

**GOVERNMENT RESPONSE TO THE
HOUSE OF LORDS ECONOMIC AFFAIRS
SELECT COMMITTEE REPORT:**

“The Economic Impact on UK Energy Policy of Shale Gas and Oil”

1. The Government welcomes the work of the Select Committee on the Economic Impact on UK Energy Policy of Shale Gas and Oil, and its report. We set out below our response to the Committee’s recommendations.
2. A key part of our long-term plan to secure Britain’s future is to support businesses through better infrastructure. We welcome the Committee’s conclusion that realising our shale potential in a safe and sustainable way could enhance energy security while providing more jobs and opportunities. By using energy more wisely and increasing our renewable, nuclear and indigenous lower carbon fossil fuels, we seek to protect the country as far as possible from volatile global fuel prices.
3. Home-grown gas, just like home-grown renewables and new nuclear, supports jobs and tax revenues for our society. Analysis by the Institute of Directors on shale gas estimated that UK investment could reach £3.7 billion a year and support 74,000 jobs in the oil, gas, construction, engineering and the chemicals sectors at peak. The 2014 EY report on the shale supply chain identified many significant opportunities for UK business in that scenario. For example, it projects a need for £2.3 billion worth of steel, around 50 drilling rigs and £2 billion worth of proppant (sand).
4. Finally, gas is the cleanest fossil fuel and therefore part of the answer to climate change, providing a cost-efficient bridge for our transition to a green future, particularly in enabling a move away from coal.
5. The Government is therefore committed to making the most of the opportunity presented by shale, recognising that operators will have to prove the commercial potential. But the Government has been clear that shale development must be safe and environmentally sound. There are robust regulations in place to ensure on-site safety, prevent water contamination and mitigate seismic activity and minimise air emissions. The UK has over 50 years of experience of regulating the onshore oil and gas industry nationally. We have a strong regulatory regime for exploratory activities and we will be looking at ways to improve it as the industry develops. In June 2012 the Royal Academy of Engineering/Royal Society independent review of the scientific and engineering evidence on risks associated with UK shale gas development concluded: *“the risks can be managed effectively in the UK, if operational best practices are implemented and enforced through regulation.”* Public Health England’s final report of June 2014 evaluated available evidence on issues including air quality, radon gas, naturally occurring radioactive material, water contamination and waste water. They concluded that *“the potential risks to public health from exposure to the emissions associated with shale gas extraction will be low if the operations are properly run and regulated.”*

6. Government has already taken action to encourage work to develop shale. This includes publication of planning practice guidance by the Department of Communities and Local Government (see <http://planningguidance.planningportal.gov.uk/>), the publication by the Environment Agency of a consultation on standard rules permits and the publication by DECC of Environmental Risk Assessment (ERA) guidance and a Regulatory Roadmap setting out all the regulation that applies to shale operations at the exploration stage.
7. The Autumn Statement 2013 announced (and the 2014 Budget implemented) a new tax allowance for the exploitation of onshore oil and gas (including shale gas) in the UK. The new tax allowance builds on the success of offshore field allowances in increasing investment in technically and commercially challenging fields. Like existing field allowances, it reduces the tax rate on a portion of a company's profits from 62% to 30% to reflect the challenging nature of these developments. Companies will receive an allowance equal to 75% of their capital spend on these projects. Independent analysis shows that this allowance makes the UK tax regime for shale gas the most competitive in Europe.
8. These Government actions aim to provide operators with the regulatory and fiscal environment they need to efficiently seek the relevant permissions to explore and assess the commercial viability of the UK's shale resource. Development and production will take time. The first successful shale fracking demonstrations in the United States were in the early 1990s, but production at commercial scale did not get under way until the early 2000s. And today, each new basin or prospect needs a period of trial or experimentation before commercial production. In typical US conditions, this might be three to five years. Such evaluation will also take time in the UK, as wells are drilled to understand our potential.

Recommendations

9. The Government response to each of the Committee's recommendations is set out below in the same order they appear in Chapter 10 of the Report: Conclusions and Recommendations.

