

POSITION STATEMENT – UPDATED OCTOBER 2018

Statement outlining our preferred policy position on unconventional oil and gas (updated to reflect the transfer of onshore oil and gas licensing powers from the UK Government in February 2018).

Overview

Unconventional oil and gas is an issue that has stimulated intense debate, motivated by deeply held and sincere views on all sides. The Scottish Government has undertaken one of the most far-reaching investigations of any government, anywhere, into unconventional oil and gas, and we are aware that the future of unconventional oil and gas in Scotland is relevant to wider energy issues and our climate change ambitions.

Scotland's approach to delivering a low carbon economy

Our environment and economy are intrinsically linked. The transformation of the energy system in Scotland, as part of the drive to tackle climate change, has the potential to bring significant economic and social opportunities to individuals, businesses and communities.

Scotland's transition to a more prosperous, low carbon economy is already well underway. We have created jobs and backed new and innovative industries while winning international respect for our ambition and leadership on climate change.

The Paris Agreement will support a worldwide market for low carbon goods and services, as other countries have committed to reducing their carbon footprint. Analysis by the International Finance Corporation indicates that the Paris Agreement will help open up \$23tn worth of opportunities for climate-smart investments in emerging markets between 2016 and 2030.

The Scottish Parliament has set ambitious climate change targets to reduce emissions of greenhouse gases by 80% from 1990 levels by 2050.

As of 2016, we have delivered a 45% reduction from baseline levels (based on emissions adjusted for trading in the EU-Emissions Trading Scheme), meeting our annual target for the third consecutive year, and on track to exceed our current 2020 interim target (42% reduction from baseline levels). Actual Scottish emissions are down 49% over the same period.

The Scottish Government's third Climate Change Plan, a draft of which was published on 19 January 2017, sets out our approach to meeting our statutory emission reduction targets to 2032, paving the way for Scotland's transition to a low carbon economy. The final Plan was published in February 2018.

The Scottish Government's proposals for a new Climate Change Bill centre around increasing the ambition of the emission reduction targets, including raising the 2050 target to 90% emission reduction, and creating ambitious interim targets for 2030 and 2040.

The Scottish Energy Strategy

In delivering a strategic approach to the long-term energy transition, the Scottish Government has also developed and published a new 2050 Energy Strategy, adopting a 'whole system approach' to securing a modern, integrated, low carbon energy system that delivers reliable supplies of energy at affordable prices to consumers in all parts of Scotland.

The draft Energy Strategy was published for consultation in early 2017 and, following the consultation responses and input from the Scottish Energy Advisory Board, Scotland's Energy Strategy 'The Future of Energy in Scotland' was published in December 2017.

The Energy Strategy is consistent with our Climate Change Plan, and incorporates our position on unconventional oil and gas, which is subject to the outcome of a Strategic Environmental Assessment.

Scotland's future energy mix

We know that over the next four decades, in each individual element of the energy system – be it heat, transport, or electricity – the potential for transformational change is great and the demands on our energy infrastructure will change dramatically in the decades ahead.

The future energy mix in Scotland will continue to be determined by a number of factors such as technology, innovation, changing costs, and regulatory frameworks. In light of this, the Energy Strategy does not prescribe an exact energy mix for 2050; however, we go further in exploring the development of the main characteristics of the energy system between now and 2050 and articulating a clearer understanding of the choices that lie ahead.

The role of natural gas in our energy system

Despite the inherent uncertainty in the long-term energy mix, the Scottish Government recognises that oil and gas will continue to have a vital role in the energy mix over the short, medium and long term, as we face a similar challenge to all advanced economies of developing cost-effective substitutes for hydrocarbons.

Natural gas is central to the projected energy mix, globally, with demand forecast to increase until 2040. Scotland currently relies on natural gas to supply the bulk of energy demand for heat, and gas will be an important part of Scotland's energy mix for the foreseeable future and production of natural gas from beneath Scotland's adjacent waters is sufficient to meet Scotland's final consumption of gas six times over. However, addressing this ongoing and future demand represents a key challenge for the future in balancing the needs of consumers with a lower carbon secure energy system.

The Scottish Government recognises that access to secure and affordable supply of energy is fundamental to the competitiveness of Scottish business and industry.

This is why we remain committed to maximising economic recovery from the North Sea and harnessing the resources and ingenuity of this sector.

Alongside this, we require a balanced approach that reduces demand for carbon intensive fuel sources and lowers our reliance on imported fossil fuels. This is why we will continue to work closely with businesses and key industrial clusters to support action to accelerate cost-effective industrial decarbonisation measures.

