

Case Study

Public engagement in shale gas and oil developments

A public dialogue to help the Office of Unconventional Gas and Oil develop its policy on public engagement and community benefits

Vital statistics

Commissioning body:

Department of Energy and Climate Change (DECC)

Duration of process:

15 months: (October 2013 – December 2014)

Total public participants involved:

71

Total stakeholders involved:

Seven experts contributed to the review of stimulus material and six external stakeholders were involved in the Oversight Group

Total experts involved in events:

Between two and four DECC representatives at each event

Cost of project:

£122,172 (total),
Sciencewise co-funding = £50,000

The UK Government is encouraging the exploration of shale gas to determine its potential for the UK and to develop the industry within the UK's energy mix. To this end, the Government established the Office of Unconventional Gas and Oil within the Department of Energy and Climate Change (DECC) to support exploration, ensure communities benefit, support public and community engagement, and build a knowledge base for development.

There has been extensive and often polarised media coverage of shale gas development and representations of risk, with potential to influence public perceptions. Among the general population, awareness of unconventional gas and oil was low, but increased rapidly – in May 2014 73.7% of a representative sample of respondents correctly identified shale gas from a list of real and imaginary fossil fuels, rising from 37.6% since March 2012. Of those who were aware of it, 49% supported it being allowed in the UK and 31% said it should not be allowed.

However, there are limitations to using traditional quantitative surveys to understand public attitudes towards complex or developing technologies, particularly at early stages of development. DECC identified a gap in understanding of how the public engage with issues around unconventional gas and oil, and the best approaches to public engagement in areas where shale gas was to be explored and may be developed – a gap this public dialogue aimed to help fill.

Policy maker view

The public dialogue **“hit a gap and hit it very well in terms of informing policy”**

DECC representative.

Influence on policy and policy makers

The emerging findings have been used by DECC to develop public engagement and the design of local events around shale gas and oil.

The DECC team feels that they have learnt much from the process, especially the direct feedback from having attended the sessions in person. They have also shared their experiences of the project in various ways, including speaking at internal lunchtime seminars to feed back to colleagues in the Department about the use of dialogue approaches.



Background

The Office of Unconventional Gas and Oil is a Government office which aims to promote the safe, responsible and environmentally sound recovery of the UK's reserves of unconventional sources of gas and oil. Shale gas and oil, and coalbed methane are known as 'unconventional' because of the techniques required to extract them. While 'conventional' deposits of oil and gas, such as those in the North Sea, are found in permeable rock and can be easily extracted, shale gas is found onshore in impermeable (shale) rock and requires hydraulic fracturing (or 'fracking') to create fissures that allow the gas to flow. This exploratory technique involves injecting water and, usually, sand particles at high pressure to create fractures and keep them open, with small quantities of chemicals used to improve effectiveness.

Globally, the USA has been the site of most hydraulic fracturing to date. Little exploratory drilling has occurred in the UK's shale deposits and it is not known how much gas or oil is commercially recoverable. The Government halted hydraulic fracturing operations in 2011 over concerns at seismic activity in Lancashire, which were attributed to Cuadrilla's operations there. In 2012, the Royal Society and Royal Academy of Engineering's review concluded that shale gas extraction could be managed safely in the UK if best practice in implementation and enforcement of regulatory safeguards was followed. Government approved the resumption of activity in December 2012.

Key messages from the participants

The dialogue found that:

- Participants found shale gas and oil was difficult to assess against their energy priorities of affordability (in terms of customer bills), sustainability (in terms of environmental impacts and long-term availability) and security for future energy decisions (in terms of guaranteed supply and self-sufficiency), particularly in the context of needing to explore it – but uncertainties were heavily weighted against it
- With the exception of a number of participants who had heard of seismic activity in Lancashire or other phenomena attributed to fracking in the USA, initial awareness of risks associated with shale gas and oil was also low
- As exploration for shale gas and oil is at an early stage in the UK, participants largely felt it to be 'an unknown'. This drove unease and caused them to categorise it as higher risk and with less clear potential outcomes than other comparator risks (such as driving on the motorway)
- Furthermore, those predisposed to negative views about shale were most receptive to information on risks, benefits and regulation that confirmed their ideas – a form of confirmation bias
- Government's commitment to shale development and that licences are granted at the start of the regulatory process, reduced confidence that decision-making bodies would be objective or have scope to make independent decisions, despite information suggesting otherwise

- Participants reacted to complexity within the subject, and questioned the public's ability to engage over processes and governance frameworks perceived as complex.

