other utilities, was also seen as important.

4.B LICENSING FOR DISTRICT AND COMMUNAL HEATING

Licensing – What we consulted upon

92. The regulatory scenario on which we sought feedback included the creation of a licensing system for district heating, covering consumer protection and technical standards. Licences would also be a means of conferring certain rights and opportunities on district heating developers.
93. The scenario considered drawing on the work of the Heat Trust in mirroring consumer protections available to gas and electricity customers and on any requirements the Scottish Housing Regulator places on heat supply to social housing tenants. (We noted that regulation of consumer protection is a reserved issue.)

25 Details are available in Section: 3.1, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

94. The scenarios suggested that technical standards could be based on the Heat Networks Code of Practice developed by the Association of Decentralised Energy (ADE) and CIBSE. The ADE is currently developing a compliance scheme, to be launched in the Autumn. However, technical standards are likely to be more specific than the Code of Practice, establishing common network parameters for district heating in Scotland to ensure interoperability of different networks, as recommended by the Expert Commission.
95. In the scenarios a licensing system could be used to confer enabling powers on licence holders. Holding a licence could also be a condition of holding a concession and of being eligible to apply to public authorities for specific buildings to be required to connect to a network.
96. Heat networks present specific monopoly issues distinct from electricity and gas. Their scale means competition among multiple suppliers operating across a single network has not often been achieved in other countries and is unlikely to be viable for the foreseeable future in Scotland. The prices operators charge, the financial returns they make and other licensing details, would require further investigation and would be subject to further policy development and consultation. A licensing system could be more effective than general standards as it could establish a robust enforcement mechanism. The regulatory scenario set out that a significant breach of the terms of a licence could result in the licence holder being deemed unfit to operate district heating in Scotland. Under the scenario an organisation whose licence was revoked could lose its concessions, which would transfer to a Supplier of Last Resort which would manage the concessions until they could be tendered to other organisations.

Licensing – Summary of consultation responses²⁶

97. Almost all respondents to our first consultation, who provided a definitive response, agreed that, as district heating becomes more widespread, it will need to become a licensed activity (47 responses out of 56 replies). Both consumer protection and consistent standards were seen as important issues that would be protected by a licensing system. Respondents suggested the Heat Trust and Chartered Institution of Building Services Engineers (CIBSE) as measures that could be included. Respondents suggested that there is a need to provide a national framework applicable to all local authorities across Scotland to ensure consistency.
98. There was also a view, however, that adherence to strict standards might negate the need for formal licensing. Some respondents felt a licensing system might prove onerous, overly bureaucratic or costly and may act as a barrier to operators, particularly for public sector or small organisations that may wish to take out a licence. To address this it was suggested that the Scottish Government engage with industry when developing the licensing system to ensure a proportionate, light-touch and well-designed system.
99. On the question of who should issue District Heating Licences and ensure that technical standards are being met, most of the small number who commented suggested a new national or central body; smaller numbers said the Scottish Government or SEPA.

²⁶ Details are available in Section: 3.5, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating'. See: http://www.gov.scot/LHEES_and_DHR_Analysis

100. While a small number of respondents felt that the benefits of the concession area would outweigh the costs of the licensing arrangements, a similar number said it was not possible to tell at this stage. Respondents highlighted that district heating operators would need a long time period to recoup investment (in concessions and licenses). Equally, the licensing system would need to ensure affordability for the customers as well as providing access to an independent arbitrator to ensure consumer protection, in particular for vulnerable customers. Respondents agreed that a licensing system was the best way to confer enabling powers in order to “level the playing field” with other utility providers.
101. Respondents suggested principles of any licensing system should include: transparency, sustainability, fair pricing, security of supply, consumer protection, skills and technical experience, industry-wide standards, financial viability, environmental considerations, including energy efficiency and decarbonisation of heat sources.
102. A related theme which emerged in responses was that in the event of failure of a licence holder or concession holder, local authorities may have to become the supplier of last resort and that they would need to have mechanisms in place to enable this. There were a small number of comments that the Scottish Government may need to be the supplier of last resort.

Licensing - What We Propose

103. In order to be able to develop and/or operate a district heating or communal heating scheme, we propose that a developer/operator must have a licence. The licence would ensure that the licence holder meets any appropriate fit-and-proper-person tests and that technical and operational quality standards (using the CIBSE Code of Practice), network compatibility, and would codify existing UK-wide consumer protection frameworks. There would be thresholds for requirements for a licence and the licensing regime would be as light touch as possible to achieve aims.
104. Developers could apply for a consent without at that point holding a licence, however before development and operation of the district heating network could commence, a licence would need to be obtained.
105. We propose that licences would be issued and monitored nationally, in line with regulatory provisions which would be set out by the Scottish Ministers. The national licensing function could be exercised by an existing body, or as part of a wider national governance framework for SEEP (see Section 4.E). We will explore the precise purpose of any national licensing body. This may for example include being an economic regulator, acting in the interest of customers, and potential customers, reducing emissions and fuel poverty objectives.
106. Licences would be issued, by a national body, with conditions to ensure that the licence holder reports appropriately and their sites meet national standards and any other appropriate performance standards (including, if necessary, penalties for non-compliance). In the event of significant breach of licence conditions the regulator would ultimately have the power to revoke the licence as is the case with other utilities.
107. We propose that any licence conditions would be consistent with the EU Energy Efficiency Directive's Article 14 requirement that for any new or existing district heating networks, any new or replacement or substantial refurbishment of heating equipment above specified thresholds, should include consideration via cost-benefit analysis of potential use of waste heat from nearby industrial plant²⁷.