As we move towards a decarbonised energy system, the role of gas and the gas network will change. The gas network could provide a flexible asset for the transportation and storage of a range of low carbon gases including hydrogen, biogas, biomethane and bio-SNG (substitute natural gas).

A reduction in emissions from heat could be realised by the use of these gases in the gas network. For instance, a transition toward a hydrogen-based gas grid would require production of hydrogen from natural gas (in a process known as steam methane reforming) alongside renewable-based production. The production of hydrogen from steam methane reformation would need to be coupled with carbon capture and storage in order to gain the carbon benefits of hydrogen as a fuel source.

Unconventional oil and gas

Conventional versus unconventional oil and gas

The oil and gas industry use a range of techniques to extract oil and gas from underground reserves.

Conventional oil and gas reserves can be exploited by drilling a well, with oil or gas then flowing out under its own pressure.

Conventional deposits are contained in porous rocks with interconnected spaces, such as limestone and sandstone. These interconnected spaces give rise to permeability that allows oil or gas to effectively flow through the reservoir to the well.

Unconventional oil and gas deposits are contained in impermeable rocks, such as shale or coal deposits. In these cases, the oil or gas cannot easily flow through the reservoir. To extract the oil and gases, techniques such as hydraulic fracturing (commonly referred to as fracking) or coal bed methane dewatering are used.

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 the area around Canonbie, Dumfriesshire. This is why our cautious, participative and evidence-led approach regarding unconventional oil and gas is so important.

What is hydraulic fracturing?

Hydraulic fracturing (or 'fracking') is a drilling technique that is used to fracture rock to release the oil and gas contained in those rocks. It is most commonly used to extract oil and gas from shale.

The rock is fractured by injecting pressurised fluids into the rock to prise open small spaces the rocks, which release the oil or gas.

What is coal bed methane?

Coal bed methane is also considered to be an unconventional source of gas. This is because the gas is present in the coal rather than being held in pore spaces.

To extract the gas, water is drained from the coal seam to release pressure (known as dewatering). This may be undertaken with or without hydraulic fracturing, depending on local geological conditions.

The Scottish Government's evidence-led approach to unconventional oil and gas

The Scottish Government has undertaken one of the most far-reaching investigations of any government, anywhere, into unconventional oil and gas.

This work began in 2013 with the establishment of an Independent Expert Scientific Panel to examine the evidence on unconventional oil and gas, including hydraulic fracturing, or 'fracking', and coal bed methane extraction.

The Panel reported its findings in July 2014. More information on the work of the Expert Panel, including the final report, can be found at: <http://www.gov.scot/Publications/2014/07/1758/0>.

After carefully considering its findings, we introduced a moratorium on onshore unconventional oil and gas in January 2015. This created space to explore the specific issues and evidential gaps identified by the Expert Panel, and to undertake a comprehensive period of public engagement and dialogue.

Our moratorium on unconventional oil and gas was implemented through the Scottish Planning system. A Direction was issued to all Planning Authorities in Scotland on 28 January 2015 when our moratorium was announced, with an accompanying Direction to the Scottish Environment Protection Agency.

A subsequent Direction was issued on 08 October 2015 which confirmed that the moratorium did not include the drilling of boreholes solely for the purpose of core sampling. The Direction includes the following definition of unconventional oil and gas:

...“unconventional oil or gas development” means development connected to the onshore exploration, appraisal or production of coal bed methane or shale oil or shale gas using unconventional extraction techniques, including hydraulic fracturing

(but does not include the drilling of boreholes solely for the purpose of core sampling)...

In early 2016, the Scottish Government commissioned a further suite of independent research reports to address the evidential gaps identified by the Expert Panel. The reports, covering health, economic and environmental matters, allowed us to consider further independent expert scientific and economic impact advice, including from the British Geological Survey, Health Protection Scotland, and the UK Committee on Climate Change.

The following research studies were commissioned in 2016:

- Economic impacts and scenario development (undertaken by KPMG)
- Climate Change impacts (undertaken by the Committee on Climate Change)
- Understanding and monitoring induced seismic activity (undertaken by the British Geological Survey)
- Transport - Understanding and mitigating community level impacts (undertaken by Ricardo)
- Decommissioning, site restoration and aftercare – obligations and treatment of financial liabilities (undertaken by AECOM)
- Health impact of unconventional oil and gas in Scotland (undertaken by Health Protection Scotland)

The research reports were published in full on 08 November 2016. The research reports can be read at: <https://www.gov.scot/Topics/Business-Industry/Energy/onshoreoilandgas/EvidenceGathering>.

