First Minister Minister for Business, Innovation and Energy

MEETING BRIEF: UNCONVENTIONAL OIL AND GAS RESEARCH AND CONSULTATION

Purpose: The First Minister requested a meeting with the Minister for Business, Innovation and Energy, and officials to discuss the publication of the research and subsequent consultation.

In this context, Officials would find it helpful to discuss (i) the timetable for the consultation, including, links to the forthcoming Energy Strategy; and (ii) alignment of our consultation preparations with Ministers' expectations for holding an inclusive and open consultation on UOG.

Background

- 1. The Scottish Government is taking a cautious and evidence-led approach to Unconventional Oil and Gas (UOG), which will be supported by a full public consultation. On 08 Oct 2015, the Scottish government published details of a comprehensive research programme (Annex A) and consultation timetable. At that time, the Scottish Government indicated that the research would be published in summer 2016 and the consultation would take place in winter 2016/17, and that an analysis of the consultation would take place in spring 2017.
- 2. Draft final reports have been submitted. Officials are assessing the reports against the specifications ahead of making the reports available for publication. An outline publication plan for the research is provided at **Annex C**. Officials are making arrangements to be in a position to launch the consultation in late 2016 or early 2017. **Annex D** summarises our consultation preparations.

Main research findings

- 3. The findings are **broadly consistent with the findings of the Independent Expert Scientific Panel**, which concluded that: *The technology exists to allow the safe extraction of such reserves, subject to robust regulation being in place.* A summary of the research findings is provided at **Annex B**.
- 4. The **total economic impact** of UOG is estimated to be relatively low, and isn't comparable to the current offshore industry in Scotland. The analysis does however indicate that using gas as a feedstock in the petrochemical industry could have significant economic benefits.
- 5. The **Health Impact Assessment** concludes that there is insufficient evidence available to allow conclusions to be on links between UOG-related activities and health outcomes. Health Protection Scotland suggest that a precautionary approach based on a range of mitigation measures involving operational best practice, regulatory frameworks and community engagement could be adopted.
- 6. The **climate change project** concludes that UOG is likely to add between 0.6 and 2.6Mt of CO₂ equivalents depending on the scale of the industry and robustness of the regulatory regime. The project concludes that exploiting UOG is only compatible with Scottish climate change targets if:
 - i. emissions are limited through tight regulation;
 - ii. Scottish UOG production displaces imports, rather than increasing domestic consumption;
- iii. UOG Emissions are offset through reductions in emissions elsewhere in the Scottish economy.
- 7. The projects also identify a set of potential actions or areas where regulation could be strengthened. On 13 October 2016, a workshop took place with the main regulators to discuss how any work to explore or address such gaps could be progressed if required at some future time.

SUMMARY OF RESEARCH PROGRAMME

Public Health Impact Assessment (Health Protection Scotland). Research questions:

- What are the potential risks to health associated with exploration for and exploitation of shale oil and gas and coal bed methane?
- What are the wider health implications of deploying the technology necessary for the exploration and exploitation of shale oil and gas and coal bed methane?
- What options could there be to mitigate any potential adverse impacts that are identified?

Decommissioning, site restoration and aftercare (AECOM). Research aims:

- better understand the steps that can be taken to ensure decommissioning, site restoration and aftercare can be undertaken in a way that ensures robust regulation and minimises impacts on communities and the environment;
- to identify and explore different models of financial guarantee that provide robust security against liabilities and improve understanding of associated costs.

Understanding and monitoring induced seismic activity (BGS). Research aims:

- better understand the levels of induced seismic activity that could be associated with unconventional oil and gas activities in Scotland; and
- better understand the robust regulatory and non-regulatory actions that can be taken to mitigate any noticeable effects on communities.

Economic impacts (KPMG). Research aims:

- Understand the potential aggregate impact of unconventional oil and gas development under a range of scenarios on the Scottish Economy
- Consider the specific impacts of the development of unconventional oil and gas in Scotland and in particular identify the key sectors and groups likely to be affected by each scenario
- Consider the potential nature and extent of any community benefit payments

Climate Change Impacts (Committee on Climate Change). Research aims::

- Examine the impacts on territorial carbon emissions of unconventional oil and gas activities in Scotland in line with the economic scenarios.
- Consider how the impacts might vary over time

Transport- Understanding and mitigating community level impacts (Ricardo). Research aims:

- the scope and scale of increased traffic volumes in community localities around site(s) during the four stages of unconventional oil and gas development (exploration, appraisal, production and decommissioning & restoration);
- the range of potential impacts (and duration of impacts) of these traffic volumes, and robust regulatory and other options that could mitigate impacts for communities.

SUMMARY OF RESEARCH FINDINGS

Economic Impact Assessment and Scenario Development (Undertaken by KPMG)

- 1. Potential UOG production in Scotland's 'Midland Valley' is restricted by the relatively high level of urbanisation, water bodies, and designated areas. KPMG assumes a total of between 10 and 31 UOG pads with 6 to 30 wells per pad is the likely scale of development in prospective UOG areas.
- 2. Given this, the economic impact of UOG in terms of GVA and supported employment is estimated to be relatively low, and significantly lower than the offshore industry in Scotland. The report also notes that if oil and gas prices remain at current levels it is <u>unlikely</u> that UOG production would be economic in Scotland. The analysis also makes clear that using gas as a feedstock in the petrochemical industry could have significant economic benefits given the contribution of the sector to the Scottish economy.
- 3. It is estimated that total gas production would be a cumulative 947 bcf (billion cubic feet) in the central scenario up to 2062, equivalent to around 5.5 years of Scottish consumption at current levels. At its peak in 2035, annual UOG production would be equivalent of around 2% of current UK Continental shelf offshore production of hydrocarbons in the central scenario, rising to around 7% under a high scenario, and a negligible amount under the low scenario.
- 4. In the central scenario the cumulative value of UOG to the economy over the period to 2062 is estimated at £1.3 billion (High £4.6 bn, Low £0.1 bn). This is equivalent to £30 million per annum of GDP equivalent to 0.1% of Scottish GDP. To put this into context, offshore oil and gas production in Scotland was worth £9.9 billion in 2015, or 6.5% of Scottish GDP.
- 5. In the central scenario, it is estimated the Scottish industry would support **1,400 jobs** in Scotland at its peak (High 3,100, Low 470). This includes indirect jobs in the supply chain and induced jobs.
- 6. In quantifying the industry's potential economic impact, the report does not include the potential benefits it could have for the Grangemouth plant. Nor does it speculate on the impact that not proceeding with UOG production could have on the facility's long term future.
- 7. Instead, the report notes Grangemouth has been unable to operate at full capacity due to lack of feedstock, and a number of petrochemical companies could see a positive impact on their supply chain if UOG is developed as they would avoid the costs of importing/transporting their primary input.
- 8. The report also highlights a number of other factors which should be considered when looking at the economic impact of UOG including the impact on local house prices, road use, agriculture, visual amenity, environmental costs and health costs.

Climate change impacts (Undertaken by the Committee on Climate Change)

- 9. Should a UOG industry be established in Scotland, the potential impact on Scottish climate change targets would be highly uncertain. Exploiting UOG on a significant scale is only compatible with Scotland's climate change targets if (a) Emissions are limited through tight regulation, (b) Scottish UOG production displaces imports, rather than increasing domestic consumption, and (c) Emissions from production of UOG are offset through reductions in emissions elsewhere in the Scottish economy.
- 10. The CCC's central estimates are for emissions from UOG to reach 2.6 Mt/year CO_2 equivalents in 2035 for <u>unregulated</u> production under the KPMG <u>High</u> Production scenario falling to 1.6 Mt under the CCC's 'minimum necessary regulation' scenario, falling to 1.1 Mt with fuller technical mitigation. To put these figures into context, they would account for roughly 11%, 7% and 5% respectively of the

Scottish Government's carbon target for 2035 and would require an increase in carbon mitigation elsewhere in the economy. Under the KPMG central scenario, and with tight regulation, emissions could reach 0.6 Mt a year in 2035.

11. It should also be noted that if Scottish UOG production simply offsets other global production of gas, then there will not be increase in global emissions. Emissions which would have previously occurred overseas will now take place in Scotland.

Transport - community level impacts (Undertaken by Ricardo)

- 12. The additional traffic movements associated with UOG resources are unlikely to be significant or detectable at a regional (i.e. local authority) or national scale, in view of the much greater numbers of traffic movements resulting from other activities.
- 13. Each well pad could require traffic movements to be sustained at around 190 per week for a period of approximately 2 years during the development phase. For context, a warehouse / distribution centre may be expected to generate approximately 5,000 two-way HGV movements per week. A windfarm construction can require 800-1,000 two-way movements at its peak. Any increase in vehicle movements could result in an increase in noise, vehicle emissions, road damage or traffic accident risks, which may be identified as negligible, or may require mitigation.
- 14. Provided the planning and Environment Impact Assessment system is properly implemented, any significant impacts would be avoided through the use of appropriate mitigation measures. However, the report notes that even with mitigation and guidance in place, local communities would experience an increase in traffic numbers, potentially for an extended period of a number of years.

Understanding and monitoring induced seismic activity (Undertaken by British Geological Survey)

- 15. The process of hydraulic fracturing, as presently implemented for shale gas recovery, is generally considered to pose a low risk of inducing either felt, damaging or destructive earthquakes. Although hydraulic fracturing is generally accompanied by microseismicity, the magnitudes of these events are usually less than 2.0 making them too small to be felt by people.
- 16. However, in western Canada, increases in annual earthquake rates over the last ten years correspond to increases in the number of hydraulically fractured wells, suggesting that hydraulic fracturing has induced earthquakes. However, the probability of earthquakes that can be felt appears to be small given the large number of hydraulic fractured wells (>12,000). To put this figure in context, the KPMG analysis envisages 300 wells in Scotland under its central scenario, and 930 in the high scenario.
- 17. Recent increases in earthquake rates and significant earthquakes in many areas of the United States where fracking is undertaken have been linked to the disposal of wastewater by injection into deep wells rather than hydraulic fracturing itself. This practice is not something that we would expect to be permitted under the current Scottish regulatory regime.
- 18. Improved understanding of the hazard from induced earthquakes and the successful implementation of regulatory measures to mitigate the risk of induced seismicity are likely to require improvements in available data, including a denser array of seismic instrumentation.

Decommissioning, site restoration and aftercare (Undertaken by AECOM)

- 19. The risk of leakage from abandoned UOG wells is likely to be very low, and international experience suggests that long-term well integrity can be achieved by implementing best practice during well construction and abandonment operations under a strong regulatory regime.
- 20. There is a risk that a small proportion of wells may fail. Leaks may occur from these wells if there is a source of oil or gas under pressure (generally not the case). Therefore it may be appropriate to monitor for leakage from decommissioned UOG wells for as long as SEPA consider necessary.

- 21. Scotland has a mature framework for the regulation and control of UOG development which is at least the equal of those examined in other countries or other industries. With appropriate regulatory oversight and monitoring, it is considered the framework is sufficient to manage risks of well leakage consistent with the aim of providing suitable protection for communities and the environment.
- 22. It is essential that UOG operators have sufficient funds available to cover liabilities associated with the abandonment and decommissioning of wells, and taking lessons from open cast coal mining there are financial mechanisms available which can minimise the risk of operators failing to honour their commitment to decommissioning.