27 Article 14 (5 – 8) of the EU Energy Efficiency Directive includes a requirement that a cost benefit analysis

108. We propose further exploring contingency measures that would ensure that market stability and customers' heating supply was maintained in the event of a District Heating supplier (or developer) failing either through insolvency or failing to meet conditions of their licence²⁸. Contingency measures, for example, exist for the gas and electricity sector in the event of failure of an operator or loss / revocation of licence . In addition, in the event of failure to complete a development we are also considering the potential to introduce performance standards (means of incentivising or penalising non-completion of work) through licence conditions (see Section 4.B).

Q10. What are your views on our proposed approach to district heating licensing?

Please explain your answer, including any available evidence or examples.

4.C CONSUMER PROTECTION

Consumer Protection - What we consulted upon

109. The scale of district heating has meant that competition between operators across a single network has not often been achieved in other countries and that it is unlikely to occur in Scotland in the near future. As heat networks are therefore effectively operated by monopoly providers, the Scottish Government recognised that specific risks in relation to consumer protection²⁹ may exist in district heating provision.
110. In light of this, in our first consultation the Scottish Government considered including minimum consumer protection standards in a licensing system for district heating operators to ensure fairness between users and operators of heat networks. This would likely increase consumer acceptance of district heating, which would in turn aid its development.
111. The regulatory scenario suggested the licensing system would draw on established industry schemes – such as the Heat Trust – to provide protections similar to those which gas and electricity customers enjoy.
112. However, the provision of consumer protection is a reserved issue. As such, the ability of the Scottish Government to provide consumer protection within district heating would depend on the UK Government agreeing to devolve powers specifically for the purpose of consumer protection in district heating or on the UK Government developing the appropriate consumer protection aspects of any licensing regime.

(CBA) is carried out when a new district heating and cooling network is planned or in an existing district heating or cooling network a new energy production installation is planned or an existing installation is to be substantially refurbished where the total thermal input of the plant in question exceeds 20MW. The CBA must assess the cost and benefits of utilising the waste heat from nearby industrial installations.

28 Guidance on supplier of last resort and energy supply company administration orders, See: https://www.ofgem.gov.uk/system/files/docs/2016/06/supplier_of_last_resort_revised_guidance_-_2016.pdf

29 Consumer protection is a system of laws and organisations that creates and upholds consumer rights. These rights aim to ensure that consumers will be treated fairly when entering into contracts with a business or trader and will have remedies if they are treated badly.

Consumer Protection - Summary of consultation responses

113. Almost all respondents agreed that district heating should become a licensed activity, for reasons relating to consumer protection, including price and security of delivery³⁰.
114. However, there was a greater variety of views on how consumer protection could be provided. Some respondents felt that the Heat Trust, a current, voluntary scheme led by industry offered a sufficient consumer protection framework. However, others suggested that there is a need to explore whether mandatory consumer protection measures should be introduced to ensure greater oversight of operators and to increase the credibility of heat networks. A smaller number suggested that the Heat Trust could act as a starting point for the development of district heating licence conditions.
115. A number of stakeholders identified specific measures which were felt to be important in providing suitable consumer protection in district heating. These included: pricing, affordability and transparency of bills / tariffs; joining and leaving rights; guaranteed minimum standard of supply; impartial and independent advice; a process for breakdowns and maintenance; complaints handling and a mandatory dispute resolution service; and a supplier of last resort.
116. One respondent commented on legislative issues, suggesting that although the Scottish Government was unable to enact new legislation to provide consumer protection, it would be possible to introduce a licence for district heating operators which could include existing protections provided under current law. Alternatively, a small number of stakeholders suggested that the Scottish Government continue to work with the UK Government to seek the creation of consumer protection provisions for district heating on a UK-wide basis, or through executive devolution of powers to Scotland, in lieu of legislative competence³¹.

Consumer Protection - What we are proposing

117. As set out in Schedule 5 of the Scotland Act 1998, there are specific matters over which the Scottish Parliament cannot legislate. These include reservations in relation to regulation of consumer protection (outlined in Section C7)³².
118. However, the Scottish Government will set out in guidance the existing, UK-wide consumer protection framework which already applies to district heating. We expect that the rights and responsibilities which this framework establishes for district heating users and operators will be complied with.
119. Meanwhile, the Scottish Government intends to continue to press for further devolution of consumer protection – both in full and specifically in district heating – to ensure that district heating consumers³³ benefit from the same protections afforded to users of other utilities. We will also explore the protections which can be extended to microbusiness customers through licensing of Scotland's district heating market.

30 Para: 3.5.1 – 3.5.7, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

31 Para: 3.5.8 – 3.5.18, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

32 Under which the UK Parliament retains the power to regulate the supply of goods and services to consumers.

33 A "consumer" is defined in the Consumer Rights Act as "an individual acting for purposes that are wholly or mainly outside that individual's trade, business, craft or profession."

120. The Scottish Government continues to work with the Association of Decentralised Energy (ADE) on the development and implementation of voluntary schemes and standards, namely the Heat Trust on consumer protection and on the Codes of Practice for the UK. We currently require operators of large-scale district heating schemes which receive Scottish Government support through our District Heating Loan Fund (DHLF) or Low Carbon Infrastructure Transition Programme (LCITP) to be Heat Trust members as a condition of funding. We may now look to extend this requirement to small-scale projects, with a possibility of reviewing the threshold to zero.
121. Additionally, the devolution of consumer advocacy and advice through the Scotland Act 2016 provides an opportunity to design a system that is focused on ensuring consumer policy is person-centred and focused on bringing tangible benefits. In particular, we will work to ensure practical solutions are sought to longstanding consumer problems, and that the consumer interest is at the heart of regulatory and policy decision-making. We will publish a separate consumer consultation later this year that will set out more detailed policy proposals.
122. In relation to district heating specifically, we will investigate how advice can be provided to district heating customers in Scotland to help users to ensure they are operating their system effectively and are assisted to control their bills – whether through an independent source and/or licenced operators and how metering data can be used in this provision.
123. We will explore how a robust dispute resolution mechanism – including the consideration of an ombudsman – can be incorporate into our proposed licensing system.
124. To ensure that potential heat users have access to relevant information we will also seek to improve the provision of information to district and communal heating consumers in Scotland by making amendments to the Recommendations Report of Energy Performance Certificates (EPCs).

