

Our countryside is not for shale

A report on fracking in the EU by Keith Taylor MEP



Introduction

This report aims to give an overview of fracking in Europe. It looks at the state of play in the different EU member states, the current legislation on fracking and then the situation in the South East of England.

What is fracking?

Fracking, short for 'hydraulic fracturing', is a process used to extract gas and oil trapped in shale rocks deep underground. Water, chemicals and sand are pumped in at high pressure to fracture the rock, and the gas or oil flows back up the drill bore.

Fracking is not the only way of extracting shale gas and oil. For example, the planning application documents for the Balcombe oil drill describe a process called 'acid stimulation':

"Stimulation is carried out by pumping water under pressure into the natural fractures in the shale formations to open them up to allow the gas to flow more freely."

This sounds very similar to fracking. The confusion over terminology only adds to the difficulty of understanding and responding to applications for permissions.

What are the problems with fracking and shale gas/oil extraction?

In the US, where shale gas exploitation is much more established than it is here, there is a growing body of evidence of the harmful impacts of fracking. Risks include:

- Water pollution
- Depletion of water resources
- Air pollution
- Health impacts for people and animals
- Earthquakes
- Industrialisation of the countryside

A note on climate change:

It has been estimated that between 60 and 80 per cent of existing fossil fuel reserves must remain in the ground if we are to have any chance of avoiding catastrophic climate change.

Some of the UK's leading climate scientists have warned that the widespread use of shale gas is quite simply incompatible with the Government's international commitments to keep global warming below two degrees.

Part One - Fracking in Europe

Attention to Europe's potential for shale gas has recently surged, with advocates deeming it the 'magic bullet' for cheap energy. This emerges upon the backdrop of shale gas extraction in the U.S., which has rapidly increased over the last few years.

Whilst the U.S.'s fracking boom is hailed as a success story, advocates of fracking in Europe fail to acknowledge considerable **differences between conditions in the U.S. and Europe:**

Costs: U.S. prices are artificially low, due to price speculation & over-estimates of gas quantities by the industry. Costs in Europe wouldn't be at this low level.

Geology: The geological conditions required for shale gas extraction are less prevalent in Europe. Its smaller gas basins, and deeper deposits at higher temperatures would make it more difficult to extract.

Hydrology: Water supplies are crucial for fracking, but Europe has limited supplies of fresh water. Shale gas extraction in water-restricted areas would affect water prices considerably.

Geography: As shale gas drilling poses environmental and health risks, population density is an issue. Europe has much higher population density than the U.S., so fracking threatens considerably more people.

Country by Country

Public and Governmental opinion on shale gas differs across the EU:

England-Wales: The largely pro-shale gas Government has lifted its moratorium in England and Wales. Exploratory drilling has taken place in the North West. South Wales and South East England are also threatened.

France: Introduced a moratorium on shale gas drilling in 2011, which is still in force. The moratorium is supported by strong public resistance to shale gas extraction.

Germany: Moratoriums in some areas, but exploration authorisations granted in others, due to federal system. Germany is undergoing a nuclear phase-out, which has sparked support for shale gas as an alternative to nuclear. Fracking poses a significant threat to Germany's low renewable water resources.

Poland: The Government strongly supports fracking, a belief which stems from the belief that shale gas is the 'silver bullet' for energy security. Poland currently relies on gas imports from Russia. It's now thought that initial estimates of shale gas quantities in Poland were over-optimistic, and energy companies have pulled out of previous projects. However, Chevron have recently returned to the South East region.

Denmark: Unofficial Moratorium. So far, no test drillings have been carried out. Test drilling permissions have been granted to one company, efforts of local campaigns groups have ensured that the company must do an environmental impact assessment before permission will be granted for the first test drilling.

Countries with bans / moratoriums	Countries with partial bans	Countries with no ban / moratorium
France Bulgaria Czech Republic	Austria Republic of Ireland Germany Spain Denmark	All other EU countries including the UK

Legislation: The State of Play at EU level

The EU lacks an overall EU framework for extraction of unconventional fossil fuels (UFFs), such as shale gas, shale oil and coal bed methane. At the very least, Keith and the Greens in the European Parliament want to see a framework introduced, to put high environmental standards in place to limit the adverse consequences of extraction.