Health Impact Assessment (undertaken by Health Protection Scotland)

- 23. The Scottish Government asked Health Protection Scotland (HPS) to undertake a public health impact assessment of the potential health consequences of developing shale oil and gas, and coal bed methane.
- 24. HPS formed a working group with expertise in hazard and risk analysis and evidence assessment, supported by technical advisers from regulatory and other public sector organisations. The health issues considered were identified from the views of community and environmental groups, industry and professional stakeholders with interests in the topic, taken together with issues identified in previously published reports.
- 25. HPS assessed the evidence for UOG hazards, exposures and health impacts by undertaking a systematic literature review of peer-reviewed scientific publications. This included epidemiological studies seeking to identify quantifiable health effects associated with UOG site operation. The evidence was assessed and categorised as being sufficient, limited or inadequate, as a basis to establish associations between UOG sourced hazards and potential health impacts.
- 26. Overall, HPS found that the current scientific evidence is inadequate as a basis to determine whether development of shale oil and gas or coal bed methane would pose a risk to public health. That is, HPS found that there is insufficient evidence currently available to allow conclusions to be made regarding the presence or absence of an association between UOG-related activities and health outcomes. This means that, at the current time, there has not been enough good-quality research undertaken to show clearly whether UOG-related activities would or would not pose risks or benefits to public health.
- 27. HPS also identified areas where the current regulatory framework for UOG development in Scotland could be strengthened, including in respect of planning and environmental regulation, as well as for industry and regulator best practice, stakeholder engagement, local health impact assessment, and monitoring and evaluation.
- 28. HPS concluded in their report that the evidence reviewed, while lacking in quantity, quality and especially consistency, would justify adopting a precautionary approach if UOG development is permitted in Scotland in the future. They suggest that a precautionary approach should be proportionate to the scale of the hazards and potential health impacts, both adverse and beneficial.
- 29. Within environmental public health, adopting a precautionary approach can take a number of forms, and it is not unusual for a precautionary approach to allow the development of a technology, where it is considered that realistic, practical opportunities can be identified to control potentially hazardous exposures.
- 30. The report summarises the approaches taken to UOG by other countries/governments, ranging from bans to supporting industry, and the report concludes that a precautionary approach in Scotland could be based on adopting a range of mitigation measures involving operational best practice, regulatory frameworks and community engagement.

RESEARCH REPORTS: OUTLINE COMMUNICATION AND HANDLING PLAN

The communications and handling plan is designed to allow swift publication of the research report in conjunction with a clear and unambiguous statement on the purpose of the public consultation on unconventional oil and gas

The plan is predicated by a decision to announce the publication of the reports via a Ministerial news release and not a Parliamentary statement. Should Ministers wish to adopt a different approach, the plan will be amended.

The reports will be available for publication 5 working days after they are finalised.

Week of publication	
Cabinet Meeting	A SCANCE contribution will be provided.
Day before publication	
Officials liaison with NGOs	SpAds and Policy Officials will co-ordinate briefing of key stakeholders including Friends of the Earth, Scottish Environment Link, The Broad Alliance, UKOOG, and COSLA.
Day of publication	
Publication of report	Morning broadcast bulletins – SG comms will trail "the report is due to be published later this morning".
	10:00 hours — Research reports to be published on the Scottish Government publications web page.
	Reports to be made available to MSPs via SPICE plus email notification.
News Releases	10:00 - Scottish Government news release welcoming the publication of the reports and containing quote from Minister for Business, Innovation and Energy. The news release will not provide an exposition of the research findings themselves.
	The news release will: - set the research as part of our "evidence-led" approach to UOG - set out that the purpose of the public consultation is to initiate a national discussion informed by impartial information to provide evidence of public views
Ministerial Media Activity	Mr Wheelhouse to be available for morning broadcast media bids. Q&A and lines to take being prepared.
Update SG website	Text of Onshore Oil and Gas SG Webpage to be updated to reflect publication of the research reports
Stakeholder communication	Officials to update key stakeholder groups with email-shot containing links to research reports and Ministerial News release.

OUTLINE OF UOG CONSULTATION PROPOSALS

- 1. In September 2016, Officials, with the support of a professional facilitator, met with representative of community groups, NGOs and industry to discuss the form, scope and evaluation of the consultation.
- 2. Similar views were conveyed by all stakeholders on many aspects of the consultation, including:
 - the importance of stimulating informed debate on this issue across civic Scotland;
 - the preparation of informative, balanced and impartial consultation materials;
 - setting out UOG issues within the context of wider energy or industrial issues;
 - undertaking a transparent and independent analysis of the consultation responses.
- 3. Officials propose preparing a short (20-30 pages) non-technical consultation document that will be accessible to the general public, as well as a wider range of stakeholders. The document would be accompanied by a set of complementary consultation materials that would provide more details on specific issues, or present impartial information in an accessible manner. An outline of the proposed consultation document and supporting materials is presented in the figure on page 8.
- 4. To host this information in an accessible form, officials are exploring the use of a temporary website out-with the Scottish Government website, which would be used for the duration of the consultation.
- 5. Based on the consultation materials described in the figure above, we propose working with an independent engagement specialist to prepare a "discussion toolkit" that would be made available online so that anyone can initiate a conversation and submit their findings to the SG. The material and questions would be consistent with the consultation document, thereby enabling the outputs from these discussions to be analysed alongside other responses to the consultation.
- 6. Officials are preparing a set of 6-8 open questions to support the consultation. In common with other consultations, we propose that these questions are quality assured by the SG analytical team. We also propose that they are evaluated by the SG Senior Social Researcher against a set of quality assurance criteria to ensure the question are impartial, accessible, clear and relevant. Example questions are provided below.
- Based on the research commissioned by the Scottish Government, are there any potential impacts that have not been suitably considered and, if so, what are they?
- What are your views on the sufficiency of the current regulatory framework and the actions proposed by the regulators to address gaps or issues?
- What are your views on how or whether UOG could support the transition to a low carbon economy?
- What are your views on the potential of UOG to support manufacturing and Scotland's petrochemical industries?
- What are your views on existing or proposed community benefit schemes, including how they could be improved?
- What are your views on the sufficiency of opportunities for communities to present views on proposed developments, and/or how this could be improved?
- On the basis of the evidence presented, what are your views on the future of UOG in Scotland?

CONSULTATION DOCUMENT

Introduction to Consultation

This section would describe the purpose of the consultation and sets out the steps the Scottish Government will take to conduct an open and inclusive consultation that allows everyone with an interest in unconventional oil and gas to get involved in the discussion and put their views across.

The Technologies Involved

This section would describe unconventional oil and gas technologies, what hydraulic fracturing involves, what is located at a typical site and the scale of the resource in Scotland.

Research Findings

This section would describe the SGs evidence led approach to UOG, set out the findings of the research (in the researchers words), and discuss how the industry would be regulated, with reference to the findings of a workshop with the main regulators.

Energy, Climate and Manufacturing

This section would describe the energy challenges and opportunities for Scotland, Scotland's action on climate change and discuss links between hydraulic fracturing and Scotland's petrochemical industries. Where appropriate, reference will be made to the research findings.

Community and UOG developments

This section would sets out how communities could potentially be affected by unconventional oil and gas developments in their area. The section would draw on the findings of the research projects to discuss local impacts and opportunities, including community benefit schemes proposed by industry (and UKG).

Concluding Remarks

This section would summarise (discuss) the main observations from the research, set out how other countries have responded to the UOG industry, reiterate the importance of public views on UOG.

SUPPORTING MATERIALS

The technology

- Guide to hydraulic fracturing
- Set of factual diagrams/info graphics

SG research

- Research reports
- Link to Health report (hosted on HPS website)
- Independent Expert Panel report

Scotland's Energy Strategy

- Link to Energy strategy info

UOG regulation

- summary of regulatory framework

Discussion/conversation materials

- discussion/conversation pack

Other questions

- UOG FAQs

Minister for Business, Energy and Tourism

OIL AND GAS 14th ONSHORE LICENCE ROUND

Purpose

To provide an update on the 14th onshore licensing round, including on a company who applied for a licence to use conventional drilling techniques to explore a previously abandoned oilfield in Scotland.

Priority: Routine

Context

- 1. In line with our cautious, evidence-led approach to unconventional oil and gas, in January 2015 Ministers asked the UK Government not to grant any further onshore oil and gas licences, including under the 14th round of Petroleum Exploration and Development Licensing (PEDL). The UK Government agreed in principle to this request.
- 2. The Smith Commission had also recommended that onshore oil and gas licencing should be devolved to Scotland. This policy is now being advanced through the Scotland Bill 2015.

Updates

- 3. On 7 Aug 2015, The Department for Energy and Climate Change (DECC) issued letters to the 7 companies who applied for 14th round exploration licences in Scotland to inform them that they will not be issuing any licences in Scotland. DECC also announced that it will not issue any new onshore oil and gas licences in Wales ahead of new onshore oil and gas licensing powers being transferred to the Welsh Assembly.
- 4. On 18 August, the UK Government offered 27 new onshore oil and gas exploration licences in England under the 14th PEDL round. The Oil and Gas Authority (OGA) also opened a consultation (under the Conservation of Habitats and Species Regulations 2010) on the remaining 132 blocks in England.
- 5. [redacted]
- 6. [redacted]
- 7. The correspondence from this company states that they are a small, new start Scottish business that may have difficulty retaining the support of investors and the commitment of their technical experts for any prolonged period.
- 8. We approached the OGA for further details of this application, including whether it was likely to be successful, but they maintain that this information is commercially confidential. There is currently one active onshore oil and gas field in Scotland at Lybster, owned and operated by IGas.

Next steps

- 9. Officials expect to be contacted by 14th round applicants in Scotland to discuss the Scottish Government's plans for onshore licencing. These meetings would allow us to listen to the experiences of these companies and learn more about their business plans and timetables.
- 10. These meetings would also give us an opportunity to set out the Scottish Governments position on onshore licencing, which we have summarised below:
 - Our moratorium on unconventional oil and gas will remain in place until we have completed our public consultation and gathered further evidence.
- We cannot pre-judge the outcome of this consultation. Our position on any future licensing regime will be informed by our public consultation and accompany evidencegathering.
- New onshore licensing powers will be devolved through the Scotland Bill 2015, which is currently progressing through the UK parliament. We expect the Bill to be passed in 2016.
- We are adopting a responsible and pragmatic approach to preparing for the devolution of these new powers. This includes working with the OGA and others to understand the practicalities of implementing a licencing regime, including transitional arrangements for existing licences.
- Onshore oil and gas developments using conventional techniques are not covered by our moratorium. The Scottish Government will carefully consider arrangements to ensure these types of developments transitional effectively to a Scottish licencing regime.

Recommendation

You are asked to note the content of this minute and confirm you are content:

- for officials to meet with 14th round applicants in the Scottish licence block areas;
- with the policy position on onshore licensing outlined under para 10.

[redacted]
Head of Onshore Oil and Gas
[redacted]

	_	_	For Information		
Copy List:	For	For	Portfolio	Constit	General
.,	Action	Comments	Interest	Interest	Awareness
Deputy First Minister and Cabinet Secretary for Finance, Constitution and Economy			Х		

DG Enterprise, Environment & Innovation
Mary McAllan
David Ritchie
[redacted]
[redacted]
Malcolm Fleming

First Minister Deputy First Minister

UNCONVENTIONAL OIL AND GAS: RESEARCH AND PUBLIC CONSULTATION TIMETABLE

Purpose

 To provide advice on the proposed handling of publication of the proposals and timetable for evidence-gathering and public consultation on unconventional oil and gas.

Priority

2. **URGENT**. On 17 September, you confirmed during FMQs that "the full timetable and the research process are being finalised and will be published before the October recess." Following discussions with SpAds and Comms we are working towards publishing this information on Tuesday 06 October.