A public consultation, Talking “Fracking”, was launched on 31 January 2017. The consultation embodied the Scottish Government’s commitment to local communities participating in decisions that matter to them, and included a number of innovative steps to encourage debate, dialogue and wide participation.

The consultation received 60,535 valid responses, at that point the second largest response to a Scottish Government consultation, and a clear validation of our participative approach.

Of these responses, 52,110 (86%) were campaign responses or petitions; and 8,425 (14%) took the form of substantive responses.

Of respondents in Scotland who provided a substantive response and a postcode, nearly two-thirds (4,151) lived in one of 13 local authority areas identified as potentially having significant shale oil and gas reserves or coal bed methane.

The overwhelming majority of respondents were opposed to the development of an unconventional oil and gas industry in Scotland. While not a referendum, and not necessarily representative of the population as a whole, approximately 99% of the responses were opposed to unconventional oil and gas extraction in Scotland.

The consultation findings were published, in full, on 03 October 2017, and can be accessed here: <http://www.gov.scot/Publications/2017/10/9813>.

The Scottish Government position on unconventional oil and gas

On 03 October 2017, the Minister for Business, Innovation and Energy set out the Scottish Government's considered position on unconventional oil and gas in Scotland.

Any policy decision that has potential for significant environmental effects must be subject to a Strategic Environmental Assessment prior to its finalisation. These requirements are set out in the Environmental Assessment (Scotland) Act 2005.

A Strategic Environmental Assessment is a means of considering the likely significant impact of a public plan, programme or strategy on the environment.

As there is potential for significant environmental effects, either as a consequence of industrial activity or as a consequence of not permitting an unconventional oil and gas industry, a Strategic Environmental Assessment is required before the policy is finalised. It is anticipated that this work will conclude in 2018, after which the policy on unconventional oil and gas will be finalised.

Reaching a preferred position on unconventional oil and gas was the culmination of a careful and comprehensive period of evidence-gathering. At each stage of the process, the Scottish Government has created opportunities for discourse and debate.

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 state 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: tightly regulated and closely monitored to ensure rapid action to address leaks; offset through reductions in emissions elsewhere in the Scottish economy; and Scottish unconventional oil and gas production would require to displace imported gas, rather than increasing domestic consumption. The Scottish Government is conscious of the cost implications of the additional mitigation actions in other areas of the economy that might be needed to counterbalance an increase in emissions from unconventional oil and gas development.

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 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. We must be confident that the choices we make will not compromise health and safety or damage the environment in which we live.

The Scottish Government considers the development of an onshore 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.

The outcome of our public consultation shows that in those communities which would be affected, there are considerable concerns about the potential impacts and disruption that could be caused.

It is the Scottish Government's position that the research we have commissioned and considered does not provide a strong enough basis from which to address those communities' concerns.

On this basis, the Scottish Government does not support the development of unconventional oil and gas in Scotland.

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 – a policy that does not support unconventional oil and gas extraction in Scotland.

It is common for policies that could have implications on development plans to be reflected in the National Planning Framework. The National Planning Framework sets the context for development planning in Scotland and provides a framework for the spatial development of Scotland as a whole. It sets out the Government's development priorities over the next 20-30 years and identifies national developments which support the development strategy.

Work on the next iteration of the National Planning Framework will begin following the passage of the Planning Bill through parliament. The Scottish Government will

embed its position on unconventional oil and gas within the next iteration, thereby giving an assurance the policy would carry significant weight in development planning and decision making, and that any future changes to the policy would be given Parliamentary consideration.

Since our preferred policy position was set out in December 2017, onshore oil and gas licensing powers were devolved on 09 February 2018. Commencement of sections 47 to 49 of the Scotland Act 2016 transferred powers for:

- 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.

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.

Consultation on the Scottish Government's preferred policy position on the development of unconventional oil and gas in Scotland

The Scottish Government is consulting on its preferred policy position on unconventional oil and gas development, the Strategic Environmental Assessment Environmental Report and partial Business and Regulatory Impact Assessment (BRIA) over an eight week period from 23 October 2018 until 18 December 2018. Comments on the preferred policy position, Environmental Report and partial BRIA can be submitted to the Scottish Government's consultation platform Citizen Space. You can view and respond to the consultation online at: <https://consult.gov.scot/energy-and-climate-change-directorate/preferred-policy-position-on-uog/>.

Respondents may find the following question helpful to provide a focus for their response to this preferred policy position:

- Do you have any views on the proposals contained within the Scottish Government's preferred policy position statement?

There is no need to restate views already expressed in relation to the 2017 Talking "Fracking" public consultation as these have been, and will continue to be, taken into account as we move towards finalising the Scottish Government's policy position