

**Partial  
Business and Regulatory Impact Assessment**

**Policy on the development of  
onshore unconventional oil  
and gas in Scotland**

**October 2018**

# Partial Business and Regulatory Impact Assessment

**Title of Proposal**

Policy on the development of onshore unconventional oil and gas in Scotland

**Purpose and intended effect**

This partial Business and Regulatory Impact Assessment (BRIA) of the development of unconventional oil and gas policy in Scotland is the latest step in the Government's policy-making process in determining the role of onshore unconventional oil and gas in Scotland's energy mix.

Views are invited on this partial BRIA which is a companion document to the Scottish Government's preferred policy position statement and Strategic Environmental Assessment (SEA) Environmental Report.

Once the consultation on the preferred policy, the SEA and the partial BRIA has been completed, responses to the partial BRIA will help inform the final BRIA which will be undertaken by officials, building on the partial assessment and information gathered from the consultation analysis. The final BRIA will be considered by Scottish Ministers when finalising their policy on unconventional oil and gas.

**Background**

Scotland's Energy Strategy (published 20 December 2017) sets out a vision for the future of energy in Scotland. It will guide the decisions that the Scottish Government, working with partner organisations, needs to make over the coming decades and support work already underway to achieve our long term climate change targets and transition to a low carbon economy.

The Climate Change (Scotland) Act 2009 sets a long-term target to reduce greenhouse gas emissions (GHG) by 80% from the baseline (which is 1990 or 1995 depending on the gas). The Act also contains annual targets for each year to 2050. All of these targets are set on the basis of territorial emissions across the Scottish economy as a whole. On 24 May 2018, Scottish Ministers brought forward a draft Climate Change Bill in response to the UN Paris Agreement, that proposes to increase the 2050 target to a 90% reduction and keep the setting of a further target for net-zero greenhouse gas emissions under regular review. In its advice to the Scottish Government on how the Bill might be drafted, the Committee on Climate Change (CCC), said : "In order to achieve a 90% target, strong and well-designed policies would be required".

Unconventional oil and gas can contribute to the provision of natural gas for energy or energy production and natural gas liquids as a raw material for the petrochemical industry.

The term 'unconventional' in unconventional oil and gas refers to the types of geology in which the oil and natural gas are found. For the purpose of this partial BRIA, unconventional oil and gas is understood to include:

- Gas extracted from onshore shale sources using hydraulic fracturing (commonly known as 'fracking');
- Associated liquids extracted from onshore shale sources using hydraulic fracturing; and,
- Coal bed methane (CBM).

Most of Scotland's unconventional oil and gas deposits occur in and around former coalfields and oil shale fields in Scotland's Central Belt which contains some of the most densely populated areas of the country, as well as in areas in South East Scotland.

The Scottish Government has taken a cautious, evidence-led approach to considering onshore unconventional oil and gas in Scotland. This included the establishment of an Independent Expert Scientific Panel ('the Expert Panel') to examine the evidence on unconventional oil and gas, including hydraulic fracturing and coal bed methane extraction.

Following the publication of the Expert Panel's report<sup>1</sup>, in January 2015 the Scottish Government announced a moratorium on onshore unconventional oil and gas development in Scotland. The moratorium created space to explore specific issues and evidential gaps identified by the Expert Panel, and undertake full public consultation. A series of independent research studies<sup>2</sup> were commissioned covering issues such as climate, seismic activity, transport, health impacts and economic impacts, and a public consultation, which received over 60,000 responses, was held from January to May 2017.

On 24 October 2017, the Scottish Parliament voted in favour of the Scottish Government's preferred policy position of not supporting onshore unconventional oil and gas development in Scotland.

In order to meet its statutory responsibilities, the Scottish Government requires a SEA to be undertaken ahead of finalising the policy on unconventional oil and gas. In addition, a BRIA is also being undertaken.

### **Preferred Policy Position**

The Scottish Government published its preferred policy position<sup>3</sup> in December 2017. This has since been updated to take into account the devolution of onshore oil and gas licensing powers on 09 February 2018. Commencement of sections 47 to 49 of the Scotland Act 2016 transferred powers for:

<sup>1</sup> <https://www.gov.scot/Publications/2014/07/1758>

<sup>2</sup> <https://www.gov.scot/Topics/Business-Industry/Energy/onshoreoilandgas/EvidenceGathering>

<sup>3</sup> <https://www.gov.scot/Topics/Business-Industry/Energy/onshoreoilandgas/PreferredPolicyPosition>

- granting and regulation of licences to search and bore for and get petroleum within the Scottish onshore area;
- determining the terms and conditions of licences; and,
- regulating the licensing process, including administration of existing licences.