Recommendation 1 – *We recommend that the Government should amend relevant legislation to ensure that subsurface drilling for oil and gas can go ahead without undue delay or cost. This change should ensure that the fact that UK landowners do not own petroleum rights makes little difference to the speed of shale gas and oil development; in practice, it may even make subsurface drilling under third party land easier in the UK than it is in the US.*

DECC has recognised that there is an issue regarding underground access. The existing procedure is costly, time-consuming and uncertain. On 23 May the Government published a consultation on underground access for shale gas and oil and deep geothermal underground drilling. The consultation closes on 15 August.

The consultation outlines our proposal for reforming the existing procedure. Companies drilling for shale gas or oil, and deep geothermal energy would be given a right of access

below 300 meters, in return for a voluntary payment and notification to the community. All other existing regulation would still apply.

The proposals in the consultation, if implemented will allow shale and geothermal companies to explore their potential while giving a financial benefit for communities in return for underground access at depths so deep they will have no negative impact on landowners. Subject to the outcome of the consultation, the Government would propose legislation, which would be implemented during the current session if Parliamentary time allows.

Recommendation 2 – *We consider that the industry, as well as the Government, will also need to present the case for shale development more effectively to local communities, including clarity of plans and meticulous compliance with regulation as well as local economic benefits.*

We agree on the importance of the industry presenting the case for shale development. The industry body UKOOG brings together operators to find and share best practice. Last year it launched the Community Engagement Charter, which emphasises the importance of early and intensive engagement, and commits operators to engage with local communities before submitting planning applications.

Government is also playing its part. We have published detailed and accessible information on our website, including an interactive Regulatory Roadmap setting out each step in the process for shale exploration as it applies in the different nations of the UK. The Office for Unconventional Gas and Oil (OUGO) has joined with regulators and worked closely in partnership with local authorities to visit local communities across the country to share information and listen to local needs and opinions. We will continue to broaden and refine the information we provide to help people understand the facts and support local authorities to engage with their communities.

One of the Royal Society and Royal Academy of Engineering recommendations was a new “environmental risk assessment”, assessing risks over the lifecycle of intended operations and requiring the involvement of local communities as early as possible. In April 2014 the Government announced that operators who wish to hydraulically fracture must conduct an Environmental Risk Assessment (ERA) and we have published specific guidance to assist operators compiling ERAs.

Community engagement is a fundamental part of the permitting and planning systems process. The National Planning Policy Framework (NPPF) published by the Department for Communities and Local Government (DCLG) and the supporting planning guidance state that development should empower local people and their accountable authorities to produce plans that reflect the needs and priorities of their communities. Local planning authorities, including mineral planning authorities (MPAs), should have up-to-date Local Plans in place, the content of which should be informed by proactive engagement with local communities to ensure they reflect a collective vision and agreed set of priorities for the sustainable development of the area. Furthermore, the NPPF and planning guidance encourages operators to engage local communities before submitting planning applications. The more issues can be resolved through early engagement, the greater the benefits for all parties. This assists local authorities to make timely planning decisions and ensures

applicants do not experience unnecessary delays. Good quality pre-application discussions with the Environment Agency and local planning authorities enables better coordination between permitting and planning processes and also between the public and developers, resulting in improved outcomes for the local communities.

Recommendation 3 – *The Government must be much more forceful in their public advocacy of the economic benefits of well-regulated shale development. They must also explicitly address the safety issues.*

We recognise the economic benefit and energy security potential of shale gas and oil development, and are working hard to promote public understanding of this. In their 2013 report *Getting Shale Gas Working*, the IoD estimated that shale gas production could reach over 30 billion cubic meters in the 2020s. Ministers including the Prime Minister have outlined the potential benefits, including for climate change and energy security, on many occasions. The Department for Business, Innovation and Skills (BIS) supported the production of the EY supply chain report published in April 2014, which sought to establish the economic impact of realising the IoD's high production scenario. EY projected significant benefits for jobs and growth from a successful UK shale industry: over 64,000 jobs at peak, with more than 6,000 jobs on shale gas pads themselves. They predicted that the jobs on the sites will be highly skilled, high quality jobs, with pay levels higher than the UK average.

The Minister for Energy, Rt Hon Michael Fallon MP spoke at the launch of the EY report in Blackpool on 24 April and subsequent conferences and we will look for further advocacy opportunities, in particular to companies for whom a successful shale industry would represent opportunities for new business.