Background

- 3. The Ministerial Statement that accompanied the announcement of the moratorium on unconventional oil and gas in January 2015 set out that Ministers would undertake further research to inform a public consultation, including a Public Health Impact Assessment. This evidence-led approach helped to secure wide support for the moratorium.
- 4. You committed to publish details and a timetable for this further research before October recess.
- 5. Officials provided detailed advice on 30 September, covering the content of the research proposals and on the proposed timetable. This advice and proposed way forward has been cleared by the Deputy First Minister and the Minister for Business, Energy and Tourism, as well as by other relevant portfolio Ministers.
- 6. In discussion with Comms and SpAds, it is proposed that we publish the timetable and summary details of the research proposals and public consultation on Tuesday 6 October.

Parliamentary Questions

- 7. The First Minister will be aware that there are a number of outstanding PQs on this and related issues.
- 8. Publishing details of the timetable of further research and the public consultation will allow us to answer four of the outstanding PQs from Lewis Macdonald MSP (S4W-24476, S4W-24477 S4W-24478, and S4W-24479) and three PQs from

- John Wilson MSP (S4W-25126, S4W-25128, and S4W-25129), providing an opportunity to highlight this announcement to the Scottish Parliament.
- 9. We also propose to lodge the information with SPICe and publish on the Scottish Government website, referencing both in the answer to the PQs.
- 10. The questions and proposed answers are attached at **Annex D.**
- 11.PQs on whether underground coal gasification and boreholes are covered by the moratorium are still to be answered. These comprise three PQs from Lewis Macdonald MSP, six PQs from Cara Hilton MSP, and one PQ from Angus MacDonald MSP.
- 12. Officials, Comms and SpAds will prepare a Q&A for clearance to deal with the media calls on these remaining PQs.

Communications and handling

- 13. The timetable and information about the research phase and public consultation will be published in SPICe and also published on the Scottish Government website. A copy of the document to be lodged in SPICe is attached at **Annex B.** A copy of the proposed website text is attached at **Annex C.**
- 14. Mr Ewing is speaking at a community energy conference in Perth on the morning of 6 October between 11:00 and 12:00. We propose that the media announcement is made at 11:00, allowing Mr Ewing to pick up any interview bids (should they arise) at 12:00. The draft media statement is attached at **Annex A.**

Recommendations

- 15. You are asked to note the contents of this submission and to confirm that:
 - You are content with the outlined approach to answering outstanding PQs
 - You are content with the proposal to lodge a document in SPICe and on the Scottish Government website on Tuesday 06 October outlining details of the evidence-gathering and consultation timetable;
 - You are content with the proposals for media handling.

		For	For Information			
Copy List:	For Action	For Comments	Portfolio	Constit	General	
	Action	Comments	Interest	Interest	Awareness	
Cabinet Secretary for Infrastructure, Investment						
and Cities			Х			
Cabinet Secretary for Social Justice,						
Communities and Pensioners' Rights						
Cabinet Secretary for Health, Wellbeing and			Х			
Sport			Х			
Cabinet Secretary for Rural Affairs, Food and the			Χ			
Environment						
Minister for Business, Energy and Tourism			Χ			
Minister for Environment, Climate Change and			Χ			
Land Reform			Χ			
Minister for Transport and Islands			Х			
Minister for Public Health			Х			
Minister for Local Government and Community			Х			
Empowerment						
	1		•			

Permanent Secretary

DG Enterprise, Environment and Innovation

DG Communities

Mary McAllan

Kenneth Hogg

Bridget Campbell

David Ritchie

John Ireland

John McNairney

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

George Burgess

PS/Transport Scotland

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Liz Lloyd

[redacted] (Comms FM/DFM/Economy)

[redacted] (Comms FM/DFM/Economy)

[redacted] (Comms Transport Scotland)

ANNEX A - MEDIA STATEMENT

SCOTLAND TO CARRY OUT WORLD'S MOST WIDE RANGING STUDY INTO UNCONVENTIONAL OIL & GAS

PUBLIC WILL GET TO STUDY RESEARCH BEFORE PUBLIC CONSULTATION

Ministers have today informed Parliament that the Scottish Government will carry out the world's most wide ranging study into the potential impacts of unconventional oil and gas, including hydraulic fracturing.

A moratorium was announced by the Energy Minster Fergus Ewing in January, when he announced plans for a full public consultation on unconventional oil and gas extraction, and outlined a programme of research work. This was to commission a full public health impact assessment, conduct further work into strengthen planning guidance, and look at further tightening of environmental regulation.

Since then the Government have undertaken a series of meetings with the key stakeholder groups including environmental NGOs, industry, local government and community organisations. Those meetings have helped inform the government's decision to extend the planned work which will also now include transport impacts research, seismic monitoring research, consideration of decommissioning and aftercare, climate change impacts research, and economic impacts research.

This work comes further to an independent Expert Scientific Panel report on unconventional oil and gas which has already been undertaken.

Ministers have also published the planned research and public consultation timetable today and confirmed that the pubic consultation will not begin until the research process has been finalised and the results published. This will give the public the chance to study that research before making taking part in the public consultation.

The detailed evidence-gathering phase will take place between now and next summer, with the consultation phase, covering engagement, public consultation and analysis, due to conclude in spring 2017.

Mr Ewing said:

"I am pleased to announce today the world's most wide ranging study into the potential impacts of unconventional oil and gas, which underlines the Scottish Government's policy of taking a precautionary, robust and evidence-based approach to unconventional oil and gas and is in stark contrast to the gung-ho approach of the UK Government.

"Ministers have held meetings with representatives of environmental non-governmental organisations, community groups, industry bodies and local government. Those meetings have helped us to prepare for the research and public consultation processes. As a result, we have a robust and thorough research process planned for a wide-ranging and participative consultation process.

"We should never close our minds to the potential opportunities of new energy technologies – but we must also ensure that community, environmental and health concerns are never simply brushed aside. The research we propose in this timetable will give all interested stakeholders important information to allow a more informed debate during the public consultation.

"Scotland's moratorium into unconventional oil and gas extraction was welcomed by both environmental campaigners and industry representatives. It will remain in place as the research and public consultation is undertaken."

Background

An overview of the evidence gathering can be found at: [INSERT LINK]

TIMETABLE

Task	Date
Evidence gathering (Phase 1) Transport, seismic, decommissioning, health	Autumn 2015 - Summer 2016
Issue specifications	Oct / Nov 2015
Tenders close	Autumn / Winter 2015
Assess tenders and appoint contractors	Winter 2015
Research underway	Winter 2015 / Spring 2016
Findings presentations to Research Advisory Groups	Spring 2016
Public Health Impact Assessment considers draft outputs from projects	Spring 2016
Final research reports and quality assurance	Summer 2016
Public Health Scotland finalise the Public Health Impact Assessment	Summer 2016
Evidence Gathering (Phase 2) Climate change, Economic	Dec 2015- Summer 2016
Project to develop scenarios	Winter 2015 / 2016
Climate change and economic impact projects	Spring / Summer 2016
Pre-consultation engagement	Winter 2015 /16 - Autumn 2016
Stakeholder meetings/Forum	Winter 2015 – Spring 2016
Surveys and/or deliberative research	Spring 2016
Website and digital engagement/information	Summer - Autumn 2016
Local information sessions	Summer - Autumn 2016
Regulation and Planning	Jan - Autumn 2016
Stakeholder workshops	Jan- Autumn 2016
Report on findings	Autumn 2016
Prepare statutory assessments	Summer - Autumn

	2016
Strategic Environmental Assessment, Equality Impact Assessment, Business and Regulatory Impact Assessment	
4 month consultation, including programme of public engagement	Winter 2016 - Spring 2017
Consultation analysis	Spring 2017

SCOTTISH GOVERNMENT

UNCONVENTIONAL OIL AND GAS CONSULTATION

Statement on evidence-gathering and timetable

The Scottish Government is committed to gathering robust evidence on the potential impacts of unconventional oil and gas oil and gas, and giving stakeholders and the public time to consider the issues and express their views and concerns.

Further to Minister for Business, Energy and Tourism Fergus Ewing's announcement on 28 January of a moratorium on granting planning consents for unconventional oil and gas exploration in Scotland, the Scottish Government has developed a programme of work to take forward a period of evidence-gathering.

Public Health Impact Assessment

A Public Health Impact Assessment will be undertaken to investigate the following questions:

- What are the potential risks to health associated with exploration for and exploitation of shale oil and gas and coal bed methane?
- What are the wider health implications of deploying the technology necessary for the exploration and exploitation of shale oil and gas and coal bed methane?
- What options could there be to mitigate any potential adverse impacts that are identified.

Health Protection Scotland (HPS) will coordinate the work, drawing on the expertise of others including NHS Health Scotland and SEPA.

The work will review the scientific evidence on potential impacts from unconventional oil and gas developments, and the risks of any associated adverse health impacts. It will include a review of the wider health related issues associated with the unconventional oil and gas developments, including issues of particular relevance to local communities.

Workshops will be organised to ensure the assessment addresses the issues of most concern to stakeholders. The work will be peer reviewed, and a final report drawing together the findings of the work will be made publicly available.

Commissioned research projects

A series of research projects will also be commissioned to investigate the potential impacts on communities. The work will also explore how any impacts might be ameliorated.

This work will include projects examining the following topics:

- o Transport understanding and mitigating community level impacts
- Decommissioning, site restoration and long term monitoring obligations and treatment of financial liabilities
- Understanding and monitoring induced seismic activity

Project specifications and summaries will be made publicly available. Final reports and plain English summaries will be published ahead of the public consultation.

Projects to examine implications for carbon emissions and wider economic impacts are also being developed.

Further details of the research projects will be provided as the work develops.

Robust Regulation

The Scottish Government will also undertake work to review the strength and suitability of the current planning and environmental regulatory regimes. This will include examination of issues such as fugitive emissions, decommissioning, wastewater, community engagement, and planning procedures. Stakeholder workshops will be organised to explore these issues in depth. The findings of this work will inform the public consultation.

Consultation Timetable

Gathering robust evidence on the issues that matter to communities is our immediate priority, and the consultation will not take place until this work has been concluded.

We expect this period of evidence-gathering will be completed in the summer of 2016. This will be followed by a period of reflection that will allow the public and stakeholders to consider and discuss the findings of this work, before a consultation is commenced.

This approach and timetable will ensure that we gather the detailed and robust evidence, whilst creating space and time for the widest possible range of voices to join the debate and participate in this important consultation.

A summary of the anticipated consultation timetable is provided below.