The regulation, including setting of the consideration payable for a licence remains reserved. In addition, the UK Government has powers to revoke a licence on the basis of failure to make payments due under the licence.

On 03 October 2017 the Chief Planner wrote to local authorities across Scotland to make clear that the Planning Direction of 2015 will continue to remain in force.

This approach ensures decisions on onshore unconventional oil and gas developments will be made in line with planning policy and procedure, and within the framework of Scottish Government policy.

Once finalised, the policy on unconventional oil and gas in Scotland will also be reflected in the next iteration of the National Planning Framework. The Scottish Government currently expects to begin preparation of its National Planning Framework 4 following the passage of the Planning Bill through Parliament from early 2019 onwards.

In the event the preferred policy position is adopted, in addition to the policy being a material consideration within planning policy, Scottish Ministers would discharge the newly devolved licensing powers in line with that adopted policy position i.e. of not supporting the development of unconventional oil and gas in Scotland.

### **Objective**

This partial BRIA sets out considerations regarding the potential impacts of the proposals for Scotland's unconventional oil and gas policy on businesses and other organisations.

The information in this partial BRIA is drawn from the existing evidence base and references the relevant documents where appropriate: specifically the suite of research on unconventional oil and gas commissioned by the Scottish Government and the responses to the public consultation, Talking "Fracking".

In reviewing the research findings, the Scottish Government has identified particular concerns over the insufficiency of epidemiological evidence on health impacts highlighted by Health Protection Scotland.

The compatibility of an unconventional oil and gas industry with Scotland's world leading climate change targets is an area of further concern.

The study commissioned by the Scottish Government to examine climate change implications, which was undertaken by the Committee on Climate Change, concluded that unconventional oil and gas extraction in Scotland would make meeting our existing climate change targets more challenging.

As the Committee states in their report, in order to be compatible with Scottish climate change targets, emissions from production of unconventional oil and gas would require to be offset through reductions in emissions elsewhere in the Scottish economy.

The Scottish Government is also aware that the potential activity associated with an unconventional oil and gas industry would be concentrated in and around former coalfields and oil shale fields in the Central Belt of Scotland, which are among the most densely populated parts of the country.

It is clear from our consultation, Talking “Fracking”, that communities across Scotland, particularly in areas where developments could take place, have yet to be convinced there is a strong enough case of national economic importance, when balanced against the risk and disruption they anticipate on matters such as transport impacts, risks of pollution, and on their general health and wellbeing.

Although the Scottish Government is confident that an unconventional oil and gas industry would aim to work to the highest environmental, and health and safety standards, it is also our responsibility as a government to make a decision we believe is the best for the people of this country.

The Scottish Government considers the development of an onshore unconventional oil and gas industry in Scotland would make achieving our energy and climate change commitments more challenging. Whilst acknowledging the important role of gas in the transition to a low carbon energy future, Scotland is a net exporter of natural gas and the addition of an onshore unconventional oil and gas industry would not promote our ability to meet our greenhouse gas emissions targets or objectives in relation to protecting and enhancing the environment.

### **Rationale for Government intervention**

Powers over onshore oil and gas licensing were devolved to Scottish Ministers in February 2018. These include the granting and regulation of licences to search and bore for and get petroleum (including unconventional oil and gas) within the Scottish onshore area.

The powers were recommended for devolution by the Smith Commission in November 2014, and devolved as part of the Scotland Act 2016. As a result, Ministers have acknowledged the need to arrive at a policy position regarding onshore unconventional oil and gas in Scotland.

In previous years, the UK Government issued Petroleum Exploration and Development Licences (PEDLs) in Scotland. There are currently three PEDLs held in Scotland, two of which are held by companies with the intention of targeting unconventional oil and gas.

### **Consultation**

This consultation on the business and regulatory impacts of the development of unconventional oil and gas policy is the latest step in the cautious, evidence-led approach adopted by the Scottish Government in considering onshore

unconventional oil and gas in Scotland. Previous work included research commissioned by the Scottish Government and public consultation, Talking “Fracking”<sup>4</sup>, which ran from 31 January 2017 to 31 May 2017. The consultation received 60,535 responses. Approximately 99% of respondents who expressed a view were opposed to fracking.