We will continue to refine our materials and engagement to explain the opportunity clearly based on the evidence.

The UK has over 50 years of experience of regulating the onshore oil and gas industry nationally. More than 2,000 wells have been drilled onshore during that time. The UK has an effective system for addressing safety risks and we will continue to set this out, recognising its importance to communities' acceptance of shale gas and oil development. We equally recognise that safety concerns around shale gas and oil production exist in some communities and we are committed to addressing them. We have produced a number of accessible booklets explaining risks, mitigations and how the regulatory system governs them. They are available on the gov.uk website and we have distributed hard copies in key areas. We have undertaken public engagement in a range of fora, ranging from national level events such as Chatham House and the Gov Today conference to local authority exhibitions and parish level meetings. We will also continue to work with local authorities to support meetings between local communities, regulators and neutral experts best placed to discuss particular general and local concerns.

Recommendation 4 – *We agree with the Royal Society and the Royal Academy of Engineering that a single body to regulate onshore development of shale gas and oil would be desirable in principle. We fear, however, that the necessary reorganisation would cause delays. We therefore*

recommend a more coordinated and responsive regulatory approach within the existing framework, with a lead regulator identified by the Government, following the five principles of good regulation advocated by the Better Regulation Task Force and adopted by the present Government.

Separate regulators have many years of experience providing specialised and rigorous expert scrutiny. We agree with the Royal Society and Royal Academy of Engineering that a single body should take the lead coordinating the various bodies with regulatory responsibility. Though not a regulator, OUGO provides that function and also coordinates Government engagement with local communities.

We also strongly agree with the Select Committee that a wholesale regulatory change would represent an unacceptable risk of delay and create uncertainty for operators and communities in areas of potential development.

We believe roles and responsibilities are clear and published the Regulatory Roadmap to help others understand how the work of different regulators comes together to provide a robust mechanism. Feedback suggests that there is a good understanding of the regulatory regime within the industry. Government has also looked for opportunities to simplify regulation and speed up processing, while maintaining a robust regulatory system for exploration. This includes:

- Issuing planning practice guidance for England which clarifies the relationship between the planning system and other regulatory regimes to minimise duplication;
- Consulting on the introduction of standard rules environmental permits. Environment Agency (EA) permits for exploration activity are typically being dealt with within the standard 13 weeks;
- Successfully making the case against the introduction of additional EU regulation.

Recommendation 5 – Transparent – *We recommend that the Government should consolidate the applicable provisions in the confusingly titled and potentially misleading Offshore Installations and Wells Regulations and Borehole Sites and Operations Regulations into one clearly labelled set of regulations for onshore oil and gas operations. As recommended by the Royal Society and Royal Academy of Engineering, the consolidated regulations should specify that well integrity is to be considered from an environmental perspective as well as a health perspective. The Environment Agency and Health and Safety Executive should make it much clearer to the industry and the public exactly how and when they would inspect well sites.*

The Offshore Installations and Wells Regulations apply to both offshore and onshore wells, ensuring that the same regulatory standards apply onshore as in the more dangerous and technically challenging offshore environment. All offshore and onshore UK wells must be designed and constructed to be structurally sound, strong and stable for their entire lifespan. While the name of the regulation could be confusing to some, a good understanding of the regulatory framework already exists in industry and other stakeholders. The HSE website has recently been revised and is clear that the Offshore Regulations apply to all wells in the UK and there is also separate guidance on what health and safety regulation applies onshore (<http://www.hse.gov.uk/shale-gas/>). Therefore

consolidating these regulations into a single set of onshore regulations may not present tangible benefits.

Well integrity is vital to environmental protection, as it is to the health and safety of those in the vicinity of a well. In November 2012, the HSE and Environment Agency published a 'working together' agreement for shale gas sites, which specifies when and at what stages they will conduct joint inspections. It also confirms that together they must be satisfied that wells are designed, constructed and operated to standards that protect safety and the environment. HSE is also committed to visit jointly with the Environment Agency all shale gas sites during the current exploratory phase of shale gas development.