Table Consultation stages and dates

Task	Date
Evidence gathering (Phase 1) Transport, seismic, decommissioning, health	Autumn 2015 - Summer 2016
Issue specifications	Oct / Nov 2015
Tenders close	Autumn / Winter 2015
Assess tenders and appoint contractors	Winter 2015
Research underway	Winter 2015 / Spring 2016
Findings presentations to Research Advisory Groups	Spring 2016
Public Health Impact Assessment considers draft outputs from projects	Spring 2016
Final research reports and quality assurance	Summer 2016
Public Health Scotland finalise the Public Health Impact Assessment	Summer 2016
Evidence Gathering (Phase 2) Climate change, Economic	Dec 2015- Summer 2016
Project to develop scenarios	Winter 2015 / 2016
Climate change and economic impact projects	Spring / Summer 2016
Pre-consultation engagement	Winter 2015 /16 – Autumn 2016
Stakeholder meetings/Forum	Winter 2015 - Spring 2016
Surveys and/or deliberative research	Spring 2016
Website and digital engagement/information	Summer - Autumn 2016
Local information sessions	Summer - Autumn 2016
Regulation and Planning	Jan - Autumn 2016
Stakeholder workshops	Jan- Autumn 2016
Report on findings	Autumn 2016
Prepare statutory assessments	Summer - Autumn 2016
Strategic Environmental Assessment, Equality Impact Assessment, Business and Regulatory Impact Assessment	
4 month consultation, including programme of public engagement	Winter 2016 - Spring 2017
Consultation analysis	Spring 2017

		.			
	Winter 2015/16	Summer 2016	Winte	er 2016/17	
EVIDENCE-GATHERING					
PUBLIC HEALTH IMPACT ASSESSMENT					
COMMISIONED STUDIES					
ROBUST REGULATION					
WORKSHOPS AND ENGAGEMENT					
CONSULTATION					
PRE-CONSULTATION ENGAGEMENT					
PUBLIC CONSULTATION					
CONSULTATION ANALYSIS					

Figure Consultation stages and dates

SG WEBSITE

Energy Web page- Energy Sources- New Technologies

Issue

The Scottish Government is committed to gathering robust evidence on the potential impacts of unconventional oil and gas, and giving stakeholders and the public time to consider the issues and express their views and concerns.

Our action

Moratorium on unconventional oil and gas

The Scottish Government announced a moratorium on unconventional oil and gas on 28 Jan 2015, which has been welcomed by industry, and community and environmental groups.

<Link to Jan 2015 Statement>

Scottish Ministers also set out plans for a full public consultation (link to subpage 1) on the issue and further research (link to subpage 2); including a public health impact assessment and work to examine how planning and regulatory procedures could be improved.

This will allow us to listen to the voices of concerned communities and stakeholders and support an informed debate that is based on sound science.

Independent Expert Scientific Panel on Unconventional oil and gas

In 2014, The Scottish Government convened an independent group of scientific experts to provide an independent, impartial evidence base on unconventional oil and gas upon which to inform a robust policy position.

The final report was published on X (Link to final report)

Background

What is unconventional oil and gas

Conventional oil and gas deposits are contained in porous reservoirs (often limestone or sandstone) that have interconnected spaces. These interconnected spaces allow oil or gas to flow through the reservoir to a well.

The term unconventional gas refers to natural gas held in rocks that cannot be exploited using traditional methods. The low porosity and permeability of shale and coal formations means that gas does not flow through them freely, rendering it much more difficult to recover by conventional production techniques.

Unconventional oil and gas techniques

Techniques such as horizontal drilling, dewatering and hydraulic fracturing can be used to access and retrieve the natural gas contained within them.

Hydraulic fracturing, also known as "fracking", is used for shale gas but not typically coal bed methane. Globally, the use of fracturing techniques to stimulate the recovery of oil and gas has expanded greatly in the last decade. Hydraulic fracturing methods have a wide range of applications, including enhancing water flow in aquifers used for drinking water.

The process of hydraulic fracturing involves pumping water into the source rock, which is typically located 1-2 km below ground, at high pressure so that the rock fractures and releases the trapped gas. This water also contains a small percentage of sand (\sim 5%) and chemicals (<1%) to improve efficiency of the operation.

Extracting coal bed methane typically requires water to be drained from the coal seam to release pressure (known as dewatering), without hydraulic fracturing.

Legislation

Directions were issued to planning authorities and SEPA to give effect to the Moratorium on unconventional oil and gas.

Unconventional oil and gas

<Links to Directions>

Scotland Bill 2015- Onshore oil and gas licencing

New onshore licensing powers will be devolved through the Scotland Bill 2015, which is currently progressing through the UK parliament.

The Scottish Government will carefully consider arrangements to ensure developments using conventional drilling techniques transitional effectively to a Scottish licencing regime.

The onshore licencing powers that will be devolved relate to petroleum exploration. Underground coal gasification is not classified as a petroleum activity, and exploration licencing remains a reserved matter. The Coal authority license all coal exploration on behalf of the UK Government.

As part of our cautious, evidence-led approach to unconventional oil and gas, in January 2015 Ministers asked the UK Government not to grant any further onshore oil and gas licences, including under the 14th round of Petroleum Exploration and Development Licensing (PEDL). No licences under the 14th round are being issued in Scotland.

Sub page 1

Consultation and Engagement

The Scottish Government is committed to being a more open, accessible Government, engaging directly with people on the issues that matter to them.

Our priority is listening to issues that communities are concerned about, and gathering the evidence we need to examine and discuss these issues.

A full public consultation will take place once the evidence gathering work is completed and there has been time for the public and stakeholders to reflect on and consider its findings.

Summary of work and timetable				
Task	Date			
Evidence-gathering				
Public Health Impact Assessment (HPS)	Autumn 2015 – Summer 2016			
Transport Impacts (commissioned research project)	Autumn 2015 – Summer 2016			
Seismic Monitoring (commissioned research project)	Autumn 2015 – Summer 2016			
Decommissioning and Aftercare (commissioned research project)	Autumn 2015 – Summer 2016			
Climate Change Impacts (commissioning method TBC)	Winter 2015 – Summer 2016			
Economic Impacts (commissioning method TBC)	Winter 2015 – Summer 2016			
Prepare and issue statutory assessments (BRIA, EQA, SEA)	Summer 2016 - Autumn 2016			
Regulation and Planning				
Workshops and Engagement	Winter 2015/16 – Summer 2016			
Consultation				
Pre-consultation engagement	Winter 2015/16 – Summer 2016			
Public Consultation	Winter 2016/17			
Consultation Analysis	Spring 2017			

Further details of the public consultation and opportunities for involvement will be provided as this work developments.

Sub page 2

Evidence-gathering

As part of our moratorium, the Scottish Government is gathering evidence to better understand the potential issues and impacts of shale oil and gas, and coal bed methane developments in Scotland. We expect this period evidence gathering will be completed in the summer of 2016. This will be followed by a period of reflection that will allow the public and stakeholders to consider and discuss the findings of this work.

Public Health Impact Assessment

A Public Health Impact Assessment is being undertaken to investigate the following questions:

- What are the potential risks to health associated with exploration for and exploitation of shale oil and gas and coal bed methane?
- What are the wider health implications of deploying the technology necessary for the exploration and exploitation of shale oil and gas and coal bed methane?
- What options could there be to mitigate any potential adverse impacts that are identified.

Health Protection Scotland (HPS) will coordinate the work, drawing on the expertise of others including NHS Health Scotland and SEPA.

The work will review the scientific evidence relating to hazards associated with the exploitation of unconventional oil and gas, and the risks of adverse health impacts associated with relevant processes and technology.

It will also include a review of the wider health related issues associated with the unconventional oil and gas developments, including issues of relevance to local communities.

Workshops will be organised to ensure the assessment addresses the issues of most concern to stakeholders. The work will be peer reviewed, and a final report drawing together the findings of the work will be made publicly available.

Commissioned research

A series of research projects will also be commissioned to investigate the potential impacts on communities. The work will also explore how any impacts might be ameliorated.

The first three projects will examine the following topics:

- Transport understanding and mitigating community level impacts
- Decommissioning, site restoration and long term monitoring obligations and treatment of financial liabilities
- Understanding and monitoring induced seismic activity

Project specifications and summaries will be made publicly available. Final reports and plain English summaries will be published ahead of the public consultation.

We will also consider areas for further evidence-gathering, including possible impacts on climate change and wider impacts for Scotland and Scottish industries.

Further details of the research projects will be provided as the work develops.

Robust Regulation

The current planning and environmental regulatory regimes will be reviewed to ensure they support a rigorous and transparent regime, underpinned by meaningful engagement.

Issues that will be examined include fugitive emissions; decommissioning; wastewater; community engagement; and planning procedures. Stakeholder workshops will be organised to explore these issues in depth.

The findings of this work will inform the public consultation.

S4W-24476 Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), in light of the moratorium on the granting of planning consents for unconventional oil and gas developments, whether it will carry out a public consultation regarding the (a) planning guidance, (b) environmental regulations and (c) possible health impacts of such developments and, if so, when this will (i) begin and (ii) end.

The Scottish Government is committed to being a more open, accessible Government, engaging directly with people on the issues that matter to them. In consultation with stakeholders, the Scottish Government has developed a programme of work to take forward the plans announced on 28 January. The Scottish Government has published details of the proposals for evidence-gathering and public consultation, including a timetable. This information is available from the Scottish Parliament Information Centre (Bib. number 57225) and on the Scottish Government website at

http://www.gov.scot/Topics/Business-Industry/Energy/onshoreoilandgas

In order to provide a full picture of evidence to interested stakeholders, a public consultation on unconventional oil and gas will be launched after this work has been completed.

S4W-24477 Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), what work will be carried out on strengthening the planning guidance with regard to unconventional oil and gas extraction; which government department or nongovernment body it will commission to do this; when the work will (a) begin and (b) end; when the findings will be published, and how many full-time equivalent staff will be employed to do this.

I refer the member to the answer to question S4W-24476 on 06 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• S4W-24478 - Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), what work will be carried out on reviewing the environmental considerations with regard to unconventional oil and gas extraction; which government department or non-government body it will commission to do this; when the work will (a) begin and (b) end; when the findings will be published, and how many full-time equivalent staff will be employed to do this.

I refer the member to the answer to question S4W-24476 on 06 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• S4W-24479 - Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), what work will be carried out on examining the possible health impact of unconventional oil and gas extraction; which government department or nongovernment body it will commission to do this; when the work will (a) begin and (b) end; when the findings will be published, and how many full-time equivalent staff will be employed to do this.

I refer the member to the answer to question S4W-24476 on 06 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• <u>S4W-25126 – John Wilson</u>

what the (a) timeline and (b) reporting mechanism is for the public consultation on unconventional oil and gas extraction, including fracking, which was announced by the Minister for Business, Energy and Tourism on 28 January 2015.

I refer the member to the answer to question S4W-24476 on 06 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• S4W-25128 – John Wilson

what funding will be allocated to conducting the public health impact assessment on unconventional oil and gas extraction, including fracking, which was announced by the Minister for Business, Energy and Tourism on 28 January 2015.

I refer the member to the answer to question S4W-24476 on 06 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

Health Protection Scotland (HPS) will undertake and coordinate the public health impact assessment, drawing on the expertise of others including NHS Health Scotland and SEPA.

S4W-25129 – John Wilson

who will be commissioned to carry out the public health impact assessment on unconventional oil and gas extraction, including fracking, which was announced by the Minister for Business, Energy and Tourism on 28 January 2015.

I refer the member to the answer to question S4W-24476 on 06 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

First Minister Deputy First Minister

UNCONVENTIONAL OIL AND GAS: RESEARCH AND PUBLIC CONSULTATION TIMETABLE AND UCG MORATORIUM

Purpose

To provide advice on handling of publication of the consultation timetable and evidence-gathering work on unconventional oil and gas, and on the announcement of a moratorium on Underground Coal Gasification (UCG).

Separate advice has been provided on exploratory boreholes (07/10/15- David Ritchie). We have drafted this note on the basis that boreholes would be permitted.

Priority

URGENT Following discussions with SpAds and Comms we are working towards publishing this information on Thursday 8 October (am).

Background

- The Ministerial Statement that accompanied the announcement of the moratorium on unconventional oil and gas in January 2015 set out that Ministers would undertake further research to inform a public consultation, including a Public Health Impact Assessment. This evidence-led approach helped to secure wide support for the moratorium.
- 2. You committed to publish details and a timetable for this further research before October recess. Officials have provided detailed advice on the content of the research, timetabling, a moratorium on UCG and boreholes.