The final BRIA will take account of the previous work, views received in the course of the consultation on the preferred policy position and the partial BRIA, and will focus on costs and benefits of the preferred option.

### **Within Government**

The Scottish Government has consulted the following internal departments in the development of the proposals contained in this partial BRIA: Directorate for Economic Development; Directorate for Legal Services (Solicitor to the Scottish Government); Directorate for Energy and Climate Change; Directorate for Local Government and Communities; Directorate for Chief Economist; and Directorate for Justice.

In addition, the Scottish Government has consulted the Scottish Environment Protection Agency (SEPA), the Health and Safety Executive (HSE) and the Coal Authority on the potential impact of the proposals. Their respective comments are reflected in the costs and benefits section of this partial BRIA.

### **Public Consultation**

The Scottish Government’s preferred policy position is subject to the outcome of a SEA. The SEA provides an assessment of the likely significant environmental effects of the preferred policy position and ‘reasonable alternatives’ to it. The Scottish Government’s preferred position is that it does not support the development of unconventional oil and gas in Scotland. This is on the basis that the development of an unconventional oil and gas industry in Scotland would make achieving its ambitious energy and climate change commitments even more challenging. Whilst acknowledging the important role of gas in the transition to a low carbon energy future, the addition of an onshore unconventional oil and gas industry would not promote our ability to meet our greenhouse gas emissions targets or objectives in relation to protecting and enhancing the environment.

It is recognised that some may regard the development of the industry, subject to the relevant licensing and permitting regimes, as alternatives to the preferred policy position. These alternatives are described in the SEA Environmental Report as:

- ‘business as usual’;
- pilot project.

While the Scottish Government is not minded to view these as reasonable alternatives it does, however, wish to invite views on their assessment in the SEA.

For completeness, all three scenarios are also considered in this partial BRIA.

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<sup>4</sup> <https://www.gov.scot/Publications/2017/01/8538>

Views are being invited on the SEA Environmental Report and the preferred policy position statement for a period of eight weeks on the Scottish Government's online consultation platform Citizen Space , during which time we would also welcome views on the issues and options considered in this partial BRIA.

Responses are invited to the following question: What are your views on the opportunities and challenges that each of the options could have for businesses?

When providing views on the partial BRIA there is no need to restate views already covered in the Talking "Fracking" public consultation analysis report as these have been, and will continue to be, taken into account as we move towards finalising the Scottish Government's policy position.

## **Business**

Discussions are planned with oil and gas businesses during the consultation period, including the holders of the three current petroleum exploration and development licences in Scotland; United Kingdom Onshore Oil and Gas (UKOOG), the representative body for the onshore oil and gas industry; and supply chain companies.

## **Options**

### Option 1 - Preferred Policy Position

The Scottish Government's preferred position is that it does not support the development of unconventional oil and gas in Scotland.

In the event the preferred position is adopted, the policy on unconventional oil and gas would be implemented using the Scottish Government's fully devolved planning powers to establish robust and effective controls.

This approach ensures decisions on onshore unconventional oil and gas developments would be made in line with planning policy and procedure, and within the framework of Scottish Government policy – a policy that does not support unconventional oil and gas extraction in Scotland.

In the event our preferred policy position is adopted, in addition to the policy being a material consideration within planning policy, Scottish Ministers would discharge our newly devolved licensing powers in line with that adopted policy position i.e. of not supporting the development of unconventional oil and gas in Scotland.

### Option 2 – Business as usual

As an alternative to the preferred policy position, under this 'business as usual' option an unconventional oil and gas industry could continue to develop in Scotland. Applications for planning permission and all other consents would be dealt with in the normal manner and in line with applicable procedural requirements and relevant policy. In particular, applications for planning permission would be determined in

accordance with the development plan then in force unless other material considerations indicated otherwise. Scottish Ministers would also exercise their newly devolved powers in relation to onshore oil and gas licensing in Scotland to consider the timing of future onshore licensing rounds..

The 'business as usual' option is based on the KPMG Economic Impact Assessment<sup>5</sup> (2016), development scenarios of a) central, b) low and c) high levels of exploration, appraisal and extraction of onshore unconventional oil and gas, as representing a 'broad range of impact scenario' of extraction within which broad locational effects, concentrated within Central Scotland can be considered.