Under the Lisbon Treaty, member states can choose their own energy mix and therefore whether or not they use shale gas. However, environmental legislation allows the EU to bring in regulations. The EU is now considering whether its legislation is sufficient to manage the risks associated with shale gas extraction. Furthermore, the Commission is conducting an initiative which aims to deliver a risk- management framework associated with shale gas extraction and production. As part of its information-gathering initiative, the commission is pursuing an impact assessment, and recently conducted a consultation with stake-holders across the EU.

The Greens are now waiting to see what the outcome of this consultation will be, and how the Commission proceeds. Currently, it is unknown whether the framework will be binding.

Work of the Keith Taylor MEP and the Greens so far:

Keith’s work on the Petition’s Committee:

Keith has supported various petitioners in their fight against fracking of shale gas:

1. Last year, Keith supported Rosemary Rechter, of ‘East Kent against Fracking’. Her petition called for sufficient EU regulation applicable to fracking for shale gas. Rosemary’s petition will now be taken into consideration for the Commission’s new proposals.

2. Keith supported Polish Petitioners earlier this year, raising their concerns about fracking in Poland. He and the Committee subsequently took a fact-finding visit to Poland. They listened to concerned citizens and raised these concerns with elected representatives. Following the trip, Keith has written to the Polish Government, raising the dangers associated with fracking, and to investigate allegations that the Government has requested that secret services infiltrate campaigns groups.

Keith and the Greens/EFA Group:

The Greens/EFA group in the Parliament have been working to address gaps in legislation. Last year, they got support to commission a study on the impacts of shale gas extraction on the environment and human health. The study revealed gaps in EU's legislative framework. Parliament then produced two reports on shale gas, one providing an Environmental perspective, and the other, an industrial perspective.

The Greens succeeded in amending the Environmental report, calling for caution, a ban in sensitive areas, tougher regulation and proper application of existing EU rules. Unfortunately, amendments calling for a moratorium on shale gas extraction were not successful.

Current legislation which Greens wish to see addressed:

Environmental Impact Assessment (EIA) Directive

This relates to the effect of public and private projects on the environment. Currently, this directive requires that projects be subject to an EIA. However, this does not apply to UFFs. Gaps to address: The Greens have filed amendments requiring the EIA to apply to UFFs.

The environment committee of the European Parliament has voted in favour of an EIA and the whole parliament will vote on this later this year.

Next steps for the Greens :

Several EU Directives relate to shale gas extraction/ production. The following Directives have been highlighted by the Greens as areas where changes must be made, to adequately address shale gas extraction:

1) Waste Directive - this applies to waste resulting from the extraction, treatment and storage of mineral resources and the working of quarries.

Gaps to address: Currently this directive relates to the safe handling of waste water, but doesn't relate to well construction for UFFs. Greens want to see this applied to well construction.

2) Licensing Directive - concerns the conditions for granting/using authorizations for the prospection, exploration and production of hydrocarbons.

Gaps to address: This concerns the granting of licences for extraction. However, its recommendations do not cover well construction and drilling for UFFs.

3) Two Directives relating to Water - these call for prevention of pollution, and promoting sustainable water usage. Gaps to address: These directives apply to fracking because of the huge quantities of water used for fracking. However, the directives do not give specific

Part two - Fracking in South East England

Shale gas and oil exploration is at an early stage in the UK – so far, the only test drilling that has taken place is in Lancashire and Sussex. But the government is keen to see fracking take off in the South East. They are using tax incentives and community pay-outs and smoothing the planning process to make it quicker and easier for companies to get permission to drill.