Q11. Taking into account the limitations of the Scottish Government's legislative competence in relation to consumer protection:

- a) what are your views on our proposals around consumer protection
- b) how do you think could we provide a robust complaint resolution process in relation to District Heating in Scotland?

Please explain your answers, including any available evidence or examples.

Q12. What are your views on how consumer advice should be provided for district heating customers in Scotland – what form should this take? Who should it be aimed at? What should be provided?

Please explain your answers, including any available evidence or examples.

4.D ENABLING CONNECTIONS

HEAT USERS

What we consulted upon

Existing buildings

125. In our previous consultation we recognised that a voluntary approach to developing district heating has worked well to date, but that investment has been piecemeal. We suggested that in order to achieve a larger rollout, further coordination beyond this voluntary approach would be required. Connecting significant heat loads would maximise the penetration of district heating and reduce the risk of wasted investment from underutilisation. We considered a scenario which focused initially on compelling existing buildings to connect on the basis of a positive project level socio-economic assessment, with public authorities having the power of last resort to direct connects when other approaches have failed.

New buildings

126. In our previous consultation we considered that LHEES could create the conditions to promote and support the development of district heating in new developments. We set out a scenario where LHEES and Local Development Plans would operate under separate legal regimes but would be considerations in the other. They would be interdependent - for example local authorities could use LHEES to inform the location of new industrial zones in the development plan.

Summary of consultation responses

*Existing buildings*³⁴

127. Many respondents said that connecting significant heat loads was essential to making district heating networks viable, and that long term heat supply commitments were needed to reduce investment risks.

128. However views on whether to give local authorities powers to compel connection of heat users to district heating networks were mixed. There was qualified support amongst some respondents, but only as a power of last resort and on the basis of demonstrable positive socio-economic assessment. However other respondents felt that the approach should remain voluntary, focusing on persuasion. There were also mixed views on whether exclusive concessions would mitigate risks by reducing costs and providing certainty over level of demand.

New buildings

129. Respondents felt that LHEES and local development plan should be aligned³⁵.

³⁴ Details are available in para: 3.3.12 – 3.3.21 and para: 3.3.34 – 3.3.42, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

³⁵ Details are available in para: 3.3.69 – 3.3.76, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

What we are proposing

Existing buildings

130. Under Part 4 of the Climate Change (Scotland) Act 2009, public bodies are required to exercise their functions in a way that contributes to the delivery of the targets set in Part 1 of the Act (for greenhouse gas emissions reduction). We propose that the Scottish Ministers would require the public sector to assess the potential for using low carbon heat, including the connection of its buildings to district heating, in collaboration with local authorities preparing their LHEES, and any local-authority-initiated procurement process. In addition, we propose that the Scottish Ministers could also encourage (e.g. via administrative arrangements, funding etc.) public sector connection where it is socio-economically cost effective to do so. Such a requirement would need to take account of the constraints of Scottish public procurement regulations. This could help the public body demonstrate that it is exercising its functions in a way that contributes towards Scotland's climate change targets as required by the Climate Change (Scotland) Act 2009. In addition, we will explore opportunities to engage and promote district heating to local authorities and the wider public sector, including updating the guidance on public bodies climate change reporting.

New buildings

131. We propose that local authorities would continue to encourage new buildings (public and non-public sector) to connect to heat networks via our proposed district heating consent process (Section 3.B), with new provision to require them to undergo socio-economic assessment, and incentives.

132. Scottish Planning Policy encourages the development of heat networks, including the safeguarding of piperuns within developments and to the curtilage of development for later connection to heat networks:

“Local development plans should support the development of heat networks in as many locations as possible, even where they are initially reliant on carbon-based fuels if there is potential to convert them to run on renewable or low carbon sources of heat in the future. Local development plans should identify where heat networks, heat storage and energy centres exist or would be appropriate and include policies to support their implementation. Policies should support safeguarding of piperuns within developments for later connection and pipework to the curtilage of development. Policies should also give consideration to the provision of energy centres within new development. Where a district network exists, or is planned, or in areas identified as appropriate for district heating, policies may include a requirement for new development to include infrastructure for connection, providing the option to use heat from the network”³⁶.

133. Future versions of Scottish Planning Policy will have regard to Scottish Government strategies and requirements on district heating in its preparation. Planning authorities would continue to have their existing discretionary planning powers, to encourage the infrastructure needed to make connections to district heating.

Q13. What are your views on the proposed approach to connecting heat users?

36 Scottish Planning Policy, See: <http://www.gov.scot/Publications/2014/06/5823/6>

SURPLUS HEAT SUPPLIERS

What we consulted upon

As well as exploring data provision by potential heat suppliers (see Section 3.D), we explored scenarios in two areas:

Supplying heat

134. In our previous consultation we recognised that surplus heat cannot be the main heat source for district heating networks (due to interruptibility, compatibility with industrial batch processes etc), and that surplus heat could only be supplied once district heating networks were established.
135. Therefore we suggested a phased approach to connection and supply of surplus heat into district heating networks identified by LHEES starting with enabling and ending up with a directive phase.