### Option 3 – Pilot Project

As stated in the SEA Environmental Report and above, it is recognised that some may regard the development of the industry or a pilot project, subject to the relevant licensing and permitting regimes, as alternatives to the preferred policy position. While the Scottish Government is not minded to view these as reasonable alternatives it does, however, wish to invite views on their assessment.

An alternative development scenario, based on a single unconventional oil and gas pilot project was also assessed in the SEA. This concerns the development of a single pilot project in one of three locations within the Midland Valley and within a PEDL area where resource has been identified. The purpose of a theoretical pilot project would be to increase the understanding of the extent of the potential resource, and impacts associated with its extraction. The theoretical pilot project is based on a number of assumptions including that it would have research and geoscience as its key driver, and be required to be delivered in collaboration with an independent research body or an academic institution and demonstrate whole lifespan of development (exploration, appraisal, production, and decommissioning) over approximately 10 years. It is unspecified whether the theoretical pilot project would be located in a rural or semi-urban or urban fringe geographical location.

For the purposes of the assessment, a theoretical pilot project is assumed to be one pad with multiple wells. The number of wells is not defined, however, it is assumed that more wells would result in greater impacts.

### **Sectors and groups affected**

#### Unconventional oil and gas developers and related supporting industries

Current holders of a PEDL in Scotland with the aim of targeting unconventional oil and gas are unable to proceed until the Scottish Government policymaking process is completed. This has implications for the supply chain in relation to skills, equipment and services required to support the proposed exploration and development activities.

Companies interested in developing and producing unconventional oil and gas in Scotland are unable to pursue development plans until the Scottish Government policymaking process is completed.

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<sup>5</sup> <https://www.gov.scot/Publications/2016/11/9393>



### Scottish Government

Scotland's Energy Strategy reiterates the Scottish Government's preferred policy position of no support for unconventional oil and gas. This is subject to the completion of the necessary statutory assessments.

### Other regulatory bodies (such as SEPA, HSE, and planning authorities):

The Scottish Government's unconventional oil and gas policy may have an impact on the workload of these authorities in respect of their regulatory responsibilities.

### Landowners, such as the Coal Authority:

The Scottish Government's unconventional oil and gas policy may result in interest amongst unconventional oil and gas developers in the exploration of land in Scotland's Midland Valley<sup>6</sup>.

### Community organisations and anti-fracking campaigners:

The development of the Scottish Government's unconventional oil and gas policy is an important issue for the people of Scotland, particularly those communities living in areas most likely to be affected by any potential unconventional oil and gas activity. The conclusion of the unconventional oil and gas policymaking process is awaited with considerable interest by a number of communities and organisations, with deeply held and sincere views found on both sides of this debate.

## **Benefits and costs**

Very few studies examining the potential impact of unconventional oil and gas on Scotland's economy have been conducted. To gain a better understanding of the potential economic implications in Scotland, the Scottish Government commissioned KPMG to examine the impact that unconventional oil and gas could have on jobs and the wider Scottish economy under a range of potential production scenarios. The findings<sup>7</sup> were published in 2016 and were an integral part of the Talking "Fracking" consultation in 2017.

## **Option 1 – preferred policy position**

### **Benefits**

Conclusion of the unconventional oil and gas policymaking process would provide certainty to interested parties, including industry stakeholder and members of communities living in areas of Scotland where shale oil and gas and CBM have been identified.

Similarly, certainty about the future of unconventional oil and gas developments in Scotland means developers, including current PEDL holders, could make future business planning decisions.

Current holders of PEDLs in Scotland may consider changing the hydrocarbon resource they wish to target, with the agreement of Scottish Ministers as licensing

<sup>6</sup> <https://www.gov.scot/Publications/2016/11/5969>

<sup>7</sup> <https://www.gov.scot/Publications/2016/11/9393>

authority, allowing them to continue to take advantage of their investment to date in the licence. The choices made by individual PEDL holders will have implications for those businesses providing the skills, equipment and services required to support any future activities, whether it be exploration of another resource or decommissioning of existing sites.

A policy of no support for unconventional oil and gas in Scotland may result in an increase in the attractiveness of investment opportunities in Scotland for some sectors.

Relevant public bodies will be able to finalise hydrocarbon related policies and strategies, such as local development plans, while relevant regulatory authorities will be able to finalise processes for dealing with hydrocarbon related applications.