3. In the period between the announcement of the moratorium in January and now:

- We have developed a robust and comprehensive research process which will support one of the world's most wide-ranging and participative consultations.
- Ministers have had meetings with environmental organisations, community groups, industry bodies and local government which have informed the scope and depth of the research.
- We have developed a consultation timetable that will ensure that the public and stakeholders will have time to fully reflect on the results of our comprehensive programme of evidence-gathering before the consultation begins.
- The timetable, which includes a period of pre-consultation engagement, will allow us to discuss the terms and design of the consultation so we can be confident it focuses on the issues that matter to communities and our stakeholders.

[redacted]

Announcement: parliamentary and media handling

- 4. There will be a single media statement on Thursday 8 October (am) which announces:
 - I. the timetable for the consultation on unconventional oil and gas;
 - II. the associated evidence-gathering programme;
 - III. the introduction of a moratorium on UCG and that Campbell Gemmell will lead an independent examination of the issues and evidence on UCG.
 - IV. SG position on boreholes
- 5. A draft news release is provided at **Annex A.** A comprehensive Q&A brief that will be used to answer follow up questions from media and stakeholders is Provided at **Annex F**.
- 6. The following actions will be coordinated with the release of the media statement:
 - A statement summarising the moratorium on UCG will be lodged with SPICe (Annex B)
 - A second statement setting out details of the proposed evidence gathering, and timetable for the consultation will be lodged with SPICe (**Annex C**).
 - Directions will be issued to Planning Authorities and SEPA giving effect to the moratorium on UCG.
 - Updated Directions clarifying the SG position on boreholes will be issued to Planning Authorities and SEPA.
 - Outstanding PQs on (i) UCG, (ii) the consultation timetable and evidence gathering work and (iii) boreholes will be answered.
 - Scottish Government Website will be updated later in the day to include new web pages summarising the government's policies and work on unconventional oil and gas and underground coal gasification (**Annex D**).

Stakeholder and Political Handling

- Officials will liaise with key stakeholders on the morning of the announcement.
- [redacted]

Parliamentary Questions

- 7. There are a number of outstanding PQs on UCG and the unconventional oil and gas consultation.
- 8. Publishing details of the unconventional oil and gas consultation and associated research will allow us to answer four of the outstanding PQs from Lewis Macdonald MSP (S4W-24476, S4W-24477 S4W-24478, and S4W-24479) and three PQs from John Wilson MSP (S4W-25126, S4W-25128, and S4W-25129).
- 9. The announcement on a moratorium on UCG will also allow the answer of two further PQs from Lewis Macdonald MSP (S4W-24474 and S4W-24475) and six

- PQs from Cara Hilton MSP (S4W-24696, S4W-24697, S4W-24698, S4W-24699, S4W-25191 and S4W-25192).
- An announcement on boreholes will allow the answer of 2 outstanding PQs on exploratory boreholes (S4W-24473 Lewis Macdonald and S4W-26767 Angus MacDonald
- 11. In answering the PQs, reference will be made to the SPICe statements. The questions and proposed answers are attached at **Annex E**.

Recommendations

- 12. You are asked to note the contents of this submission and to confirm that:
 - You are content with the proposals for handling the announcement.
 - You are content with the outlined approach to answering outstanding PQs.

		_	For Information		
Copy List:	For	For	Portfolio	Constit	General
• ,	Action	Comments	Interest	Interest	Awareness
Cabinet Secretary for Infrastructure, Investment and Cities			Х		
Cabinet Secretary for Social Justice,			χ		

Communities and Pensioners' Rights			
Cabinet Secretary for Health, Wellbeing and		Х	
Sport		X	
Cabinet Secretary for Rural Affairs, Food and the		X	
Environment		,	
Minister for Business, Energy and Tourism		Х	
Minister for Environment, Climate Change and		X	
Land Reform		Х	
Minister for Transport and Islands		Х	
Minister for Public Health		Х	
Minister for Local Government and Community		Х	
Empowerment			

Permanent Secretary

DG Enterprise, Environment and Innovation

DG Communities

Mary McAllan

Kenneth Hogg

Bridget Campbell

David Ritchie

John Ireland

John McNairney

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

George Burgess

PS/Transport Scotland

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Liz Lloyd

[redacted] (Comms FM/DFM/Economy)

[redacted] (Comms FM/DFM/Economy)

[redacted] (Comms Transport Scotland)

ANNEX A – DRAFT MEDIA STATEMENT

[redacted]

TIMETABLE

Summary of work and timetable			
Task	Date		
Evidence-gathering			
Public Health Impact Assessment (Health Protection Scotland)	Autumn 2015 – Summer 2016		
- Stakeholder workshops	Autumn/Winter 2015		
- Peer review	Spring/Summer 2016		
- Publish Final Report	Summer 2016		
Research project 1 - Transport impacts	Autumn 2015 – Summer 2016		
- Open and competitive tender	Autumn/Winter 2015		
- Appoint contractor	Winter 2015/16		
- Stakeholder workshops	Winter 2015/16		
- Publish Final Report	Summer 2016		
Research project 2 - Decommissioning and aftercare	Autumn 2015 – Summer 2016		
- Open and competitive tender	Autumn/Winter 2015		
- Appoint contractor	Winter 2015/16		
- Stakeholder workshops	Winter 2015/16		
- Publish Final Report	Summer 2016		
Research project 3 - Seismic activity and monitoring	Autumn 2015 – Summer 2016		
- Open and competitive tender	Autumn/Winter 2015		
- Appoint contractor	Winter 2015/16		
- Stakeholder workshops	Winter 2015/16		
- Publish Final Report	Summer 2016		
Research project 4 - Economic Impacts	Winter 2015/16 – Summer 2016		
Research Project 5 - Climate Change Impacts	Winter 2015/16 – Summer 2016		
Regulation and Planning			
Workshops and Engagement	Winter 2015/16 – Summer 2016		
Report on Findings	Autumn 2016		
Consultation			
Pre-consultation engagement (including stakeholder forums, and public engagement)	d Winter 2015/16 – Autumn 2016		

4 month Public Consultation	Winter 2016/17
Consultation Analysis	Spring 2017

ANNEX B

SPICe STATEMENT UNDERGROUND COAL GASIFICATION (UCG)

Moratorium on Underground Coal Gasification

Underground Coal Gasification is an industrial process which converts coal in non-mined coal seams into gas.

The technology used for UCG differs considerably from technology utilised for unconventional oil and gas.

The moratorium announced in January 2015 was specifically about onshore unconventional oil & gas planning consents, including fracking. The powers to award onshore exploration licences are in the process of being devolved to Scottish Ministers. These onshore licensing powers will cover petroleum exploration.

In line with the precautionary, evidence-based approach already shown on unconventional oil and gas, the Scottish Government has introduced a separate moratorium on planning consents related to Underground Coal Gasification (UCG) developments in Scotland.

The moratorium on UCG will provide time to carefully consider the potential impacts of this new technology.

The Scottish Government has appointed Campbell Gemmell to lead an independent examination of the issues and evidence surrounding UCG.

Implementing the moratorium

A Direction giving effect to this moratorium has been issued to all Scottish planning authorities under regulations 31 and 32 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013.

To ensure consistency across regulatory regimes, a similar Direction has been issued to the Scottish Environment Protection Agency (SEPA) regarding any relevant new Controlled Activity Regulation (CAR) Licences.

SPICe STATEMENT - UNCONVENTIONAL OIL AND GAS CONSULTATION

Statement on evidence-gathering and timetable

The Scottish Government is committed to gathering robust evidence on the potential impacts of unconventional oil and gas oil and gas, and giving stakeholders and the public time to consider the issues and express their views and concerns.

Further to Minister for Business, Energy and Tourism Fergus Ewing's announcement on 28 January of a moratorium on granting planning consents for unconventional oil and gas exploration in Scotland, the Scottish Government has developed a programme of work to take forward a period of evidence-gathering.

Public Health Impact Assessment

A Public Health Impact Assessment will be undertaken to investigate the following questions:

- What are the potential risks to health associated with exploration for and exploitation of shale oil and gas and coal bed methane?
- What are the wider health implications of deploying the technology necessary for the exploration and exploitation of shale oil and gas and coal bed methane?
- What options could there be to mitigate any potential adverse impacts that are identified.

Health Protection Scotland (HPS) will coordinate the work, drawing on the expertise of others including NHS Health Scotland and SEPA.

The work will review the scientific evidence on potential impacts from unconventional oil and gas developments, and the risks of any associated adverse health impacts. It will include a review of the wider health related issues associated with the unconventional oil and gas developments, including issues of particular relevance to local communities.

Workshops will be organised with the main stakeholder groups to ensure the assessment addresses the issues of most concern to stakeholders. The work will be peer reviewed, and a final report drawing together the findings of the work will be made publicly available.

Research projects

A series of research projects will also be commissioned to investigate the potential impacts on communities. The work will also explore how any impacts might be ameliorated.

This work will include projects examining the following topics:

- Transport understanding and mitigating community level impacts
- Decommissioning, site restoration and aftercare obligations and treatment of financial liabilities
- Understanding and monitoring induced seismic activity
- Economic impacts
- Climate Change

Individual meetings with the main stakeholder groups (community, environment and industry) at the outset of each project. This will give stakeholders an opportunity to highlight key sources of information and those issues of most concern to them.

Project specifications and summaries will be made publicly available. Final reports and plain English summaries will be published ahead of the public consultation.

Project 1- Transport- Understanding and mitigating community level impacts

The aims of the research will be to better understand:

- the scope and scale of increased traffic volumes in community localities around site(s) during the four stages of unconventional oil and gas development (exploration, appraisal, production and decommissioning & restoration);
- the range of potential impacts (and duration of impacts) of these traffic volumes, and robust regulatory and other options that could mitigate impacts for communities.

Project 2- Decommissioning, site restoration and aftercare – obligations and treatment of financial liabilities

The aims of the research will be to:

- better understand the steps that can be taken to ensure decommissioning, site
 restoration and aftercare can be undertaken in a way that ensures robust regulation and
 minimises impacts on communities and the environment;
- to identify and explore different models of financial guarantee that provide robust security against liabilities and improve understanding of associated costs.

Project 3 - Understanding and monitoring induced seismic activity

The aims of the research will be to:

- better understand the levels of induced seismic activity that could be associated with unconventional oil and gas activities in Scotland; and
- better understand the robust regulatory and non-regulatory actions that can be taken to mitigate any noticeable effects on communities.

Project 4 Economic impacts

The aims of this research will be to:

 Understand the potential aggregate impact of unconventional oil and gas development under a range of scenarios on the Scottish Economy

- Consider the specific impacts of the development of unconventional oil and gas in Scotland and in particular identify the key sectors and groups likely to be affected by each scenario
- Consider the potential nature and extent of any community benefit payments

Project 5 Climate Change Impacts

The aims of this research will be to:

- Examine the impacts on territorial carbon emissions of unconventional oil and gas activities in Scotland in line with the economic scenarios.
- Consider how the impacts might vary over time

Robust Regulation- Planning and Environment

The Scottish Government will also undertake work to review the strength and suitability of the current planning and environmental regulatory regimes. This will include examination of issues such as fugitive emissions, decommissioning, wastewater, community engagement, and planning procedures. Stakeholder workshops will be organised to explore these issues in depth. The findings of this work will inform the public consultation.

Consultation Timetable

Gathering robust evidence on the issues that matter to communities is our immediate priority, and the consultation will not take place until this work has been concluded.