Development of new plant

136. We set out a scenario where new industrial plant would be required to be 'district heating ready' (which could mean installed equipment for connection and/or relevant buildings included in planning permission and space safeguarded for pipework and necessary equipment), and that there could be a regulatory power to require new plant to connect to district heating networks.
137. The scenario also included that LHEES could be a consideration in the allocation of industrial sites, informing the local development plan, and vice versa.

Summary of consultation responses

Supplying heat³⁷

138. There were mixed views over compelling the supply of surplus heat to district heating networks. Most respondents considered that an enabling approach for supplying surplus heat was appropriate, with compulsory mediation appropriate in some circumstances and direction as a last resort where there were security of supply concerns.
139. Respondents recognised that there are challenges and barriers to supplying surplus heat that need to be addressed: reliability of supply, capital costs, risk, quality of waste heat and determining a heat price that balances the need to incentivise business and ensure districting heat doesn't create fuel poverty.
140. In particular industry respondents said that there are perverse incentives to supplying surplus heat to district heating networks: the PPC Regulations required to continually improve plant efficiency to reduce the surplus heat; supplying heat isn't their main business so contracts shouldn't oblige them to provide uninterruptible supply or include penalties; the ownership structure and business planning cycles are at odds with the longer term planning cycles required to reduce risks for district heating; and that there is a lack of appropriate skills and business models for industry to supply surplus heat to district heating networks.
141. Respondents suggested that incentives could be provided to reduce the payback period for investing in connecting to district heating networks.

³⁷ Details are available in Section: 3.4, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

142. Some respondents did not agree with the idea of a mediator when parties could not reach agreement, saying that local authorities do not have a role to intervene in contractual negotiations outside their own assets.

Development of new plant³⁸

143. There was qualified support from respondents for new industrial plant to be 'district heating ready', but only within a district heating zone identified by LHEES and where there is demand for heat. Being district heating ready should not reduce the viability of the development or lead to extra heat being produced.
144. Respondents said that the local development plan and the planning regime are most appropriate ways to ensure new industrial buildings connect district heating ready, ensuring decisions are appropriate for the local area. Being district heating ready should be a requirement of planning consent or building regulations.

What we are proposing

Potential supply of heat to district heating schemes: existing plant and new plant

145. We propose a phased approach for non-domestic sectors with potentially usable surplus heat, applying to both existing and new (including significant refurbishment or expansion) plant, to connect and supply heat:
- Phase 1 – voluntary approach: non-domestic sectors with potentially usable surplus heat would be encouraged to connect and supply to heat networks, but it would be left to market forces;
 - Phase 2 – enabling approach: where non-domestic sectors with potentially usable surplus heat and heat network operators cannot reach an agreement, but where socio-economic assessment demonstrates it would be viable, either party can seek mediation from a designated body. Note the mediation does not compel connection or supply; and
 - Phase 3 – compulsory mediation: where neither non-domestic sectors with potentially usable surplus heat, nor heat network operators have engaged in discussions for the supply of surplus heat, but where socio-economic assessment demonstrates that it would be viable to zone an area for district heating, those parties could be required to enter into discussions mediated by a designated body. We are still investigating the costs and benefits and effectiveness of this third phase and would welcome any evidence in this area.
146. While mediation will be provided, the outputs of these discussions cannot ultimately compel connection or supply between two third parties, though may be considered in any future licensing or consenting processes. We propose that mediation would be carried out individually or jointly by relevant consenting bodies or regulators such as local authorities, SEPA or the national delivery mechanism (see Section 4.E).

³⁸ Details are available in para: 3.4.48 – 3.4.53, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

147. Planning authorities would continue to have their existing discretionary planning powers, and SEPA as statutory consultee, to encourage the infrastructure needed for new non-domestic sector developments with potential useable surplus heat to make connections to district heating.

Q14. What are your views on the proposed phased approach to non-domestic sectors with potentially usable surplus heat?

Please explain your answers, including any available evidence or examples.

148. SEPA currently regulates activities in the non-domestic sector that impact on the environment through a number of individual regulatory regimes (see Box 1), some of which can include consideration for energy efficiency and heat. However energy efficiency and heat are not the primary objective of these existing regimes. Therefore we are now calling for evidence from stakeholders to assess the scope and desirability for achieving more in the areas of energy efficiency and heat within the current suite of regulatory regimes. The information provided will be used to inform future policy development.

Further call for evidence

149. In this call for evidence we would like your views on the following questions.

Q15. Requiring all regulated non-domestic sectors (see Box 1) with potentially usable surplus heat to carry out energy efficiency assessments, including heat (and its recovery, and onsite and offsite use), and implement recommendations where feasible.

Q16. How should energy efficiency (including heat) be assessed across the regulated non-domestic sectors – including consideration for energy efficiency beyond the site boundary?

Q17. Could a more consistent approach be achieved within the PPC regime, with the existing energy efficiency requirements for Part A sites being applied to Part B sites?

Q18. Which benchmarks or criteria should be used / considered in assessing energy efficiency?

Q19. What range of industrial processes should be covered, including size and sector, and why?

Please explain your answers, including any available evidence or examples.

Box 1: Current Regulatory Framework

Scottish Legislation

- Pollution Prevention and Control (PPC):
 - part A (combustion over 50 MW) - a systematic assessment of heat and energy efficiency (unless plant is also regulated under ETS); heat is considered a pollutant and energy efficiency must also be considered. Part B (combustion between 20 – 50 MW) – no requirement for energy efficiency but heat is considered a pollutant;
 - requirement for new or refurbished plant to undertake a cost benefit analysis for connecting to a district heating network;
 - Waste incinerators have to take into account SEPA's Thermal Treatment of Waste Guidelines which set energy efficiency standards and the requirement for a Heat and Power Plan setting out how these will be achieved.
- Medium Combustion Plant Directive (MCPD) – from 2018 will regulate combustion plant between 1 – 50MW with emission limit values. This has no energy efficiency requirements; and
- Water Environment (Controlled Activities) Regulation (CAR) – heat is a pollutant in relation to protection of the water environment but not the wider environment. There are no energy efficiency requirements.