The dialogue identified the following principles for any engagement process on shale gas:

- **Proactivity:** relevant bodies taking the lead on engagement, rather than waiting to be asked
- **Framing engagement:** directly addressing existing public concern – providing the rationale for shale, including affordability, energy security and sustainability
- **Empowerment:** using information throughout the process, supporting the public to influence decision-making, giving time for people to consider their views
- **Transparency:** being clear about what is known about shale gas and what is not; what the public can influence and what they cannot; as well as about operations, regulatory decisions and progress
- **Accessibility:** using a variety of channels and forums to make engagement as inclusive as possible, and explaining risks and impacts in terms of how local people might experience them (effect on daily life)
- **Independence:** providing unbiased, balanced information and offering an independently managed engagement process
- **Accountability:** providing clarity on the stringency of regulation and its enforcement.

Participants also designed engagement processes, based on the existing regulatory framework and consultation opportunities. While an ‘all channels open’ approach was often discussed without reference to feasibility, common themes arose:

- **Proactive notification of proposals** should maximise reach and inclusivity through an ‘all channels open’ approach such as leaflet drops, social media, travelling displays and door knocking for those closest
- **A period of information provision** (national followed by local) – such as face-to-face meetings where operators and experts could be asked direct questions; and interactive, visual exhibits to bring issues to life and make them tangible
- **Collated materials** – ‘translated’ for local people, so accessible and relevant
- **A chance for the public to be involved** in shaping plans, through a mixture of online, written, and face-to-face meetings, and an up-to-date, concurrent online presence (such as a web portal)
- **Continued involvement once exploration goes ahead** was considered the key, including management of community benefits by local people
- **Monitoring and oversight** from regulatory bodies (such as postal and web portal updates).

Participants made suggestions for engagement approaches in four stages: a national debate, during the pre-planning application stage, during the planning application stage and activities once exploration has begun.

The most trusted messengers were those most likely to have a clear understanding of the issues and to be honest about them. Non-biased experts deemed most suitable for this role included academics, scientists and regulatory bodies.

“ [Scientists] would be impartial. They would have no... monetary gains... they would have a decent... qualification to really talk about it in great depth and understanding. ”

Public participant, Winchester.

Given requisite time and support, participants engaged with the technical aspects of hydraulic fracturing, helped by images and videos of the drill and the well. They felt that information at the national level should be high level and easy to understand (‘a layman’s guide’), while information during local engagement should be more in-depth. In general, comparisons to familiar, everyday concepts were more useful points of reference than statistics, when deemed relevant and accurate.

Participants discussed the key points of the UK Onshore Oil and Gas community benefits package, which elicited mixed responses. Participants appreciated the flexibility offered, and the idea that money could be managed by the ‘community’ and held by a third party rather than being absorbed into a council’s general funding. Some concerns were raised in relation to job creation and the financial aspect of the package. Clarity about how local jobs would be created and presenting financial benefit as just one aspect of the proposals, not particular to shale gas (that is, similar benefits to those for wind farms), would help assuage concerns.

Three areas of public concern persisted throughout the dialogue, despite the existing regulatory framework. These include concerns about the independence of the various bodies involved, long-term accountability for operators and the ability for the public to have a say.

The dialogue activities

The key objectives for the elements of the public dialogue covered by the Sciencewise funding were:

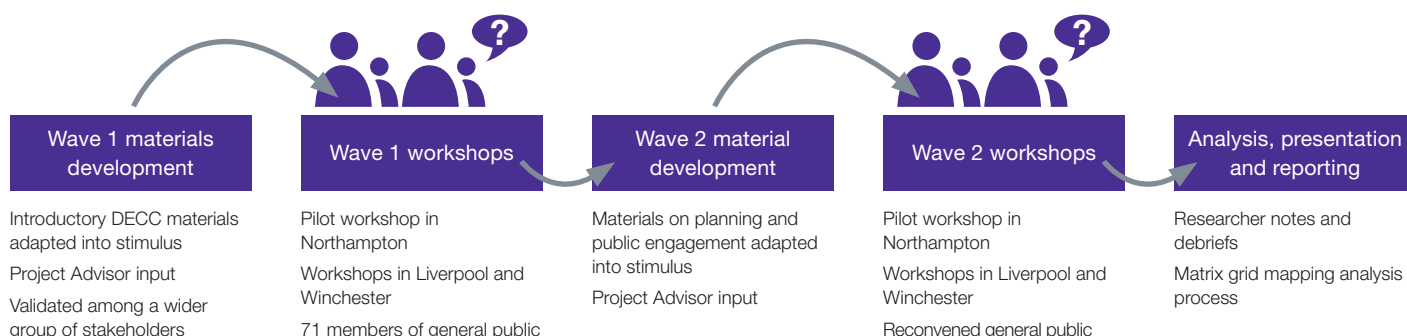
- To understand how to engage the public most effectively in unconventional gas and oil developments in their area
- To understand how the public engage with issues around unconventional gas and oil – practically and cognitively
- To identify any gaps where
 - further policy or materials are needed to help the public understand unconventional gas and oil; or
 - the regulatory arrangements are less able to inspire public confidence, even where objectively robust, as this will be an important element of DECC’s consideration of the necessary regulatory regime, and how it is communicated, going forward into a potential production phase
- To explore public understanding and acceptability of the recently published industry community benefit package proposals.