We expect this period of evidence-gathering will be completed in the summer of 2016. This will be followed by a period of reflection that will allow the public and stakeholders to consider and discuss the findings of this work, before a consultation is commenced.

This approach and timetable will ensure that we gather the detailed and robust evidence, whilst creating space and time for the widest possible range of voices to join the debate and participate in this important consultation.

A summary of the anticipated consultation timetable is provided below.

Table Consultation stages and dates

Summary of work and timetable				
Task	Date			
Evidence-gathering				
Public Health Impact Assessment (Health Protection Scotland)	Autumn 2015 – Summer 2016			
- Stakeholder workshops	Autumn/Winter 2015			
- Peer review	Spring/Summer 2016			
- Publish Final Report	Summer 2016			
Research project 1 - Transport impacts	Autumn 2015 – Summer 2016			
- Open and competitive tender	Autumn/Winter 2015			
- Appoint contractor	Winter 2015/16			
- Stakeholder workshops	Winter 2015/16			
- Publish Final Report	Summer 2016			
Research project 2 - Decommissioning and aftercare	Autumn 2015 – Summer 2016			
- Open and competitive tender	Autumn/Winter 2015			
- Appoint contractor	Winter 2015/16			
- Stakeholder workshops	Winter 2015/16			
- Publish Final Report	Summer 2016			
Research project 3 - Seismic activity and monitoring	Autumn 2015 – Summer 2016			
- Open and competitive tender	Autumn/Winter 2015			
- Appoint contractor	Winter 2015/16			
- Stakeholder workshops	Winter 2015/16			
- Publish Final Report	Summer 2016			
Research project 4 - Economic Impacts	Winter 2015/16 – Summer 2016			
Research Project 5 - Climate Change Impacts	Winter 2015/16 – Summer 2016			
Regulation and Planning				
Workshops and Engagement	Winter 2015/16 – Summer 2016			
Report on Findings	Autumn 2016			
Consultation				
Pre-consultation engagement (including stakeholder forums, and public engagement)	Winter 2015/16 – Autumn 2016			
4 month Public Consultation	Winter 2016/17			
Consultation Analysis	Spring 2017			

SG WEBSITE

Energy Web page- Energy Sources- New Technologies

Issue

The Scottish Government is committed to gathering robust evidence on the potential impacts of unconventional oil and gas, and giving stakeholders and the public time to consider the issues and express their views and concerns.

Our action

Moratorium on unconventional oil and gas

The Scottish Government announced a moratorium on unconventional oil and gas on 28 Jan 2015.

<Link to Jan 2015 Statement>

Scottish Ministers also set out plans for a full public consultation (link to subpage 1) on the issue and further research (link to subpage 2); including a public health impact assessment and work to examine how planning and regulatory procedures could be improved.

This will allow us to listen to the voices of concerned communities and stakeholders and support an informed debate that is based on sound science.

Moratorium on Underground Coal Gasification

The Scottish Government announced a moratorium on unconventional oil and gas on 28 Jan 2015. The Moratorium will create space and time to take forward a period of evidence gathering.

<Link to Oct 2015 Statement>

Independent Expert Scientific Panel on Unconventional oil and gas

In 2014, The Scottish Government convened an independent group of scientific experts to provide an independent, impartial evidence base on unconventional oil and gas upon which to inform a robust policy position.

(Link to final report)

Background

What is unconventional oil and gas

Conventional oil and gas deposits are contained in porous reservoirs (often limestone or sandstone) that have interconnected spaces. These interconnected spaces allow oil or gas to flow through the reservoir to a well.

The term unconventional gas refers to natural gas held in rocks that cannot be exploited using traditional methods. The low porosity and permeability of shale and coal formations means that gas does not flow through them freely, rendering it much more difficult to recover by conventional production techniques.

Unconventional oil and gas techniques

Techniques such as horizontal drilling, dewatering and hydraulic fracturing can be used to access and retrieve the natural gas contained within them.

Hydraulic fracturing, also known as "fracking", is used for shale gas but not typically coal bed methane. Globally, the use of fracturing techniques to stimulate the recovery of oil and gas has expanded greatly in the last decade. Hydraulic fracturing methods have a wide range of applications, including enhancing water flow in aquifers used for drinking water.

The process of hydraulic fracturing involves pumping water into the source rock, which is typically located 1-2 km below ground, at high pressure so that the rock fractures and releases the trapped gas. This water also contains a small percentage of sand (\sim 5%) and chemicals (<1%) to improve efficiency of the operation.

Extracting coal bed methane typically requires water to be drained from the coal seam to release pressure (known as dewatering), without hydraulic fracturing.

What is underground Coal Gasification

Underground Coal Gasification is an industrial process, including high pressure combustion, to convert coal in non-mined coal seams into gas. The technology used for UCG differs considerably from technology utilised for shale oil and gas and coal bed methane.

Legislation

Directions were issued to planning authorities and SEPA to give effect to the Moratorium on unconventional oil and gas and UCG.

Unconventional oil and gas

<Links to Directions>

Underground Coal Gasification

<Links to Directions>

Scotland Bill 2015- Onshore oil and gas licencing

New onshore licensing powers will be devolved through the Scotland Bill 2015, which is currently progressing through the UK parliament.

The Scottish Government will carefully consider arrangements to ensure developments using conventional drilling techniques transitional effectively to a Scottish licencing regime.

The onshore licencing powers that will be devolved relate to petroleum exploration. Underground coal gasification is not classified as a petroleum activity, and exploration licencing remains a reserved matter. The Coal authority license all coal exploration on behalf of the UK Government.

As part of our cautious, evidence-led approach to unconventional oil and gas, in January 2015 Ministers asked the UK Government not to grant any further onshore oil and gas licences, including under the 14th round of Petroleum Exploration and Development Licensing (PEDL). No licences under the 14th round are being issued in Scotland.

Sub page 1

Consultation and Engagement

The Scottish Government is committed to being a more open, accessible Government, engaging directly with people on the issues that matter to them.

Our priority is listening to issues that communities are concerned about, and gathering the evidence we need to examine and discuss these issues.

A full public consultation will take place once the evidence gathering work is completed and there has been time for the public and stakeholders to reflect on and consider its findings.

Further details of the public consultation and opportunities for involvement will be provided as this work developments.

k to table summarising consultation timetable>

Sub page 2

Evidence-gathering

As part of our moratorium, the Scottish Government is gathering evidence to better understand the potential issues and impacts of shale oil and gas, and coal bed methane developments in Scotland. We expect this period evidence gathering will be completed in the summer of 2016. This will be followed by a period of reflection that will allow the public and stakeholders to consider and discuss the findings of this work.

This comprehensive programme of work will include a Public Health Impact Assessment and projects examining the following topics:

- Transport understanding and mitigating community level impacts
- Decommissioning, site restoration and aftercare obligations and treatment of financial liabilities
- Understanding and monitoring induced seismic activity
- Economic impacts
- Climate Change

Further details of the work can be found at <Link to SPICe Statement).

Robust Regulation – Planning and Environment

The current planning and environmental regulatory regimes will be reviewed to ensure they support a rigorous and transparent regime, underpinned by meaningful engagement.

Issues that will be examined include fugitive emissions; decommissioning; wastewater; community engagement; and planning procedures. Stakeholder workshops will be organised to explore these issues in depth.

The findings of this work will inform the public consultation.

Consultation timetable and evidence-gathering

S4W-24476 Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), in light of the moratorium on the granting of planning consents for unconventional oil and gas developments, whether it will carry out a public consultation regarding the (a) planning guidance, (b) environmental regulations and (c) possible health impacts of such developments and, if so, when this will (i) begin and (ii) end.

In consultation with stakeholders, the Scottish Government has developed a programme of work to take forward the plans announced on 28 January. The Scottish Government has published details of the proposals for evidence-gathering and public consultation, including a timetable. This information is available from the Scottish Parliament Information Centre (Bib. number 57225) and on the Scottish Government website at http://www.gov.scot/Topics/Business-Industry/Energy/onshoreoilandgas

In order to provide a full picture of evidence to interested stakeholders, a public consultation on unconventional oil and gas will be launched after this work has been completed.

• S4W-24477 Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), what work will be carried out on strengthening the planning guidance with regard to unconventional oil and gas extraction; which government department or nongovernment body it will commission to do this; when the work will (a) begin and (b) end; when the findings will be published, and how many full-time equivalent staff will be employed to do this.

I refer the member to the answer to question S4W-24476 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• S4W-24478 - Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), what work will be carried out on reviewing the environmental considerations with regard to unconventional oil and gas extraction; which government department or non-government body it will commission to do this; when the work will (a) begin and (b) end; when the findings will be published, and how many full-time equivalent staff will be employed to do this.

I refer the member to the answer to question S4W-24476 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

• S4W-24479 - Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), what work will be carried out on examining the possible health impact of unconventional oil and gas extraction; which government department or nongovernment body it will commission to do this; when the work will (a) begin and (b) end; when the findings will be published, and how many full-time equivalent staff will be employed to do this.

I refer the member to the answer to question S4W-24476 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• <u>S4W-25126 – John Wilson</u>

what the (a) timeline and (b) reporting mechanism is for the public consultation on unconventional oil and gas extraction, including fracking, which was announced by the Minister for Business, Energy and Tourism on 28 January 2015.

I refer the member to the answer to question S4W-24476 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• <u>S4W-25128 – John Wilson</u>

what funding will be allocated to conducting the public health impact assessment on unconventional oil and gas extraction, including fracking, which was announced by the Minister for Business, Energy and Tourism on 28 January 2015.

I refer the member to the answer to question S4W-24476 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

Health Protection Scotland (HPS) will undertake and coordinate the public health impact assessment, drawing on the expertise of others including NHS Health Scotland and SEPA.

S4W-25129 – John Wilson

who will be commissioned to carry out the public health impact assessment on unconventional oil and gas extraction, including fracking, which was announced by the Minister for Business, Energy and Tourism on 28 January 2015.

I refer the member to the answer to question S4W-24476 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

Underground Coal Gasification

S4W-24475 Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), whether the moratorium on the granting of planning consents for unconventional oil and gas developments will apply to (a) underground coal gasification and (b) coalbed methane extraction.

In line with the precautionary, evidence-based approach already shown on unconventional oil and gas, the Scottish Government has now announced plans for a separate moratorium on planning consents related to Underground Coal Gasification (UCG) developments in Scotland. The moratorium will be accompanied by a programme of evidence-gathering work.

Information is available from the Scottish Parliament Information Centre (Bib. number ???) and on the Scottish Government website at http://www.gov.scot/Topics/Business-Industry/Energy/onshoreoilandgas

Coalbed methane extraction (CBM) is already covered by the existing moratorium on unconventional oil and gas developments.

S4W-24696 Cara Hilton

what its position is on extending the moratorium on fracking to include underground coal gasification.

I refer the member to the answer to question S4W-24475 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

S4W-24697 Cara Hilton

what its position is on reports of serious groundwater contamination and large carbon emissions being associated with underground coal gasification.

I refer the member to the answer to question S4W-24475 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

S4W-24698 Cara Hilton

for what reason the moratorium on fracking does not include underground coal gasification.

I refer the member to the answer to question S4W-24475 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

S4W-24699 Cara Hilton

what its position is on the recent comment from Friends of the Earth Scotland that "underground coal gasification is the most experimental and frightening method of unconventional gas extraction".

I refer the member to the answer to question S4W-24475 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

• <u>S4W-25191 Cara Hilton</u>

when it will provide substantive answers to questions S4W-24696, S4W-24697, S4W-24698 and S4W-24699 regarding its position on underground coal gasification, which received holding answers on 13 March 2015.