### **Costs**

As indicated at the start of this section, the Scottish Government commissioned KPMG to examine the impact that unconventional oil and gas could have on jobs and the wider Scottish economy under a range of potential production scenarios (each of which is outlined in the SEA Environmental Report which accompanies this partial BRIA). In KPMG's central scenario, the study estimates that:

- the total, cumulative industry expenditure in Scotland would be £2.2 billion through to 2062.
- this would add £1.2 billion to Scotland's economy over this period, which is approximately equivalent to 0.1% of Scottish GDP – a measure of Scotland's economic output – per year over the lifetime of the industry.
- the industry would support 1,400 jobs in Scotland at its peak. This includes indirect jobs in the supply chain and jobs created in other sectors of the economy, for instance hotel and taxi businesses.
- the cumulative, additional tax receipts (for the UK and not including coal bed methane) would be £1.4 billion on the development of unconventional oil and gas through to 2062.

Turning to those businesses which received a PEDL from the UK Government in previous years and have undertaken limited unconventional oil and gas exploration to date, this investment may not yield any returns unless planning permission is received for any future proposed activities on the site.

Should a current licence holder conclude they wish to surrender their licence, the licence holder will be liable for the decommissioning and aftercare costs in relation to the work which has been undertaken and the infrastructure installed. The value of the investment and the related decommissioning and aftercare costs will vary from development to development and will depend on the conditions set by the various regulatory authorities and other public bodies in respect of consents, licences, and access agreements provided. Given the lack of available evidence in relation to decommissioning costs, further engagement with licence holders on this particular topic would be helpful in order to quantify relevant sums.

In addition, the fees and annual charges due in respect of some licences and consents held, will be lost to the relevant public body.

SEPA is the principal environmental regulator for onshore oil and gas in Scotland. SEPA has no specific budget set aside for the monitoring and regulating of onshore unconventional oil and gas as this is built into the licence fees for the various authorisations. SEPA has advised that no significant loss of income in respect of these fees is anticipated and no significant resource implications under this option.

Any activity which intersects, disturbs or enters coal seams requires prior written authorisation from the Coal Authority. The Coal Authority has advised that due to the infrequency of the granting of relevant access agreements, the potential loss of related fees and annual charges would be insignificant under this option.

The Health and Safety Executive (HSE) has advised that it charges £173 per hour for its work but not all HSE work in relation to its responsibilities in respect of oil and gas developments is cost-recovered. Income from planning applications does not currently meet the costs of delivering development management services. As a result, this option would result in no additional costs to the HSE or planning authorities.

In the case of Scottish Ministers, as the onshore oil and gas licensing authority, to date no annual land rental charges (set by the UK Government) have been payable to the Scottish Government in respect of those licences which have been unable to progress due to the moratorium on unconventional oil and gas developments in Scotland. Therefore there would be no loss to the Scottish Government in respect of land rental income.

## **Option 2 – business as usual**

### **Benefits**

Implementation of this policy option will allow unconventional oil and gas developers to plan exploration, development and production activities in Scotland, subject to receipt of relevant licences and consents. Those current PEDL holders who have been unable to progress work under their licence due to the unconventional oil and gas moratorium will be able to plan the recommencement of activities, subject to receipt of relevant licences and consents. The potential evolution of the unconventional oil and gas industry under this option, will also have implications for those businesses providing the skills, equipment and services required to support the proposed future activities.

In the case of regulatory authorities and landowners, this option will result in a return to the well-established pre-moratorium processes and systems.

As indicated in Option 1 Costs, the Scottish Government commissioned KPMG to examine the impact that unconventional oil and gas could have on jobs and the wider Scottish economy under a range of potential production scenarios.

The economic impact study also highlights that natural gas liquids produced from shale reserves can be an important feedstock (a raw material to supply or fuel an industrial process) in manufacturing industries. The commissioned research also highlighted the potential for domestically produced unconventional oil and gas to have a positive impact for manufacturing companies which use it as a feedstock, should import substitution lead to lower costs of their primary input through avoiding importing and transportation costs, but did not quantify these potential impacts given the uncertainties.

In Scotland there are 150 manufacturing companies involved in the manufacture of chemicals and chemical products supporting around 3,500 direct jobs. These companies are involved in the manufacture of primary chemicals, chemical products for industrial applications, pharmaceuticals, and plastic manufacturing. The chemical sciences industry is estimated to support a direct employment of 9,000 in Scotland and around 70,000 people are employed in dependent services.