UK Legislation

- EU Emissions Trading System (ETS) – a market based trading scheme which puts a price on carbon and requires industry to account for its emissions. Applies to combustion industries over 20MW and other specified industries;
- Energy Saving Opportunities Scheme (ESOS) – company groups from all sectors registered in Scotland that are over a certain size are required to undertake energy audits every four years which include energy saving opportunities.

For more information see www.sepa.org.uk

4.E ENABLING ACTIVITY AND ADDITIONAL AREAS FOR CONSIDERATION TO SUPPORT OUR REGULATORY APPROACH

What we consulted upon

150. In our previous consultation, we sought views on the potential impact upon local authorities of them having statutory functions around LHEES and district heating regulation. We recognised that the provision of appropriate support and resource would be vital in meeting our policy aims, building upon existing skills and expertise within local authorities and support structures such as the Heat Network Partnership. We also recognised that careful consideration would need to be given to the distribution of skills and resources across local and national levels.

Summary of consultation responses

151. Respondents told us that to support the development of LHEES, there would be a need for central government input to create Scotland-wide, standardised, information, data and resources, and make this available to local authorities. In addition, respondents suggested that there would be a need for financial resource for additional in-house staff and / or procurement of consultancy services. Finally, respondents told us that there was a need for technical resource and strategic guidance to support local authorities.

152. In terms of how to provide this support, there was a recurrent suggestion throughout the consultation, that SEEP as a programme, generally, and LHEES and district heating regulation by local authorities, specifically, would benefit from some form of oversight from a national body – either a Scottish Government department or agency, or an independent body. This would help in ensuring clear guidelines and support to provide a cohesive, consistent approach to attract investment into SEEP delivery programmes, and to provide reassurance to consumers. Respondents told us that national input could reduce the resource implications for local authorities, allowing local authorities to focus their efforts on successful local delivery and implementation of their priorities in their LHEES. Local authorities also sought specific support to help them prepare for LHEES ahead of any introduction of a statutory duty, and also ongoing support, thereafter, with delivery of SEEP programmes flowing from the LHEES³⁹.

153. Specific suggestions for a national body or other form of national oversight included:

- provision of guidance, advice or templates;
- setting and implementing national standards. Working in partnership with local authorities to ensure local targets are in line with national targets and priorities or to oversee targets; both for LHEES and overall SEEP targets;
- provision of regulatory oversight and scrutiny to ensure the long term interests of both consumers and network operators;
- overseeing consumer protection, including service provision and complaint resolution;
- raising awareness among consumers; trusted or independent sources of information will be required;

³⁹ Details are available in Section: 3.6, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

- issuing and enforcing concessions: as this would need multiple expert resources across Scotland, a national unit could provide specialist skills and would offer economies of scale. A national framework for issuing concessions would provide consistency;
- checking for consistency of concession design;
- a Scottish Government backed national energy company could take over failing concessions or post-concession;
- collecting and providing data or providing support to collect data;
- National benchmarking of heat supply pricing compared to alternative supply options; or conducting annual tariff reviews;
- issuing licences, again to ensure consistency and also that technical standards are met; and
- Provision of analytical skills, resources and techniques; this will be cost effective and ensure consistency⁴⁰.

What we are proposing – National Delivery Mechanism

154. Scotland's Energy Efficiency Programme (SEEP) is a 20 year infrastructure programme with an estimated investment in excess of £10 billion. As a multi-stakeholder programme, SEEP will span a range of elements, linking national level policies and regulation with local delivery programmes.
155. Given the scale and duration of the programme we recognise that there is a need for co-ordination to ensure consistent and sustained delivery across multiple parliamentary cycles, in line with the Scottish Government's long-term fuel poverty and climate change targets. Consistent, long-term delivery will be needed to realise societal-wide benefits - e.g. fuel poverty, health, regeneration, economic, environmental – which accrue over a number of years.
156. As a long term national infrastructure priority, the Scottish Ministers have already committed through the Infrastructure Investment Plan⁴¹ and Programme for Government to providing multi-year funding for SEEP, that is not tied into the cycle of an annual budget. In addition to its scale and duration, SEEP is technically complex requiring specialist input into its design and delivery, as evidenced in particular by consultation responses highlighted, calling for technical support and capacity to be provided nationally to assist local authorities in the preparation and approval of LHEES, and in the regulation of district heating. In responding to the previous consultation, we recognise the benefits that a national delivery mechanism for SEEP could bring in ensuring pooling of resources, and in helping to reduce resource implications for local authorities, as well as ensuring consistency across the programme.
157. There are a number of potential national delivery mechanisms that could support local authorities in delivering their proposed functions for LHEES and district heating regulation, and which could support delivery and governance of SEEP more widely, including:
- amending the functions of an existing independent body or government agency to co-ordinate and deliver SEEP;

40 Details are available in Section: 5.4, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

41 Infrastructure Investment Plan, See: <http://www.gov.scot/Topics/Government/Finance/18232/IIP>

- establishing a new body – either SEEP-only or with wider Energy/Fuel Poverty interests;and
- National oversight provided directly by the Scottish Government.