I refer the member to the answer to question S4W-24475 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

S4W-25192 Cara Hilton

whether it will extend the moratorium on fracking to include underground coal gasification.

I refer the member to the answer to question S4W-24475 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

http://www.scottish.parliament.uk/parliamentarybusiness/28877.aspx.

S4W-24474 Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), whether the moratorium on the granting of planning consents for unconventional oil and gas developments will prohibit developments that do not require hydraulic fracturing.

The moratorium on unconventional oil and gas developments covers coal bed methane developments: these are unconventional developments and as such are covered whether or not they involve hydraulic fracturing.

All other developments using conventional drilling techniques are not covered by the moratorium.

Boreholes

S4W-24473 Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), whether the moratorium on the granting of planning consents for unconventional oil and gas developments will prohibit the drilling of conventional boreholes for (a) environmental baseline assessments, (b) exploratory flow-back testing and (c) the appraisal of commercial feasibility in relation to potential unconventional oil and gas developments.

Boreholes are drilled regularly in Scotland and for a variety of purposes.

With regard to unconventional oil and gas, only boreholes drilled for the purpose of obtaining a core sample are permitted. Directions have been issued today to Planning Authorities and SEPA clarifying this position.

It is the Scottish Governments position that such boreholes must also have research and geoscience as their key driver and by undertaken in collaboration with an independent research body (such as the British Geological society) or academic institution, and the information obtained will be made available to support the evidence-base on unconventional oil and gas.

The Scottish Government, in consultation with stakeholders, will update planning guidance to reflect this position. Planning guidance will also be reviewed to ensure that borehole applications are subject to appropriate public scrutiny and that proposals satisfactorily address all the likely impacts on local communities and the environment.

• S4W-26767 Angus MacDonald

To ask the Scottish Government whether its moratorium on hydraulic fracturing includes test drilling for shale gas in central Scotland.

I refer the member to the answer to question S4W-24473 on 08 October. All answers to written parliamentary questions are available on the Parliament's website, the search facility for which can be found at:

Q&A - Unconventional Oil & Gas

Implementing the Moratorium

1. What is the rationale behind a moratorium?

The moratorium announced in January 2015 was specifically about onshore unconventional oil & gas, including fracking.

The technology used for UCG differs considerably from technology utilised for unconventional oil and gas, and UCG is not classified as a petroleum activity,

We have continued to listen to the views being expressed by communities, industry, MSPs, and environmental organisations on UCG.

In line with our cautious and evidence-based approach, a separate moratorium on UCG will allow the necessary time and space for full and careful consideration of the potential impacts of this new technology.

2. How will the moratorium be implemented?

A Direction giving effect to this moratorium has been issued to all Scottish planning authorities.

To ensure consistency across regulatory regimes, a similar Direction has been issued to the Scottish Environment Protection Agency (SEPA) regarding any relevant new Controlled Activity Regulation (CAR) Licences.

3. Does the Scottish Govt expect to have exploration licensing powers for UCG?

While powers to award onshore unconventional licences are being devolved to Scottish Ministers, powers to award operators exclusive rights to exploit coal resources for UCG rests with the UK Government/Coal Authority and there are no live proposals to devolve these to Scotland.

4. What about the economic opportunities that will be lost by not developing UCG?

We should be clear that this is not an absolute ban on UCG – we are calling a moratorium now so that we can determine the best way forward to examining the risks and benefits of UCG.

We know the resources are there - they will still be there in the future.

5. Industrial figures like Tom Crotty at INEOS have indicated previously that a moratorium will harm our security of energy supply and could have a negative impact on their operations. How can this be avoided?

We believe that we need a balanced energy mix and it is clear that fossil fuels will be a part of that for the foreseeable future. However, in order to inform our longer-term strategic approach, we think it's important to seek further evidence to fill the gaps in our knowledge and let the voice of local communities be heard.

A moratorium is the right approach so that everyone – including developers, local communities and environmental campaigners - is clear on expectations, and we have the time to gather more evidence, allowing our policy position to be founded upon a robust evidence-base.

6. What action will Scottish Government take if UK Government/Coal Authority continues to issue further UCG licences in Scotland?

As this is not a devolved issue, the UK Government should have regard for Scotland's position regarding UCG. The appropriate response to any future licensing would be further discussion between the UK and Scottish Governments to aid understanding of the practicalities of implementing a licensing regime.

7. Will the Scottish Government's undertake a consultation and what issues will it cover?

The first step is to examine the issues and evidence surrounding UCG. On completion, this will inform the next steps taken.

8. Why do we need a moratorium on UCG? Why not allow planning applications to proceed while the Government consults stakeholders and undertakes further research?

A moratorium is a sensible way to proceed; it gives clarity to all interested parties - including potential developers - on the Scottish Government's position on the matter and allows us to take stock of where we are and what our long term plans should be.

9. How long while the moratorium remain in place?

The moratorium will remain in place until the necessary evidence-gathering has been and the results of our consultation have been considered.

The moratorium will provide space for the Scottish Government to examine, investigate and develop the evidence-base. This is consistent with the current position on unconventional oil and gas. We understand that this is a complicated issue which strikes a chord with the both the people and industries of Scotland; as such, we will take the necessary time to deliver a comprehensive process which is consistent with the model of community engagement and democratic participation Ministers wish to establish as a hallmark of the Scottish Government

10. What work will now take place now that a moratorium has been announced?

The Scottish Government has appointed Campbell Gemmell to lead an independent examination of the issues and evidence surrounding UCG, this will include working closely with communities and stakeholder to understand the issues of most concern.

11. Why has it taken so long for the government to clarify its position on UCG?

This is too important an issue to rush to a position. We have been taking a cautious, precautionary approach, and the Scottish Government has listening carefully to the views being expressed.

There are no live planning applications involving UCG activities in Scotland.

We have taken the time to carefully consider the issue and come to the right decision for the people of Scotland.

12. Does this moratorium not risk jobs in the oil and gas sector?

No as we do not expect any major UCG developments in the near future in any case, especially given the low oil price. Job creation is one potential benefit of development of UCG, but it is only one element amongst many that must be considered.

13. Why doesn't the Scottish Government ban UCG?

Because we are taking an evidence-based approach to this issue and currently we do not have the evidence to support a ban.

14. Does this not show that Scotland is closed for business?

No it shows Scotland is responsible in how it does business.

15. Is this not just a political fix to take you through until after elections in 2016?

No. It is clear that there are several areas of concern where we do not have sufficient information analysis and expert evidence, and since our approach is evidence based, these are gaps that we need to fill.

16. Is this a U-turn, pure and simple?

Not at all. We are continuing to take an evidence-based approach, and it is clear that we simply lack sufficient evidence on a number of important areas, and therefore we are proceeding to start the work necessary to fill these gaps. This will take time. But it is important that we have a comprehensive evidence-gathering process in Scotland as a firm base from which to work.

CLIMATE CHANGE

1. Is the extraction of unconventional hydrocarbons contradictory to Scottish Government's ambitious climate change policies?

It is clear from our actions that we are equally committed to the transition to a low carbon economy. This is evidenced in our ambitious renewables targets, climate change targets and our Heat Generation Policy Statement, which will reduce our use of fossil fuels.

We need a global transition to a low carbon economy and Scotland is helping to lead that transition, however as a global society it is very likely that we will continue to need fossil fuels as part of the energy mix for many years to come, so our approach is one of careful stewardship of finite resources.

As countries such as Denmark show, there is no contradiction between making use of substantial, in its case, gas reserves, while leading the transition to a low carbon economy. The oil and gas industry has an important role to play in that transition, and the hydrocarbon-rich nations have a responsibility to lead the transition to a low carbon economy.

2. What consideration are you giving to the climate change consequences of unconventional oil and gas?

The carbon impact of unconventional oil and gas will play a part in our consultation process. The Cabinet Sub-Committee on climate change is also considering how we can further cut carbon emissions.

3. Should the Scottish Government be pursuing opportunities for development of onshore wind rather than unconventional gas?

In Scotland we need a diverse and balanced energy portfolio to provide us with secure and affordable heat and electricity for decades to come. However, the Scotlish Government has an obligation – both moral and of economic opportunity – to lead the way to a low carbon economy. Scotland already generates 49.6% of its gross equivalent electricity needs from renewables and our ambition is to deliver the equivalent of at least 100% of gross electricity from renewables by 2020.

However, we also recognise the need for clean thermal baseload to supplement increasing renewables and unconventional gas could potentially play a part in that, particularly if used in conjunction with carbon capture and storage technologies.

It is equally important to remember that gas is used for much more than just electricity generation in Scotland, with the majority of it is used for heating and other purposes.

4. Could you clarify what Controlled Activity Regulation licences are for, why no further CAR licences will be issued and what the practical effect of this measure will be?

Unconventional gas activities involve activities such as boreholes which require authorisations by SEPA to ensure that environmental impacts are recognised and mitigated.

The Direction to SEPA to refer any new applications to Ministers ensures that we have a coherent approach across Scotland and that the moratorium does not have gaps between regimes; e.g. those areas where planning permission may already be granted. Its practical effect will be to support the Scottish Government's moratorium on unconventional gas development.

PLANNING

1. What is the purpose of the Planning Direction on UCG?

The Direction will ensure that the Scottish Government is notified of all planning applications for underground coal gasification should any come forward. The Direction takes effect immediately and is not time-limited.

2. What will be the process of implementing the moratorium on UCG?

Developers will need to reflect on the moratorium. If they decide to submit a planning application, the Direction will ensure that the Scottish Ministers are notified of any application that is accepted by the planning authority as valid. Our expectation is that planning permission should not be granted. However, the Direction ensures that the Scottish Ministers will have an opportunity to call in any application. We will not hesitate to use the powers available to us to ensure that the moratorium is enforced.

3. What type of developments are covered by the moratorium?

Planning permission is required for any building, engineering, mining or other operations in, on, over or under land, extending to the mean low water mark of ordinary spring tides. This would mean that a planning application will be required for any onshore infrastructure associated with offshore extraction. A moratorium on the onshore infrastructure would effectively ensure that development cannot proceed.

4. Robustness of existing planning regulation around UCG?

Work will be undertaken during the moratorium to examine the robustness of current regulatory measures, including planning.

5. What has changed since Mr Neil's letter to Cluff?

The moratorium announced in January was specifically about onshore unconventional oil & gas planning consents. This was confirmed to Cluff Natural Resources. The moratorium did not cover underground coal gasification because of the substantial differences between the two technologies. This includes licensing powers, extraction techniques, likely development timescales, and different regulatory frameworks. Given these key differences, it was considered important for the Scottish Government to assess the technologies separately in line with our evidence-based approach.

6. Labour "triple lock" and local referendum?

Our moratorium gives people all the protection that they need for the foreseeable future. It will only be lifted if there is clear evidence to demonstrate that the potential impacts of development can be properly addressed. Our subsequent work will fully reflect the Scottish Government's commitment to community engagement and democratic participation, including how best to involve communities in the planning decision making process so that their voices are not ignored.

EVIDENCE-GATHERING

1. Can you explain why you think the evidence-gathering process is one of the most wide-ranging in the world?

In additional to a thorough examination health impacts, we are commissioning, through open and competitive tendering, studies examining transport, seismicity, decommissioning, climate change, and economic impacts. We will also be examining regulatory issues, like participation and engagement, fugitive emissions and wastewater. Collectively, this is one of the most comprehensive packages of work ever undertaken by a government to explore unconventional oil and gas.