The HSE and Environment Agency's 'working together' agreement also contains commitments to engage and inspect new and first time operators; agreeing to:

- meet and advise them of their duties under the relevant legislation
- conduct a joint inspection of the key operations, including:
 - cementing and verification of cement
 - mini hydraulic fracture
 - bleed back
 - main hydraulic fracture

These meetings and visits may include other licensing or statutory bodies as appropriate. If operators substantially change the process, such as depth or fracturing media, the regulators may change the inspection schedule and may require permit modifications.

Industry has also taken action. The UK Onshore Operators Group (UKOOG) guidelines, published on 1 February 2013, entitled UK Onshore Shale Gas Well Guidelines – Exploration and Appraisal Phase, sets out that the operator should assess the environmental implications, either through the well examiner, if he/she has appropriate skills, or by a separate contractor liaising with the well examiner.

We will continue to work with the Environment Agency and HSE to explain this element and the rest of the inspection regime to operators and the public.

Recommendation 6 – Accountable – *The Government should provide a single, clear appeals process for operators in the event that an application for planning permission is refused by a local authority.*

There is a single, clear appeals process for operators. Any appeals against refusal of planning permission for shale gas exploration are handled under the Town and Country Planning regime, in the same way as other appeals for retail, infrastructure and other forms of development.

If a Mineral Planning Authority refuses planning permission in England for shale gas exploration, the applicant may appeal. In these circumstances an Inspector from the Planning Inspectorate (PINs) will be appointed to consider the application and review the case for and against by written representation or by coordinating a public inquiry. Most appeals are decided by Planning Inspectors on behalf of the Secretary of State for Communities and Local Government. Further details of the appeals process in England can be found in the

planning practice guidance (see <http://planningguidance.planningportal.gov.uk/blog/guidance/appeals/planning-appeals-general/>). This is a devolved matter but similar arrangements apply in Scotland, Wales and Northern Ireland.

Recommendation 7 – Proportionate – *Operators are often required to submit the same information to different regulators. The Office of Unconventional Gas and Oil should provide a single point for data input to remove duplication and reduce costs for operators.*

As explained above, OUGO is not a regulator but a lead body which coordinates between the various bodies with regulatory responsibility. The integrity and independence of the regulators are critical to public confidence in shale gas development, such that we would consider it inappropriate for OUGO to be seen as an intermediary. We also believe regulation works best – that it is most rigorous and efficient – when there is a direct connection between the operator and expert regulator.

We have worked with the regulators already to simplify the process for getting an environmental permit and reduce the time it takes to get one. Planning practice guidance in England makes clear that mineral planning authorities do not need to carry out their own assessment of matters which are covered by other regulatory regimes, as they can rely on the assessment of bodies like the Environment Agency and HSE.

However, where we are presented with clear evidence of demands for the same information from different agencies within the remit of central Government, we will act to streamline data demand and collection. We will keep this under review and, where the case is made for changes that will improve or maintain regulatory efficiency and effectiveness and reduce burdens upon firms, we will implement these.

Recommendation 8 – Consistent – *The Government should ensure that operators are able to make all the required planning and permit applications in parallel, in order to speed the process. There is room for much greater coordination, particularly in relation to information sharing between local authorities and the Environment Agency.*

Planning practice guidance makes clear that operators can make all relevant required permit and planning applications in parallel. The Environment Agency encourages ‘twin tracking’ of planning and permitting applications, which allows some technical reports to be used for both purposes. In addition, twin tracking simplifies how Environment Agency and relevant Mineral Planning Authorities respond to each other’s consultations. Companies may choose not to twin track for various reasons e.g. because of the uncertainty around the outcome of a planning application, but that is their decision.

Planning practice guidance encourages Minerals Planning Authorities to engage with statutory and relevant non-statutory consultees (this includes the regulators) in pre-application discussions. Bringing together the regulators and mineral planning authorities at this early stage will help to identify the issues which need to be resolved and the information that needs to be provided, which may be relevant to obtaining other permits and licenses.