158. In terms of functions to support local authorities in LHEES and district heating regulation, a national delivery mechanism could potentially offer the following support:

- LHEES national guidance, approvals, and review;
- technical expertise, capacity and advice in preparing LHEES;
- approval and funding of SEEP delivery programmes (including investment in district heating);
- licensing of district heating (including monitoring, review, enforcement);
- appeals for district heating consent;
- wider issues in terms of SEEP financial incentive packages, loans etc; and
- technical expertise, capacity and advice in delivering local authority-led district heating schemes.

Q20. What are your views on the establishment of a national delivery mechanism to support local authorities in delivering their proposed functions for LHEES and district heating, and which could support delivery and governance of SEEP more widely? What form should it take? What functions should it have?

Please explain your answer, including any available evidence or examples.

What we are proposing – Local authority capacity-building support for LHEES

159. In summer 2017, we announced Scottish Government support to 11 local authorities to pilot the development of an LHEES in their areas through SEEP pilots⁴². This initial offer of support, includes access to dedicated consultancy expertise provided through our national programmes such as Resource Efficient Scotland, the Energy Savings Trust, and the Scottish Futures Trust (SFT), as well as external consultancy to enable testing and piloting of different approaches to data collection, analysis, assessment of the building stock, and prioritisation of actions. The support also includes provision of a dedicated officer to ensure wider collaboration between local authorities, and dissemination of knowledge and information across all of Scotland's 32 local authorities.

160. We would envisage that prior to any introduction of a statutory duty to prepare LHEES, that this programme of pilot capacity-building support would be made available to all of Scotland's local authorities, to help them prepare for this duty. The lessons learned from pilots would be used by the Scottish Government to inform the design of any eventual duty, and associated guidance documents or regulations, and would be developed in partnership with local government. The wider SEEP pilot programme will continue to support local authorities to develop and test new approaches to delivery of energy efficiency and heat decarbonisation.

⁴² See SEEP pilots phase 2 funding announcement Aug 2017, including list of recipients: <https://news.gov.scot/news/gbp-4-4-million-announced-for-energy-efficiency-projects-across-scotland>

161. In addition to this programme focused on piloting LHEES, there continues to be support available for the district heating elements of wider local strategies through the Heat Network Partnership local authority strategy support programme. Additionally, the Heat Network Partnership is developing guides or supportive information for local authorities, to add to that available on www.districtheatingscotland.com. These include:
- a guide on heat supply agreements, and key issues to be considered within these, being developed by SFT; and
 - supportive information on the procurement process for district heating projects, whether this is through concessions or other procurement mechanisms, being developed by SFT.
162. We are also investigating options for procurement frameworks to support local authorities in procuring district heating services and projects, since well-designed frameworks can support the Scottish supply chain e.g. Non Domestic Energy Efficiency (NDEE) Framework the Scottish public sector <http://www.gov.scot/Topics/Business-Industry/Energy/Action/lowcarbon/NDEE>.

INCENTIVES

163. The first consultation sought little feedback around financial support required to deliver district heating, other than support that may be required by local authorities to develop and deliver LHEES. The regulatory scenario worked up with the the Working Group aimed to reduce the cost of delivering district heating by reducing the risk of investment.
164. In the consultation responses, some respondents suggested incentives should be provided, in preference to using compulsion to connect. These included financial support to help upgrade heating in existing buildings or connection subsidies for anchor loads⁴³.
165. Currently we have a number of programmes that provide support to district heating schemes, while these may not be their main focus in all cases. For example the Resource Efficient Scotland programme has carried out a number of opportunity assessment and feasibility studies for district heating. The Low Carbon Infrastructure Transition Programme (LCITP)⁴⁴ has provided development and capital support for a number of district heating projects demonstrating innovative technologies' and approaches. The District Heating Loan Fund⁴⁵ is an ongoing programme that has provided loans to 44 projects. These work alongside the Renewable Heat Incentive which provides support for renewable heating equipment (but not for district heating technology). A number of projects in Scotland have developed using one or more of the above support mechanisms.

43 Details are available in Section: 5.6, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

44 The Low Carbon Infrastructure Transition Programme (LCITP), see: <http://www.gov.scot/Topics/Business-Industry/Energy/Action/lowcarbon/LCITP>

45 The District Heating Loan Fund, see: <http://www.energysavingtrust.org.uk/scotland/grants-loans/district-heating-loan>

166. With the LCITP and RHI both funded to 2020/21, we need to consider options for providing support to district heating (and wider heat decarbonisation) as part of the SEEP programme and it's development.

Q21. Please let us know any views you have on the most cost effective way of supporting schemes that are socio-economically appropriate and in line with the local authority LHEES.

WIDER UK HEAT MARKET REFORM

What we consulted upon

167. In the previous consultation we sought views on the wider regulation of the heat market to ensure decarbonisation, and on when decisions should be taken on the future of the gas network, given that gas provides heat to 78% of our homes and the majority of heat used by business and industry in Scotland. This was linked to the wider scenarios set out in our draft Climate Change Plan for decarbonisation of heat and for delivering our climate change targets in the residential and services sectors. Our consultation recognised that whilst regulation of heat is within the devolved competence of the Scottish Parliament, regulation of the gas network is a matter reserved to the UK Parliament. We highlighted work that is now underway by the UK Government to establish the evidence base needed to take decisions on the long-term direction of heat decarbonisation to determine the most appropriate mix of solutions such as district heating, electrification of heat with heat pumps, and decarbonisation of the gas network.

168. We also reiterated that, during the period when we await UK Government decisions on the future of gas, the Scottish Government will continue to focus its efforts in the meantime on areas of heat decarbonisation which are within our competence:

- with a priority on reducing heat demand as set out in the heat hierarchy of the Heat Policy Statement, through Scotland's Energy Efficiency Programme; and
- low carbon heat supply via low regrets options as set out by the Committee on Climate Change⁴⁶ such as:
 - district heating projects in areas where heat density is high and district heating is financially viable delivering affordable, low carbon heat efficiently; and
 - renewable heat technologies to individual properties particularly in areas off the gas network.

