Fracking: a technological innovation too far?

September 2013

<u>James Woudhuysen</u>, <u>Joanne Green</u>, <u>Erik Bichard</u> and <u>Tony Bosworth</u> introduced a discussion on fracking



Although the UK government has been mindful of the **looming energy crisis** for the last decade, it has responded like rabbits caught in the headlights. Finally, there is some political will to start resolving the matter with more than a few solar panels or wind turbines on the roof. In the 2012 budget, George Osborne approved the construction of new gas-fired power stations, and established the Office for Unconventional Gas and Oil, to join up responsibilities across government and provide a single point of contact for investors and streamline the regulatory process for deploying technologies

like fracking



Alongside the introduction of some more developed techniques to extract gas and oil from previously hard to mine sources, **fracking** is the latest of these technologies to pose a serious option for governments and industry to invest serious levels of resources into. This isn't a technique without its critics though, and the political climate set against high-tech solutions hasn't gone away, even though the wind has been taken out of its mills recently. So how much of a change has there been in the climate of political opinion in this second dash for gas?



The discovery of enormous reserves of readily exploitable shale gas and other 'unconventional' sources of energy have transformed previously pessimistic discussions around an 'energy crunch', and with predictions that the US could be entirely self-sufficient by 2030, and the UK and Europe not far behind. Not only might Western nations no longer need to rely on volatile supplies from the Middle East: some leading experts suggest North America could become its rival, even its supplier. So could the spectres of brown-outs, oil shocks, and fuel rationing really be banished now?



Some background readings

<u>UK data and analysis for shale gas prospectivity</u>, by N Smith, P Turner and G Williams, Geological Society of London 2010

<u>Is fracking environmentally friendly?</u> Andrew Simms and Rob Lyons debate in The Guardian 23 September 2011

Fracking and Fukushima: our energy security fears, Battle of Ideas 30 October 2011

<u>Seven reasons why we don't need shale gas</u>, by Helen Rimmer, Friends of the Earth briefing March 2012

Shale gas: energy solution or fracking hell? by Tony Bosworth, Friends of the Earth briefing March 2012

<u>James Hansen: Why I must speak out about climate change</u>, Lecture on TED Talks, 7 Mar 2012

<u>UK dash for gas would be illegal, says climate committee</u>, by James Murray, Guardian 13 September 2012

Shale Gas to the Climate Rescue, by Alan Riley, The New York Times opinion pages 13 August 2012

Fracking firm Cuadrilla plans new well at St Annes site, BBC News 21 August 2012

Doha: It's the end of the world as we know it, by Rob Lyons, spiked 5 December 2012

<u>Ignore the doom merchants, Britain should get fracking</u>, by Boris Johnson, The Telegraph 9 Dec 2012

Climate change: apocalypse postponed, by Rob Lyons, spiked 6 February 2013

The Facts on Fracking, by Susan Brantley and Anna Meyendorff, New York Times 13 March 2013

<u>UK steals vital lead on Europe in shale gas stakes</u>, by Peter C. Glover, The Commentator 25 March 2013

So shale gas could meet demand for 40 years. What then? by Andrew Simms, Guardian 28 June 2013

<u>Turning FACT Inside Out</u>, by Denis Joe, Review of FACT exhibition for Manchester Salon July 2013

Balcombe: colonised by fracktivists, by Rossa Minogue, spiked 8 August 2013

An Open Letter To Fracking Frack Inc About This Fracking Stuff , by John Robb, Louder Than War 19 August 2013

What's Behind the Balcombe Fracking Protest? video by Dan Clayton of some Balcombe protestors, September 2013

Watch video of the speaker and audience discussion below. Thanks to Dan Clayton the documentary filmmaker from Leeds for this.



Discussion Partners



This Salon discussion is generously partnered and sponsored by the Manchester Network of the IET, one of the largest and most active outside London, stemming from the amalgamation of the

Northern Society of Electrical Engineers, founded in 1893, with the Institution of Electrical Engineers in March 1900. A iming to retain the high standards are maintained into the future the IET Manchester Network has six technical groups covering a wide range of special interests:

ons, broadcasting and multimedia technical group (CBM);

Computing, control and automation technical group (CCA);

Engineering, management and manufacturing technical group (EMM);

Multi technical group (MTG);

Power technical group (PTG) and

Transport technical group (TTG). They also organise two other groups:

Young Professionals (YP) and

Retired Members (RM).



The Manchester Salon is participating in the fabulous <u>Manchester Science Festival</u> for the fourth year running, itself celebrating its sixth year. With over 200 events for families and adults, you can expect an exciting nine days of cutting-edge research, the brightest minds and amazing events. You'll have the chance to delve into immersive experiences, explore the science of the city by foot, join in the debate, enjoy hands-on activities, see awe-inspiring films and much more. Watch out for trailblazers throughout the year and join us at events throughout Greater Manchester during 27 October - 4 November 2013.