Recommendation 9 – Targeted – *A targeted approach by the regulators should include a clear timetable for decision-making, agreed beforehand with the operators.*

Planning permission is one of the regulatory requirements that operators must meet before drilling a well. Planning applications for oil and gas (like all forms of mineral extraction) are classified as major applications. This means once a mineral planning authority has validated a planning application, the authority has to decide the application within 13 weeks, or 16 weeks if it has an Environmental Impact Assessment attached to it. Planning practice guidance encourages applicants and mineral planning authorities to seriously consider entering into Planning Performance Agreements (PPAs). PPAs are project management tools which set clear timescales for action between authorities and applicants in respect to bringing forward planning applications. They encourage joint working between applicants and authorities, and help to bring together other parties such as regulators. Further details can be found in planning practice guidance (see <http://planningguidance.planningportal.gov.uk/blog/guidance/before-submitting-an-application/planning-performance-agreements>).

Health and safety regulations have clear timelines for the regulatory processes applied to well design and construction. Operators can help regulators by setting out the timetable to which they are working, and then submitting the necessary and sufficient information for regulatory approvals in good time.

Operators must submit the well notification to the HSE at least 21 days before work starts, so the specialist inspector has time to evaluate it. In practice the well notification is usually submitted to HSE earlier as this allows more time for the operator to make any necessary changes to their plans before they start work on the well.

In respect to environmental permissions, the Environment Agency will hold detailed pre-application meetings with operators, at which they will clearly set out the process the applicant needs to go through, including indicative timescales. The Environment Agency pro-actively seeks to meet operators planning development and explain what they need to include in their application. This allows operators to assess preparation time. The Environment Agency also advises operators how long they should allow for the permit determination process (at present generally up to 13 weeks for bespoke permits). The Environment Agency usually recommends that operators aim to have their permits in place at least one month before they plan to start on site. All permit applications are subject to consultation and it is important that all relevant issues are addressed through that process. Any delay can also be mitigated by operators if they engage effectively with the local community. The Environment Agency has recently completed a consultation on the use of standard rule permits for low-risk exploration activities, as is common in a variety of other industries, and is considering its conclusions. The use of standard rules would allow permits for these activities to be processed in 2-4 weeks. Once a number of sites have been through the planning and permitting processes it should become possible to estimate typical timescales and Government will check the system is working as efficiently as it can, without compromising its rigour.

Recommendation 10 – *We recommend that regulations should make explicit that the well examiner for onshore oil and gas operations should be independent of the well operator.*

The well examiner is a separate and additional check to the HSE well inspector. The well examiner is employed by the company because the company is responsible under health and safety legislation for the safety of its operations. The well inspector is a member of the HSE who checks and approves or rejects the well design and reviews the weekly reports during the well's construction to ensure that the design is being adhered to. HSE is also committed to inspect jointly with the Environment Agency all shale gas sites during the current exploratory phase of shale gas development.

The UK model of health and safety regulation requires operators to take responsibility for managing and controlling the risks that they create. This is reinforced by regulatory checks and enforcement actions where necessary. This approach supplemented by industry specific regulations has operated successfully in the conventional oil and gas industry on and offshore for decades, to such an extent that the European Commission has based its new Offshore Safety Directive on the UK's offshore safety case approach.

Regulation 18 of the Offshore Installations and Wells (Design and Construction etc) Regulations sets out the requirements for the independent well examiner.

(7) For the purpose of this regulation a person shall be regarded as independent only where –
(a) his examination will not involve the consideration by him of an aspect, of a thing liable to be examined, for which he bears or has borne such responsibility as might compromise his objectivity;
and

(b) he will be sufficiently independent of a management system, or of a part thereof, which bears or has borne any responsibility for an aspect, which he might consider, of a thing liable to be examined, to ensure that he will be objective in discharging his function.

This requirement now forms part of the Offshore Safety Directive which is being transposed into domestic legislation. HSE currently checks the competence and independence of the person nominated. As per Regulation 18, the well examiner must be independent of the operational team constructing the well. Offshore operators are typically large enough to maintain a permanent team of well examiners separate from the operational teams. Onshore shale gas operations are more likely to be undertaken by smaller operators in the exploration phase, who by their nature are likely to hire third-party contractors to fulfil this role.

The Government considers the existing regulation in place for the exploration phase to be robust. As part of our work on preparing for the production phase, we will consider whether any changes to this approach would be beneficial and proportionate.