46 Committee on Climate Change (October 2016) Next steps for UK heat policy, eg p 8-9
<https://www.theccc.org.uk/wp-content/uploads/2016/10/Next-steps-for-UK-heat-policy-Committee-on-Climate-Change-October-2016.pdf>

Summary of consultation responses⁴⁷

169. Respondents to the consultation told us that in general they supported the Scottish Government's approach. Many comments focused not only on decarbonisation but also on the need to address fuel poverty as a priority, and a need for controls to ensure that energy for district heating is low or zero carbon and that new plant can be adapted in future to operate on other fuels or technologies.
170. There were mixed views expressed as to whether regulation relating to heat should focus on transition to a largely decarbonised energy system and not extend to regulation of other heating fuels. One or two respondents commented on the need for balance to ensure there is fair competition and also to protect consumers. Several responses included suggestions for the use of incentives for take up of low carbon solutions, and carbon taxes or obligations for energy service providers (ESPs) to reduce CO2 emissions. There was also some comment on the need for investment and support for green gas projects, low carbon solutions and appropriate infrastructure.
171. Respondents told us that UK Government decisions on the future of the gas network should be taken "as soon as possible" or "as a matter of urgency"; others referred to 2020, by 2023 (before the next gas price control review), mid 2020s or within the next five years.
172. Comments from those who favoured early decisions included suggestions that this would assist local authorities in their planning, ensure consumers are making appropriately informed decisions regarding purchase of heating systems and give clarity to businesses who may be affected. Others commented on the potential benefits of socialising the costs of heat decarbonisation as widely as possible – either through support from taxpayers, or through creation of a regulated asset base for heat. This could bring benefits to investors, developers and also to customers for the socialisation of development and maintenance costs to be spread across the widest possible heat market.

What we are proposing

173. The Scottish Government welcomes the views given by stakeholders on wider regulation of the heat market and on the decisions to be taken by the UK Government on the future of the gas network. We reaffirm our commitment that during the period when we await UK Government decisions on the future of gas, the Scottish Government will continue to focus its efforts in the meantime on areas of heat decarbonisation which are within our competence – heat demand reduction and low carbon heat supply via low regrets options. Further information on our approach will be set out in our final Climate Change Plan pathways for the residential and services sectors, in light of recent advice from the Committee on Climate Change⁴⁸.

⁴⁷ Details are available in para: 3.6.25 – 3.6.34, Why Research, (2017) 'Analysis of responses to the Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating', See: http://www.gov.scot/LHEES_and_DHR_Analysis

⁴⁸ Committee on Climate Change, (2017), 'Reducing emissions in Scotland – 2017 progress report', See: <https://www.theccc.org.uk/publication/reducing-emissions-scotland-2017-progress-report/>

174. We will also:

- continue to urge the UK Government to take decisions on the future of the gas network, and the overall mix of heat decarbonisation in reserved areas (electricity, gas, oil) as rapidly as possible, taking into account advice from the Committee on Climate Change;
- develop regulation of district heating in Scotland to support investment and consumer protection, as outlined elsewhere in this consultation;
- continue to provide support for the development of low carbon heat supply and heat demand reduction through our existing funding programmes (e.g. District Heating Loan Fund, LCITP), and the development of new funding programmes under SEEP;
- work with stakeholders to consider future support for low carbon renewable heat, including discussions with the UK Government around the ending of the current Renewable Heat Incentive commitment period to 2020-21 (see Paragraph 163/4 on 'Incentives');
- initiate discussions with the UK Government to consider the possibility of further devolution of powers necessary from Westminster for the regulation of consumer protection in the heat market;
- continue to participate as Government observers in the Association of Decentralised Energy's taskforce⁴⁹ which is advising Government on how to create a self-sustaining market for heat networks, and address challenges created by heat networks' natural monopoly, to reduce investment risks, investment costs, and the cost of heat to customers; and
- work with the UK Government to consider the recommendation of the ADE taskforce, and to agree an approach on how to respond to these within our devolved powers.

Q22. We would welcome stakeholders' views on our suggested approach to wider UK heat market reform, and in particular:

- a) any additional evidence that can be offered around the approach that should be taken to decisions on decarbonisation of the gas supply
- b) any views on the issues being considered within the remit of the ADE taskforce

⁴⁹ The Association for Decentralised Energy, (2017), 'Task Force on Post-2020 Heat Network Arrangements Terms of Reference – March 2017', See: https://www.theade.co.uk/assets/docs/resources/Heat_Network_Task_Force_-_Terms_of_Reference_-_March_2017.pdf

5. ASSESSING IMPACT

EQUALITY

175. The public sector equality duty requires the Scottish Government to pay due regard to the need to:

- eliminate discrimination, victimisation, harassment or other unlawful conduct that is prohibited under the Equality Act 2010;
- advance equality of opportunity between people who share a protected characteristic and those who do not; and
- foster good relations between people who share a relevant protected characteristic.

These three requirements apply across the “protected characteristics” of age; disability; gender reassignment; pregnancy and maternity; race; religion and belief; sex and sexual orientation.

176. We are keen that in our proposals we include measures to protect groups such as the elderly or disabled from being exploited and also, in the context of our proposals around socio economic assessment as part of LHEES and district heating schemes, that it is ensured that people with protected characteristics have an equal opportunity to be included.

177. Please answer the following questions to assist us in this:

Q23. Please tell us about any potential impacts, either positive or negative, you feel our proposed approach may have on particular groups of people, with reference to the “protected characteristics” listed above.