There is also uncertainty regarding the impacts of a new supply of unconventional oil and gas on the wider energy market. However, the Scottish Government commissioned research identified that the relative small scale of potential Scottish production relative to the scale of US production and a highly interconnected European market would likely mean there was no impact on domestic or global energy prices.

## **Costs**

The findings of the Scottish Government commissioned Economic Impact Assessment included observations by KPMG that exploration work would be required to determine the commercial feasibility and production potential of Scotland's resources.

In order to progress unconventional oil and gas exploration, development and production, relevant consents, licences and access agreements will be required, which will have related fees and annual charges. Securing all the necessary consents and licences may prove difficult in the event of opposition to the plans from local communities (detail on views expressed through the Talking "Fracking" consultation is available on the consultation analysis report)<sup>8</sup>.

In 2016, the Scottish Government commissioned the British Geological Survey to undertake a research study<sup>9</sup> into understanding and monitoring induced seismic activity. The study concludes that the risk of felt earthquakes from unconventional oil and gas developments is low. In addition, the study notes that improved understanding of the hazard from induced earthquakes and the successful implementation of regulatory measures to mitigate the risk of induced seismicity is likely to require industrial data from hydraulic fracturing operations, seismic, geological and geophysical data.

<sup>8</sup> <https://www.gov.scot/Publications/2017/10/9813>

<sup>9</sup> <https://www.gov.scot/Publications/2016/11/5969>

The Committee on Climate Change was asked by the Scottish Government to examine the impacts of extraction of unconventional oil and gas on greenhouse gas emissions and climate targets<sup>10</sup>. The Committee found that additional production emissions from shale wells would need to be offset through reductions elsewhere in the Scottish economy, such that overall effort to reduce emissions would be sufficient to meet emissions targets.

The Committee's findings included the need for strong, coordinated regulation to reduce or eliminate adverse impacts. Experience with the remediation of open-cast coal sites in Scotland has highlighted the importance of robust decommissioning and restoration regimes. Robust regimes would be required to ensure operators/owners comply with their obligations, and communities and the public sector were not left to deal with restoration and aftercare issues and costs.

Consideration, design, collection of relevant data, introduction and regulation of robust regimes to mitigate the risk of induced seismicity and adverse environmental impacts would have resource implications for the relevant authorities and stakeholders and may lead to increased costs for operators/owners during all stages, including decommissioning, of an unconventional oil and gas development.

It is very difficult to predict the potential upscaling of the unconventional oil and gas industry under this option. HSE has advised that resourcing would be kept under review under this option and SEPA has advised that the potential resource implications of this option would be informed by discussion with the Environment Agency. The Coal Authority has advised that due to the infrequency of the granting of relevant access agreements, it would be difficult to calculate the resource implications of this option.

The Scottish Government is committed to reviewing the wider planning fee regime to better reflect the developments which are now coming forward and to take account of the changes proposed in the Planning Bill. Following the passage of the Bill, the Scottish Government proposes to consult on restructuring the categories of development and the associated fees for applications.

### **Option 3 – pilot project**

#### **Benefits**

All those benefits outlined in Option 1 will be relevant to this option.

In addition, this option increases understanding of the extent of the potential resource and impacts associated with unconventional oil and gas extraction over the whole lifespan of development (exploration, appraisal, production, and decommissioning) - approximately 10 years.

The theoretical pilot project would be delivered in collaboration with an independent research body or an academic institution which will help ensure the objectivity of the

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<sup>10</sup> <https://www.gov.scot/Publications/2016/11/1380>

research undertaken and conclusions, robustness of the data collected and emphasis on dissemination of the findings.

## **Costs**

All those costs outlined in Option 1 will be relevant to this option.

In addition, the delivery of a pilot project in Scotland would require funding by project partners. The costs of the project will require to be discussed with the PEDL holder, project partners and relevant regulatory bodies and will depend on a range of factors, including the exploration activity which may already have been undertaken at the location, the drilling depth, number of wells required, and the infrastructure required to be installed to support the operation. Delivery of the project would also be dependent on receipt of relevant licences, consents and access agreements, for which there may be application fees and annual charges.

The Oil and Gas Authority advises that an onshore exploration well typically costs between £0.5m and £7m and may take two years to plan.<sup>11</sup>

As part of the consultation, we would welcome the views of stakeholders on potential costs and funding sources.