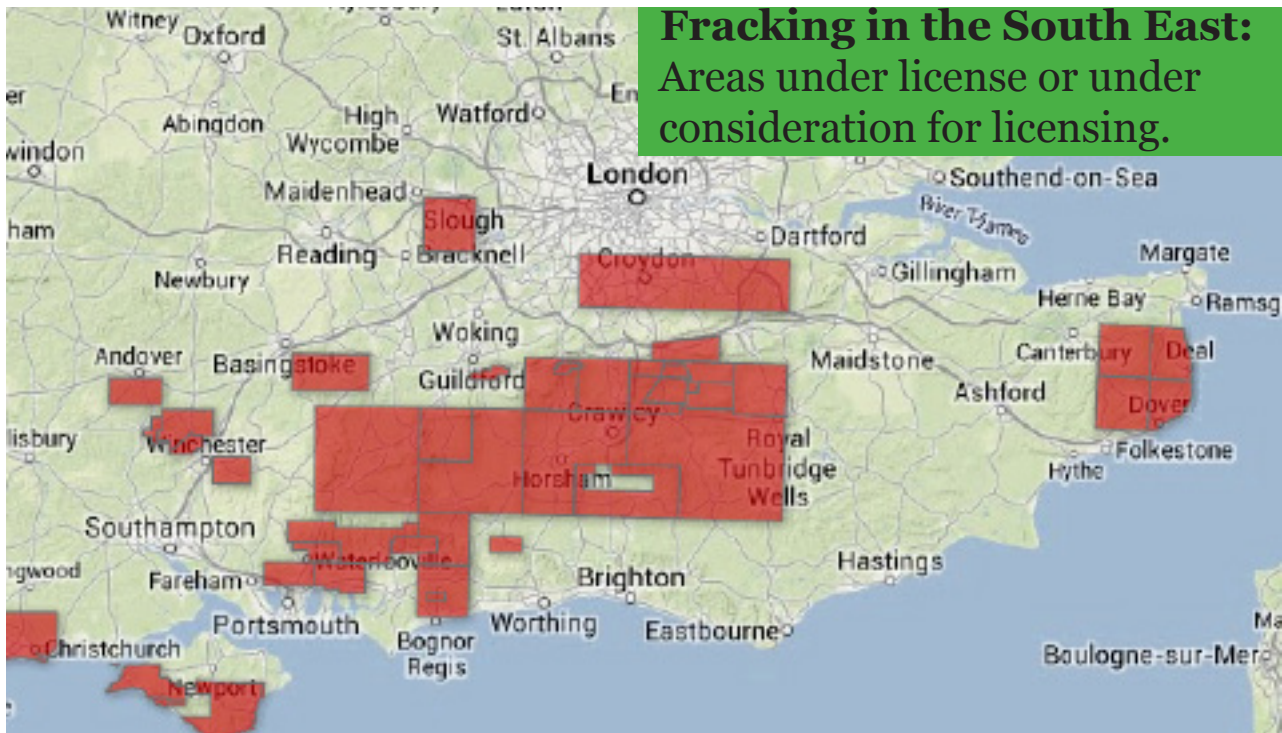
There are potentially large shale gas resources in the South East. The Weald Basin, running from Kent through Sussex and Surrey to Hampshire, is seen as a prime area for shale gas. Parts of Oxfordshire and Buckinghamshire are also being eyed up as potential gas mines.

Planning permission has been issued for drilling at sites in Kent and Sussex. New applications are being made, and it is likely that more will follow.

In **Balcombe** exploratory drilling is being carried out by Cuadrilla. The company are planning to use 'acid stimulation' to exploit the area's oil reserves. The company claim that they are not looking to frack in the area 'at this time' but campaigners are concerned that the exploratory drilling could lead to fracking in the near future.

Keith Taylor, MEP for the South East, at the anti-drilling protest in Balcombe:





What you can do:

Keep an eye out for applications for test oil and gas drilling near you.

Before they can drill for gas or oil, companies need three things:

- a licence from the Department of Energy and Climate Change
- planning permission, issued by the local authority
- permits from the Environment Agency

Licences have been granted covering wide areas. However the Government is keen to extend this licensing to much of the South East in the next licensing round, likely to take place later this year. These licences are to extract the gas or oil, and do not specify the method to be used. In order to frack, companies need further specific permits.

The planning permission will include more detail of the methods to be used and the infrastructure required. Read any applications for gas or oil drilling carefully – they can be hard to make sense of, so do consult campaigners with experience on the issue.

The planning and permit stages are your opportunities to oppose the plans, as they involve public consultation. Friends of the Earth has a useful briefing called Shale gas exploration and planning which can help you object through the planning system.

Keep Keith Taylor MEP informed of new applications and link up with other campaigners to share knowledge and skills.

www.keithtaylormep.org.uk



About Keith:

Keith Taylor is the Green Party's member of the European Parliament for South East England. He is a member of the Greens/EFA group in the European Parliament.

Keith has been working with residents in Balcombe who are protesting against Cuadrilla's plans to drill in their area.

You can find out about Keith's work at www.keithtaylormep.org.uk