Dialogue workshops were held in three locations (Winchester, Northampton and Liverpool) during February and March 2014, engaging a total of 71 people. The three locations were chosen to provide a range of demographic, geological and licensing factors, covering areas that were prospective and not prospective for shale gas. The workshops enabled a diverse mix of participants to:

- learn from written information and experts
- listen to each other, and share and develop their views
- reach carefully considered conclusions and communicate those conclusions directly to inform Government decision-making.

In each location, the first day looked at the background to shale gas and oil development. The second day was spent working with participants to design public engagement approaches. The overall dialogue process is illustrated in Figure 1.

Figure 1 Illustration of public dialogue process



DECC convened an Oversight Group for the project including external stakeholders (Local Government Association, United Kingdom Onshore Oil and Gas, Campaign to Protect Rural England, University of Exeter, Health and Safety Executive, Planning Officers Society) as well as Sciencewise, and the delivery and evaluation contractors. The Oversight Group reviewed stimulus materials for both waves of the dialogue. To further ensure the information materials provided reflected a balance of views, the research team consulted wider stakeholders (Greenpeace, National Farmers' Union, The Wildlife Trusts, IGas, the Planning Officer's Society and two academic scientists from the Universities of Oxford and Exeter) to comment on the Wave 1 materials introducing shale gas, risk and regulation. Their comments were incorporated into the materials. The dialogue delivery team also consulted Dr Jason Chilvers, Senior Lecturer at UEA School of Environmental Sciences, at several stages through the project, particularly when developing the stimulus materials and developing and reviewing the analytical framework and findings.

The primary focus of the dialogue was not to explore public attitudes towards DECC's policy on unconventional gas and oil. However, it was recognised that this needed to be covered before the discussion could focus on engaging with the public about these issues. Therefore, Wave 1 explored participants' initial understanding and beliefs about unconventional gas and oil. To enable an informed discussion, it introduced information on science, technology and regulation, as well as a range of perspectives and views on unconventional gas and oil. Wave 2 then focused on what public engagement should look like, including identifying trusted messengers and desired channels of engagement. Responses to the Community Engagement Charter and community benefits package were also explored.

Three facilitators attended each area event, working with participants in three small groups at each workshop. Venues provided a plenary space for all participants, and discussions moved between the plenary and breakout groups which comprised eight participants per facilitator. In attendance at each area event were DECC representatives, a Sciencewise representative and the independent evaluator.

What worked especially well

The two-day structure for each dialogue workshop was important. Participants were, in most cases, starting from a low knowledge base about unconventional gas and oil so needed the time and space to process new information before giving an informed view.

The handouts were well received and, crucially, included perspectives from different organisations that gave an important sense of balance and objectivity.

The use of small groups as a mechanism to discuss issues and raise questions in between the presentations and plenary sessions was effective.

An element that worked particularly well was during one of the final sessions in the second round of workshops where participants fed back their co-created engagement plans in a plenary session involving DECC officials. Participants were very positive about the opportunity to feedback, and it was an important way of giving them confidence that their views were important and would have an impact on DECC.

What worked less well

The project timescale was a significant constraint that had a series of impacts. For example, it significantly hindered the ability of the Oversight Group to comment on the materials, which is regrettable given their expertise. However, the project, and the information and learning it has generated, was needed quickly to inform emerging policy and practice.

There were some practical difficulties in communicating the distinction between a debate about shale gas itself and the processes of engagement around shale gas. This led some participants, to think that Government has already decided in favour of shale gas exploration.

There was a demand among participants for more technical/scientific input and for a greater range of speakers/perspectives. The use of video as a proxy was effective, but did not compensate for having experts in the room; while the audio clips added less value, in part because the audio quality in the rooms was not ideal.

There was also a desire among participants for more direct engagement with DECC representatives, rather than via the facilitators. While this was part of the design, so that all participants got the same information, there was scope for more interaction that could have benefitted the process and the dynamic between participants and observers.

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Full project and evaluation reports available from Sciencewise on www.sciencewise-erc.org.uk/cms/public-engagement-in-shale-gas-and-oil-developments