## **Scottish Firms Impact Test**

This partial BRIA seeks views from stakeholders on the potential impact on businesses of the policy options being considered. There may be businesses affected from within the oil and gas industry and supply chain, varying in size from very large to small and micro-sized firms.

During the consultation period, discussions will be held with at least six oil and gas sector businesses. This will help inform the Scottish Firms Impact Test.

## **Competition Assessment**

- **Will the measure directly or indirectly limit the number or range of suppliers?** No. Unconventional oil and gas exploration, development and production in Scotland will continue to be subject to the planning system under each of the options. In the event that local decision making by planning authorities results in limiting the market for supplies and services to the unconventional oil and gas industry in Scotland, this should have no impact on the market within other parts of the UK and internationally. It is also worth noting that many of the skills, equipment and techniques used for unconventional oil and gas drilling are similar to those used for offshore oil and gas, conventional onshore oil and gas and geothermal thereby providing other avenues for businesses to explore in Scotland.
- **Will the measure limit the ability of suppliers to compete?** No. Local decisions made by planning authorities will help determine the market for

<sup>11</sup> <http://www.scotcourts.gov.uk/docs/default-source/cos-general-docs/pdf-docs-for-opinions/2018csoh66.pdf?sfvrsn=0>

supplies and services to the unconventional oil and gas industry in Scotland but, within that market, none of the options should limit the ability of suppliers to compete. There will be no impact on suppliers' ability to compete in other parts of the UK and internationally. In addition, none of the options being considered would limit the ability of suppliers to compete in other related industries in Scotland, such as offshore oil and gas, conventional onshore oil and gas, and geothermal energy.

- **Will the measure limit suppliers' incentives to compete vigorously?** No. Local decisions made by planning authorities will help determine the market for supplies and services to the unconventional oil and gas industry in Scotland, but within that market, none of the options should limit suppliers' incentives to compete vigorously. There will be no impact on suppliers' incentives to compete elsewhere in the UK and international markets or in other related domestic industries.
- **Will the measure limit the choices and information available to consumers?** No. Shale gas is currently available on the international market. None of the options should limit import opportunities or information available to unconventional oil and gas consumers.

We would welcome views on the following matters:

- To what degree, if any, stakeholders consider the Options outlined within this document will impact on consumers.
- What impact, if any, stakeholders consider future technological advances may have on an unconventional oil and gas industry.

### **Test run of business forms**

Any forms introduced to support any of the policy options outlined in this partial BRIA, will be similar to those used by the Oil and Gas Authority (OGA) which has been the licensing authority since 2015. Holders of current licences in Scotland are familiar with the OGA forms, many of which are available online for stakeholders to view.

### **Legal Aid Impact Test**

There is always the potential for the legality of a decision made by the Scottish Government to be challenged. The Scottish Legal Aid Board have advised that any judicial review of Scottish Ministers' decisions in respect of their finalised unconventional oil and gas policy in due course may attract Legal Aid funding but it is unlikely to have a major impact on the Fund unless it is particularly long-running or complex.

### **Enforcement, sanctions and monitoring**

Unconventional oil and gas developments will require permission from the planning authority and may also require other relevant licences and consents, such as from SEPA or the Coal Authority. Drilling consent will also be required from Scottish Ministers as onshore oil and gas licensing authority in Scotland. In addition, other public bodies will require to be notified of any intention to drill, such as the HSE. With the exception of the Scottish Government's onshore oil and gas licensing regime, these are well established systems and the relevant public body will provide

the necessary enforcement and monitoring to ensure compliance under each option and mitigate, where appropriate, adverse impacts.

With regards to the onshore oil and gas licensing regime, since the devolution of onshore oil and gas licensing powers, the Scottish Government has been having discussions with the other regulatory authorities and bodies to increase understanding of the existing systems and regulations. This understanding of the systems operated by these other relevant bodies is informing the development of systems and processes for a licensing regime in Scotland, including enforcement, sanctions and monitoring.

### **Implementation and delivery plan**

Ministers will determine the role of unconventional oil and gas in Scotland's energy mix following the completion of the policy-making process.

Option 1 would be implemented through the planning system and the newly devolved onshore oil and gas licensing powers. It will also be incorporated in to National Planning Framework 4.

Option 2 would involve the revocation of the Ministerial Directions previously issued to planning authorities and SEPA. The policy on unconventional oil and gas in Scotland will be incorporated in to National Planning Framework 4.