2. What will the public health impact assessment cover?

The Public Health Impact assessment will be a carried out in line with best practice, and will consider both the direct and wider health impacts arising from unconventional oil and gas extraction. It will consider 3 questions;

What are the potential risks to health associated with exploration for and exploitation of shale oil and gas and coal bed methane?

What are the wider health implications of deploying the technology necessary for the exploration and exploitation of shale oil and gas and coal bed methane?

What options could there be to mitigate any potential adverse impacts that are identified?

3. How will the PHIA be undertaken?

The PHIA is being coordinated by Health Protection Scotland, drawing on the expertise of others such as NHS Health Scotland and SEPA.

It will include a scientific review of evidence relating to hazards associated with the exploitation of unconventional oil and gas, and the risks of adverse health impacts associated with its processes and technology. It will also include a review of the wider health related issues associated with the exploitation of unconventional oil and gas reserves in Scotland.

4. Can the public get involved in the PHIA?

Everyone will have the opportunity to have their say on the potential health risks associated with unconventional oil and gas extraction during the public consultation. The PHIA itself is a rigorous and independent piece of scientific work, and consequently there will not be opportunities for the general public to shape its content.

5. Will the PHIA mean that local health impact assessments will not be required?

The PHIA will look at the range of health impacts that could occur, not at the specific issues associated with a specific site. It will be valuable resource for public health professionals if they are required in the future to consider local health impacts, either as part of an Environmental Impact Assessment or as a stand-alone local Health Impact Assessment.

6. When will the PHIA be completed?

Summer 2016.

EXPLORATORY BOREHOLES

1. Why are you permitting exploratory borehole drilling while the moratorium is in place?

Scottish Government is committed to gathering as much evidence as possible during the period of the moratorium. We believe it is important that the public consultation is informed by as complete a picture as possible and our evidence gathering programme reflects this objective. In this context, exploratory borehole drilling will be a scientific exercise to give us a greater understanding of the likely available resource and any permitted borehole drilling will not involve hydraulic fracturing or the extraction of petroleum. The evidence from exploratory boreholes would further refine the knowledge already accrued through the British Geological Survey's report

on potential unconventional oil & gas resources in the Midland Valley, published June 2014

Borehole drilling is a common occurrence in Scotland for a variety of purposes. There is no evidence to indicate that the process of drilling deep boreholes for exploratory analysis using standard techniques will present any greater environmental or public health risks.

2. Why have you taken so long to decide?

This is too important an issue to rush to a position. We have been taking a precautionary, evidence-based approach, and the Scottish Government has been committed to engaging and listening to all stakeholders during the period of the moratorium.

3. Isn't this the first step to Fracking?

There will be no fracking during the period of the moratorium. The Scottish Government is committed to evidence gathering, and any exploratory boreholes would have research and geoscience as the key driver, they would be delivered in collaboration with an independent research body (such as the British Geological Society) and an academic institution, and are for the purposes of furthering the evidence-base on unconventional oil and gas. The evidence from exploratory boreholes would further refine the knowledge already accrued through the British Geological Survey's report on potential unconventional oil & gas resources in the Midland Valley, published June 2014

To: Minister for Business, Innovation and Energy

UNCONVENTIONAL OIL AND GAS: COMMUNICATIONS AND HANDLING OF CONSULTATION LAUNCH

Purpose: to confirm the communications handling plan for the publication of the consultation on unconventional oil and gas.

Priority: Immediate

Background

- 1. The Scottish Government is taking a cautious and evidence-led approach to unconventional oil and gas (UOG), supported by a full public consultation.
- 2. On 08 November 2016, the Scottish Government published the results of a comprehensive research programme into UOG and confirmed that the consultation will take place in early 2017, in coordination with the publication of the draft Climate Change Plan and the consultation on Scotland's draft Energy Strategy.
- 3. Ministers have cleared the content of the UOG consultation (submission from [redacted] 13 December 2016). Ministers also confirmed the sequencing of the publication of the draft Climate Change Plan, draft Energy Strategy consultation and UOG consultation (submission from [redacted], 14 December 2016).
- 4. The UOG consultation will be accompanied by a temporary online micro-site that will provide user-friendly information on UOG and the findings of the research commissioned by the Scottish Government. The micro-site will also act as a gateway to the main consultation and supporting evidence. The consultation will be hosted on the Scottish Government Citizen Space website. Discussion tool-kits have also been prepared to help communities and other groups participate in the consultation.

Consultation launch: communication and handling plan

- 5. Officials have liaised with SpAds and the SG Communications team to prepare a communication and handling plan that will promote wide awareness of the launch of the consultation.
- 6. The consultation will be named: Talking "Fracking": A consultation on unconventional oil and gas. All supporting materials, including the micro-site, will adopt this name.
- 7. It is proposed that the consultation launches on week commencing 30 January, with the current preferred launch date 31 January. The draft Climate Change Plan will be published on 19 January followed by the draft Energy Strategy consultation on 24 January.
- 8. The draft Energy Strategy helps establish the context for the UOG consultation by setting out wider opportunities and actions to secure Scotland's energy future. Officials have worked closely

to ensure consistency in policies and messaging between the draft Energy Strategy and the UOG consultation. The publication of the draft Energy Strategy will incorporate clear lines on the imminent publication of the UOG consultation and its significance to the final Energy Strategy.

- 9. The UOG consultation will run until the end of May 2017 to ensure that there is sufficient time for local authorities to consider any responses after the local government elections. This is consistent with the timing of the draft Energy Strategy consultation.
- 10. The launch of the UOG consultation is an opportunity to reinforce the following important messages:
 - i. The Scottish Government's continued commitment to gathering evidence and giving people across Scotland an opportunity to put their views across;
 - ii. The Scottish Government's neutral stance on UOG. The UOG consultation does not set out a preferred Scottish Government policy position. Instead, the consultation creates space for dialogue and allows different perspectives to come forward;
 - iii. restate that the Scottish Parliament will be given an opportunity to vote on the future of UOG in Scotland once the consultation closes and the results have been analysed;
 - iv. promote the actions that are being taken to encourage an informed national discussion, including launching a dedicated micro-site and preparing discussion tool-kits to help communities and other groups participate in the consultation.
- 11. In view of the sensitive topic matter, and to promote wide awareness of consultation, the main elements of the launch would be:
 - i. a written IPQ announcing the launch of the consultation;
 - ii. a press release coordinated with the publication of the IPQ;
 - iii. a 20-second video clip by the Minister for Business, Innovation and Energy for use on SG social media platforms, encouraging the public to respond to the consultation;
 - iv. a comprehensive mail shot to stakeholders across Scotland.
- 12. The Minister for Business, Innovation and Energy will be available for media bids directly after the consultation is launched. An extensive Q&A is available for Communications colleagues and the Minister.
- 13. Details of the communications and handling plan are provided at Annex A. A SCANCE note outlining the consultation and handling plan is being prepared for Cabinet on 24 January 2017.
- 14. There will be continued opportunities for Ministerial engagement with stakeholders during the consultation.

Recommendation

15. You are invited to note the content of this minute and indicate whether you are content for officials to progress the communications handling plan described in **Annex A**

[redacted]
Onshore Oil and Gas
Ext: [redacted]

Copy List:	F	F	For Information		
	For For	Portfolio	Constit	General	
	Action	Comments	Interest	Interest	Awareness
First Minister		Χ			
Deputy First Minister					X
Cabinet Secretary for Economy, Jobs and Fair Work			Χ		
Cabinet Secretary for Health and Sport					
Cabinet Secretary for Environment, Climate Change			Х		
and Land Reform			Х		
Cabinet Secretary for Communities, Social Security					
and Equalities			Х		
Cabinet Secretary for Rural Economy and					
Connectivity			Х		
Minister for Public Health and Sport					
Minister for Local Government and Housing			Х		
Minister for Further Education, Higher Education and			Х		
Science			X		

Permanent Secretary

DG Economy

DG Communities

Chief Scientific Advisor

Chief Scientific Advisor for Rural Affairs, Food and the Environment

Chief Scientist (Health)

Chris Stark

Mary McAllan

Kenneth Hogg

Bridget Campbell

David Ritchie

[redacted]

[redacted]

Simon Fuller

John Ireland

John McNairney

Katriona Carmichael

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Gareth Brown

[redacted]

[redacted]

Kate Higgins

David Miller

Liz Lloyd

[redacted]

[redacted]

Jeanette Campbell

Comms Economy

UOG CONSULTATION: COMMUNICATION AND HANDLING PLAN

The communications and handling plan is designed to promote the publication of the consultation on unconventional oil and gas (UOG) and to encourage public participation in the consultation through national print and broadcast coverage and through social media activity on Twitter.

Key Messages:

- The Scottish Government is committed to gathering evidence into unconventional oil and gas in Scotland and giving people across Scotland an opportunity to put their views across.
- The UOG consultation does not set out a preferred Scottish Government policy position.
 Instead, the consultation creates space for dialogue and allows different perspectives to come forward.
- The Scottish Parliament will be given an opportunity to vote on the future of UOG in Scotland once the consultation closes and the results have been analysed.
- The Scottish Government is keen to encourage an informed national discussion, and has launched a dedicated microsite and prepared discussion tool-kits to promote active participation in the consultation.

Handling Plan:

Day of publication – TBC W/C 30 January		
Officials liaise with stakeholders	A.M. SpAds and policy officials will co-ordinate briefing of key stakeholders including Friends of the Earth Scotland, Scottish Environment LINK, The Broad Alliance, UKOOG, and COSLA.	
Written IPQ	To be answered mid-morning and the consultation will go "live" once the IPQ is answered.	
Publication of Consultation	The consultation will go "live" on the Scottish Government's consultation portal "Citizen Space" and will appear on the Scottish Government's Publications page.	
News Release	Ministerial news release welcoming the publication of the consultation. The news release is an opportunity to: - cast the consultation as part of our "evidence-led" approach	
	to UOG; - set out that the purpose of the public consultation is to initiate a national discussion informed by impartial information to provide evidence of public views; - restate that the Scottish Parliament will be given an opportunity to vote on the future of UOG in Scotland once the consultation closes and the results have been analysed; - a final decision will be made by end of 2017.	
	The news release will promote the dedicated UOG micro-site and the discussion tool-kits which have been developed to support the consultation.	

Post-Cabinet Briefing (this would be applicable if the launch date is Tuesday 31 January)	The FMOS will inform the media attending the post-Cabinet briefing of the launch of the UOG consultation.
Ministerial media activity	Mr Wheelhouse will be available for broadcast media bids once the consultation goes live.
	A 20-second video clip from the Minister encouraging the public to respond to the consultation will be recorded and posted on Facebook and Twitter.
	A 5-second text animation and the link to consultation will be tweeted.
Consultation micro-site	A temporary, dedicated online micro-site has been developed to host information about unconventional oil and gas in Scotland and the Scottish Government consultation. This site will go "live" when the consultation is published.
Update SG website	Text of Onshore Oil and Gas SG webpage will be updated to reflect publication of the consultation, and hyperlinks to the consultation on Citizen Space will be embedded.
Stakeholder communication	Following the publication of the consultation, officials will update key stakeholder groups with email-shot containing links to consultation document, consultation microsite and Ministerial news release.
During the Consultation	
Ministerial stakeholder engagement	Opportunities for engagement with stakeholders during the consultation will be identified, for example hosting a set of meetings with key stakeholder groups. Officials will provide further advice on stakeholder engagement options.
On-going social media activity	The web links to the UOG consultation on Citizen Space will be tweeted at regular intervals during the consultation period to encourage public participation.