

Policy Summary, August 2013: Shale gas in the UK

Summary

The RSPB does not support shale gas extraction in the UK because:

- The regulatory framework for the industry does not provide sufficient protection for the natural environment.
- Government has not put forward a convincing case that demonstrates that shale gas extraction will not undermine the UK's ability to meet its legally binding climate change targets or its broader commitment to keeping global climate change to within 'safe limits'.

Background

Interest in fracking for shale gas is rapidly expanding in the UK as a result of strong support from Government. Several exploration licences have been granted in the UK, including areas in the Pennine, Wessex, Weald and Cleveland basins. The most advanced are in the North West, where exploratory drilling has recommenced following a moratorium due to seismic tremors in 2011. This is also an area that is rich in wildlife, including internationally important populations of migratory birds.

Given that fracking for shale gas is a relatively new commercial technology, the risks it poses to the natural environment remain uncertain but best available evidence suggests they could be significant. Furthermore, investment in fracking and gas generation in the UK comes at a time when the climate crisis is deepening and the need to reduce greenhouse gas emissions has never been more critical.

Natural environment risks

Significant uncertainties remain over the potential ecological impacts of shale gas extraction in the UK. Key factors affecting the scale of the risk include site selection, operation methods (during construction, operation and decommissioning), regulatory standards and monitoring regimes. The potential impacts will be considerably greater when operating at a commercial scale due to the cumulative impacts of increased levels of activity. In the Bowland shale area in the North of England, for example, current estimates suggest 5,000-10,000 well pad sites would be required, each between one and two hectares in size. This could have an extremely significant cumulative impact on wildlife.

Key risks to the natural environment include:

- **Water stress** – In water-stressed areas fracking could put substantial pressure on already limited resources. Shale gas exploration and production will also be a very water intensive industry;

- **Habitat fragmentation and loss** - Multiple well-pads over large areas of the countryside could have serious adverse impacts on wildlife by displacing species such as geese and swans from their feeding areas;
- **Disturbance from noise and activity** – Drilling activity and truck movements could lead to the displacement of species that are susceptible to noise like Pink-footed goose and Whooper swan; and,
- **Air quality** - Fugitive methane emissions emitted during and following drilling activity can have negative impacts on air quality.

Climate risks

There are a number of serious risks associated with commercial shale exploitation in the UK that could undermine our commitment to avoiding dangerous levels of climate change.

- **Methane leakage** - If unmitigated, the fugitive methane emissions during well completion could be equivalent to 2% of total methane production per well. Methane is a potent greenhouse gas;
- **Shale gas may be additional to existing fossil fuel use** – In the US, the switch from coal to gas has reduced domestic emissions, but the coal is still being extracted; it's just being exported, increasing emissions elsewhere. Shale gas in the UK may also be in addition to and not instead of existing fossil fuel use; and,
- **Gas lock-in** – Shale gas is being supported in the UK at the same time as a large new generation of gas-fired power stations. This risks locking the UK in to a fossil-fuel based power system that may not be compatible with the recommendation by the Climate Change Committee that electricity should be largely decarbonised by 2030.

Recommendations

The RSPB is calling on Government to clearly demonstrate that developing a shale gas industry in the UK is compatible with our domestic climate change commitments, and the UK's commitment to keeping global climate change to within 'safe' levels. In the meantime, the regulatory framework for shale gas extraction and exploration needs to be improved significantly. Specifically:

- Shale gas exploration and extraction should only be allowed to continue within a regulatory and policy framework that is fit for purpose. The current framework does not provide adequate safeguards against the potential environmental risks of shale gas extraction;
- Locational guidance should be developed to ensure shale gas operations are excluded from particularly sensitive areas, including, for example, protected areas;
- The Town and Country Planning (Environmental Impact Assessment) (EIA) Regulations should be amended to require EIA for all developments, including exploratory drilling; and,
- Methane emissions from completed wells should be minimised and carefully monitored. Reduced emission completions equipment should be required as standard.

For more information contact:

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