Q24. Are there any special provisions/ measures we should consider/ make/ include:

a) to ensure protected characteristics are taken account of in the LHEES? In your opinion, should the LHEES process specifically include/ address the protected characteristics?

b) to ensure protected characteristics are taken account of in the socio economic assessment? In your opinion, should that process specifically include/ address the protected characteristics?

c) in terms of the installation of networks in order to minimise disruption to people with mobility problems or any other protected characteristic?

d) in terms of consumer protection, that would better assist in ensuring that people with protected characteristics will be safeguarded (taking account of our limited legislative competence in this area)?

e) in terms of communications, that would better assist in ensuring that people with protected characteristics will be kept informed and can fully participate?

Please explain your answers, including any available evidence or examples.

178. The comments received from this consultation along with further work to be done in terms of face-to face engagement/discussions with appropriate stakeholders will be used to inform the Equality Impact Assessment (EQIA), which will also include consideration of evidence relevant in terms of Child Rights and Welfare and to determine what further work may be needed in respect of the EQIA.

BUSINESS AND REGULATION

179. A Business and Regulatory Impact Assessment (BRIA) analyses whether a policy is likely to increase or reduce the costs and burdens placed on businesses, the public sector and voluntary and community organisations. Since we are still consulting on our proposals, it is not possible at this time for the Scottish Government to carry out a full analysis of costs and impact, however it is our intention, when we have more evidence in light of responses to this consultation, to create and publish a full Business and Regulatory Impact Assessment at a later date.

180. In order to assist in this process please answer the following question:

Q25. Please tell us about any potential costs or savings that may occur as a result of our proposed approach and any increase or reduction in the burden of regulation for any sector. Please be as specific as possible.

Please explain your answer, including any available evidence or examples.

PRIVACY

181. A Privacy Impact Assessment (PIA) considers the protection of personal data. Whilst we believe it is unlikely, due to the nature of our proposals, that there will be impact on the privacy of individuals as a result of Local Heat & Energy Efficiency Strategies and Regulation of District Heating, if you are aware of any impact in this area, please answer the following question with as much supporting detail as possible and, if required, a PIA will be undertaken.

Q26. Please tell us about any impact on individual privacy/ data that may result from our proposals. If there is an impact on individual privacy, are there any special provision/ measures we should consider/ make/ include that would better assist in ensuring that this privacy impact is lessened/ negated?

Please explain your answer, including any available evidence or examples.

STRATEGIC ENVIRONMENTAL ASSESSMENT

182. The high level policy objectives on the development of Local Heat & Energy Efficiency Strategies and the Regulation of District Heating were previously set out in the Draft Climate Change Plan: The Draft Third Report on Policies and Proposals 2017-2032 and Draft Scottish Energy Strategy: The Future of Energy in Scotland published 27 January 2017. These policy documents were subject to a joint Strategic Environmental Assessment (SEA) as required by the Environmental Assessment (Scotland) Act 2005 ("2005 Act"). It is our view that the policy objectives set out in this consultation document are a continuation of those previously outlined and as such, the Environmental Report produced at that time remains a relevant reflection of the likely significant environmental impacts.
183. It is our intention that as the policy position develops, for example, when the regulatory position of the proposals become clearer, a further review for compliance with regard the 2005 Act will be undertaken and if required a SEA will be carried out.
184. The previous joint Strategic Environmental Assessment (SEA) of the Draft Climate Change Plan: The Draft Third Report on Policies and Proposals 2017-2032 and Draft Scottish Energy Strategy: The Future of Energy in Scotland can be viewed at this link: <http://www.gov.scot/Publications/2017/01/9030>.

6. RESPONDING TO THIS CONSULTATION

185. We are inviting responses to this consultation by 20 February 2018.

186. Please respond by using the Scottish Government's consultation platform, Citizen Space. You can view and respond to this consultation online at: <https://consult.gov.scot/energy-and-climate-change-directorate/lhees-and-dhr2>. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 20 February 2018.

187. If you are unable to respond online, please complete the Respondent Information Form (see 'Handling your response' below) to:

LHEES-DHRegs@gov.scot

Or

Heat and Energy Efficiency Unit
4th Floor,
Atlantic Quay,
150 Broomielaw,
Glasgow G2 8LU

Handling your response

188. If you respond using Citizen Space <http://consult.scotland.gov.uk/>, you will be directed to the Respondent Information Form. Please indicate how you wish your response to be handled and, in particular, whether you are happy for your response to be published.

189. If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

190. All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

Next steps in the process

191. Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material, responses will be made available to the public at <http://consult.scotland.gov.uk>. If you use Citizen Space to respond, you will receive a copy of your response via email.

192. Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so.

Comments and complaints

193. If you have any comments about how this consultation exercise has been conducted, please send them to:

LHEES-DHRegs@gov.scot

Or

Heat and Energy Efficiency Unit
4th Floor,
Atlantic Quay,
150 Broomielaw,
Glasgow G2 8LU

Scottish Government consultation process

194. Consultation is an essential part of the policy-making process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work. You can find all our consultations online: <http://consult.scotland.gov.uk>. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

195. Consultations may involve seeking views in a number of different ways, such as public meetings, focus groups, or other online methods such as Dialogue (<https://www.ideas.gov.scot>).

196. Responses will be analysed and used as part of the decision-making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review;
- inform the development of a particular policy;
- help decisions to be made between alternative policy proposals; and/or
- be used to finalise legislation before it is implemented.

197. While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.



RESPONDENT INFORMATION FORM

Please Note this form **must** be completed and returned with your response.

Are you responding as an individual or an organisation?

- Individual
- Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

- Publish response with name
- Publish response only (without name)
- Do not publish response

Information for organisations:

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

- Yes
- No



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