Recommendation 11 – *We recommend that, as proposed by the Royal Society and Royal Academy of Engineering, rules should be introduced to monitor wells abandoned in future, and a common liability fund established by the industry in case of default by an operator.*

Operators remain responsible for any liabilities that arise from abandoned wells. Where there has been a change of ownership, DECC expect the new owner to take appropriate

steps to remedy any problem. The Government will work with regulators to determine what a proportionate and risk-based approach to monitoring abandoned wells should involve. DECC officials have held preliminary discussions on this matter with industry. Consultation with industry and regulators continues and we hope to publish the outcome of these discussions in the second half of 2014.

As the recent ReFINE report highlights, there have been no reported pollution incidents associated with abandoned wells, but we are not complacent. Once the monitoring regime has been established, DECC will work with UKOOG to make sure industry develops a robust scheme to cover liabilities in the event of default by an operator.

Recommendation 12 – *The Government must take decisive measures to quicken the pace of exploration and development of the UK’s shale gas resource, including to take the lead in reassuring local communities that with clear and rigorous regulation in place, shale gas can be developed with low risk to health and the environment.*

Government has taken a number of steps to help accelerate exploration and development of our shale resource, including the regulatory improvements set out above.

In addition, Government has funded assessments of the potential resource, carried out by the British Geological Survey of the Carboniferous Bowland Shale, the Weald Basin Jurassic Shale, and the Midland Valley of Scotland. The 2014 Budget introduced fiscal measures to incentivise operators to explore this potential, and the Prime Minister announced 100% business rate retention for local authorities for shale projects, so that communities benefit appropriately from development in their area.

We expect companies to undertake initial exploration activity on shale, including hydraulic fracturing, this year and next. Some companies have or are expected to apply for planning permission and the associated permits needed. Others are doing preparatory geological work. A number of the operators have also been in discussions with major investors and Centrica, GDF Suez and Total have all taken stakes in local operators.

Some 7,300 square miles of Great Britain are already under licence, including significant areas likely to contain shale. We have also carried out a consultation on a Strategic Environmental Assessment (SEA) for future development of onshore oil and gas. Ministers are presently considering the consultation responses to the environmental report.

While it is the operators’ responsibility to engage with communities on their plans, it is Government’s role to make it clear that rigorous regulation is in place such that shale gas can be developed in a safe and environmentally sound way. This is a key priority for OUGO, which frequently visits prospective areas for shale with regulators to meet elected representatives and members of the public to explain the regulatory system and answer questions to ensure local concerns are addressed. We will continue to review and refine our materials and engagement activities to ensure they meet the needs of local communities and are as accessible as possible.

Recommendation 13 – *We recommend that, since several Departments share responsibility for policy on shale gas, the Government should take measures to improve coordination, clarity and speed of policy making and its implementation.*

DECC is the Department responsible for shale gas and oil, co-ordinates policy with Government Departments and regulators, and provides a single point of contact for stakeholders. OUGO was established in early 2013 within DECC's Energy Development Unit. OUGO aims to promote the safe, responsible and environmentally sound recovery of the UK's unconventional reserves of gas and oil. OUGO's objectives are to: make the most of our natural resources, enable shale development whilst protecting the environment and safeguarding the public, make sure local communities benefit from development in their area, support public engagement and build our knowledge base. OUGO works closely with Whitehall departments, regulators and other stakeholders to achieve these objectives.

OUGO coordinates cross-Whitehall work through close working relationships with a variety of Departments and Agencies. This ensures policy is well informed, coherent across government, alert to risks and challenges and delivered in the right order at the right time.

Recommendation 14 – *We recommend in particular that the Prime Minister should establish a Cabinet Committee or Sub-Committee, chaired by the Chancellor of the Exchequer, to direct and coordinate policy on development of shale gas, with a mandate to promote well-regulated exploration and development of the UK's shale gas resource.*

Shale gas and oil is an integral part of DECC's energy and climate policy under the Secretary of State for Energy and Climate Change. There are a number of committees that consider economic issues including the Economic Affairs Committee and the Growth and Enterprise Committee which are appropriate forums for discussion of shale. These bring together the relevant Ministers including the Chancellor, and the Prime Minister. We therefore consider that the existing Cabinet Committee structures are capable of addressing the issue raised by the Committee.