Option 3 would be implemented by development of proposals, in liaison with key industry stakeholders, relevant regulatory authorities and public bodies, local communities and research/academic partners for a pilot project to commence exploration activities within 24 months of finalisation of the policy.

### **Post-implementation review**

The finalised policy on unconventional oil and gas in Scotland will be reflected in the next iteration of the National Planning Framework, NPF4. Current legislation requires that the National Planning Framework is reviewed every five years, or that Scottish Ministers must publish the reason why they have decided not to revise it. The Planning Bill currently before Parliament proposes that the time period for review is extended to 10 years.

### **Summary**

The Scottish Government has undertaken an extensive and comprehensive period of evidence-gathering, including consultation, over the past five years which examines the issues, challenges and opportunities presented by unconventional oil and gas. The content of this partial BRIA draws on the findings of this activity, in particular the suite of research reports which were published in 2016.

The amount of unconventional oil and gas that could be economically or technically recovered in Scotland is not known. Further exploratory work (including core sampling) would be required to better understand the resources that could be commercially exploited.



The total economic impact of unconventional oil and gas is estimated to be relatively low, and is not comparable to the current offshore industry in Scotland.

While an unconventional oil and gas sector in Scotland could provide important benefits to Scotland's petrochemical sector and provide a cost-effective gas supply for local energy networks, and increase security of supply, particularly for high energy use industries, the scale of production in Scotland would be relatively low in comparison to European or international gas production and would be unlikely to have an impact on global gas supply prices, and therefore on consumer energy costs.

Option 1 takes into account the evidence base, including the response to the Talking "Fracking" consultation. In addition, the Scottish Parliament has voted in support of this option.

The Scottish Government considers the development of an onshore unconventional oil and gas industry in Scotland would make achieving its energy and climate change commitments more challenging. Whilst acknowledging the important role of gas in the transition to a low carbon energy future, the addition of an onshore unconventional oil and gas industry would not promote our ability to meet our greenhouse gas emissions targets or objectives in relation to protecting and enhancing the environment.

**We would welcome your views on the costs and benefits associated with the three options discussed in this partial BRIA. Please let us know your views in response to Question 6 of the consultation questions published on Citizen Space<sup>12</sup>: *What are your views on the opportunities and challenges that each of the 3 options set out in the partial BRIA could have for businesses?***

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<sup>12</sup> <https://consult.gov.scot/energy-and-climate-change-directorate/preferred-policy-position-on-uog/>

**Declaration and publication**

I have read the Business and Regulatory Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options. I am satisfied that business impact will be assessed with the support of businesses in Scotland.

**Signed:****Date: 11 October 2018****Minister's name:** Paul Wheelhouse**Minister's title:** Minister for Energy, Connectivity and the Islands**Scottish Government Contact point:** Annabel Hamid, 0131 2449380

## **Responding to this Consultation**

We are inviting responses to this consultation by 18 December 2018.

Please respond to this consultation using the Scottish Government's consultation hub, Citizen Space (<http://consult.gov.scot>). Access and respond to this consultation online at <https://consult.gov.scot/energy-and-climate-change-directorate/preferred-policy-position-on-uog/>. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 18 December 2018.

If you are unable to respond using our consultation hub, please complete the Respondent Information Form to:

Onshore Oil and Gas Team  
The Scottish Government  
3F South  
Victoria Quay  
Edinburgh  
EH6 6QQ

## **Handling your response**

If you respond using the consultation hub, you will be directed to the About You page before submitting your response. Please indicate how you wish your response to be handled and, in particular, whether you are content for your response to be published. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

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

If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document.

To find out how we handle your personal data, please see our privacy policy: <https://beta.gov.scot/privacy/>

## **Next steps in the process**

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

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

### **Comments and complaints**

If you have any comments about how this consultation exercise has been conducted, please send them to the contact address above or at [UOGSEAConsultation@gov.scot](mailto:UOGSEAConsultation@gov.scot).

### **Scottish Government consultation process**

Consultation is an essential part of the policymaking process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: <http://consult.gov.scot>. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

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

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

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



## Respondent Information Form

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

Are you responding as an individual or an organisation?

- Individual  
 Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email

If you are responding on behalf of an organisation, please select a type/sector that best describes your organisation.

- Business / industry  
 Academic / research  
 Professional / trade body  
 Public body  
 Third sector / NGO  
 Community group  
 Other (please provide further details below)

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

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

**Information for organisations:**

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

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

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

- Yes
- No



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