

**MAY 2014**

## **FRACKING**

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## KEY TERMS

Fossil Fuels

Hydraulic Fracturing

Moratorium

Off-Shore Drilling

Peak Oil

Renewable Energy

# INTRODUCTION

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Amidst global concerns regarding energy security and climate change, the issue of Fracking has come to the fore, and become one of the most controversial political issues in the UK today. Hydraulic fracturing, commonly known as fracking, is a technique of extracting oil and gas by forcing large volumes of water, sand and chemicals into the ground at high pressure causing tiny fractures in rocks far below the surface, and allowing gas and oil deposits trapped within to be released [Ref: [BBC News](#)]. Invented in the United States in 1947, it has been used an estimated 2.5 million times around the world [Ref: [Wikipedia](#)] and advocates, including London Mayor Boris Johnson, argue the technique could boost the UK economy by creating an abundance of cheap energy [Ref: [Telegraph](#)] as well as creating thousands of jobs [Ref: [The Times](#)]. In the midst of fears that conventional oil reserves may soon peak, fracking could ensure energy security for generations to come, some argue [Ref: [Bloomberg](#)]. Whilst others feel that fracking is fundamental to continued economic and social development: “The production and supply of energy was grasped in terms of the extent to which it emancipated people, the extent to which it freed them up to realise ever expanding objectives, from flight to electricity grids. In a sense, our civilisation, such as it is, is based on power” [Ref: [spiked](#)]. Opponents dismiss these arguments though, and claim that the potential environmental impact of fracking far outweighs any economic benefits. These critics argue the process has been known to cause minor earth tremors, and some fear it could trigger severe earthquakes [Ref: [BBC News](#)]. More broadly, they observe that at a time when we should be turning to alternative, low-carbon energy sources to combat climate change, fracking encourages a continued reliance on fossil fuels [Ref: [Guardian](#)].



# THE FRACKING DEBATE IN CONTEXT

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## Environmental concerns

Fracking has been used in the UK's off-shore drilling operations in the North Sea since the 1970's, but the process was banned from June 2011 to April 2012 after onshore fracking was cited as the likely cause of a minor earthquake in Lancashire [Ref: [BBC News](#)], and Germany currently has a ban on fracking [Ref: [The Times](#)]. However, a report by The Royal Society stated that the UK moratorium should be lifted because: "Hydraulic fracturing is an established technology that has been used in the oil and gas industries for many decades" [Ref: [The Royal Society](#)]. Opponents however, argue that there is a: "...moral responsibility" to tackle climate change for the sake of future generations [Ref: [Guardian](#)], and that a move towards fracking detracts from developing and using low carbon renewable energy sources [Ref: [Independent](#)]. Fracking produces large amounts of toxic waste, they argue, including methane, and all fracking wells eventually suffer leakages of chemicals such as hydrochloric acid, with 6% of wells leaking immediately [Ref: [Guardian](#)], having catastrophic consequences for the environment and wildlife [Ref: [BBC News](#)]. They also point to the fact that waste from fracking sites has been known to contaminate drinking water [Ref: [Huffington Post](#)], resulting in recorded cases of people becoming seriously ill [Ref: [The Times](#)]. In opposition to these arguments, others note that: "Nothing is completely risk free" and as such, suggest that these concerns are not reason enough to reject fracking outright [Ref: [Reason](#)]. Moreover, according to some: "Natural gas from fracking actually benefits the environment" [Ref: [Guardian](#)], and evidence from a recent IPCC report is cited to substantiate this view [Ref: [Telegraph](#)]. In addition, new techniques have refined the process

of fracking, and it is noted that in the United States, fracking fluid can now be recycled so that it can be used at multiple drilling sites [Ref: [Forbes](#)], and waste fluid is stored deep in the ground, and is unlikely to leak into the water table [Ref: [The Royal Society](#)]. Others take a more balanced view, and accept that whilst fracking would increase the UK's contribution to global emissions, shale gas emits far less carbon dioxide than coal, and if done safely, and implemented along with carbon capture technology, gas can be used: "...as a bridge to a low carbon future" [Ref: [Guardian](#)], a view supported by Ed Davey, Secretary of State for Energy and Climate Change [Ref: [Gov.UK](#)].

## Economic Bonanza?

The United States is often cited as an example of fracking success; moving from a net importer of gas to a net exporter [Ref: [The Times](#)], and has recently overtaken Saudi Arabia as the world's leading exporter of gas and oil [Ref: [Telegraph](#)]. In light of this, supporters state that fracking for gas is imperative for the UK's energy security, as it would protect us from overseas price shocks brought on by global events [Ref: [Telegraph](#)]. Prime Minister David Cameron has claimed the fracking industry could create as many as 64,000 jobs in the UK and has the potential to drive domestic energy prices down [Ref: [Telegraph](#)], as well as fuelling up to £6 billion of inward UK investment in the coming years [Ref: [Guardian](#)]. Fracking will be beneficial for local communities advocates claim, suggesting that councils could raise up to £3 million each year through fracking rights, which they could use to lower council tax and fund community schemes [Ref: [The Times](#)]. Supporters also cite the fact that the United States has seen a 25% reduction in household gas bills in



recent years as a result of having home grown energy [Ref: [The Times](#)], although, it should be noted, Chancellor George Osborne has suggested the same reduction in domestic energy bills may not happen in the UK in the short term [Ref: [BBC News](#)]. However, many of the claims made about the economic benefits of fracking have been called into question [Ref: [New Statesman](#)], with one eminent scientist calling claims that fracking will lower domestic bills: "...Baseless economics" [Ref: [Independent](#)]. Critics are keen to characterise arguments about the economic benefits of fracking as being purely hypothetical, pointing out that the projections of gas reserves in the UK are still unproven, and even if correct, they may be beyond the reach of current extraction methods [Ref: [New Statesman](#)]. And most strikingly, as a retort to the economic benefits argument, one commentator states bluntly that: "...we can't put a price on the environment. The air, the water, the land – these are precious resources which we must conserve, if we are to leave a habitable world to future generations" [Ref: [New Statesman](#)].

### Frack to the future?

The fracking debate also raises broader social issues beyond economic and energy concerns, with some stating that: "Anti-fracking zealots are the enemies of progress" [Ref: [Telegraph](#)]. Proponents of fracking in the UK assert that finding new and innovative ways of extracting natural resources is fundamental to human development, and something to support on principle. Risk aversion is at the heart of anti-fracking sentiment they claim, with one commentator observing, as evidence of this outlook, that: "They say coal is dirty, and normal oil production might overheat the planet. Hydroelectric dams kill fish. Nuclear

plants could suffer meltdowns. Windmills kill birds" [Ref: [Reason](#)]. But anti-frackers dismiss these claims, and suggest a better use of new technological developments would be to invest in renewable industries such as off-shore wind, which currently receive six times less in subsidies than fossil fuels, and accuse supporters of propagating a: "...fracking fairytale" [Ref: [Huffington Post](#)]. Even if we move towards fracking, they argue, it will be up to 5 years before we even know if the shale reserves in the UK are viable [Ref: [Independent](#)] and they criticise supporters for failing to note the differences between the UK and the US; there are 8 times more people per square mile in the UK, thus making the exploration process vastly different to that in the US [Ref: [Guardian](#)], and subject to the concerns of far more local communities [Ref: [New Statesman](#)]. So, where does the balance lie; are the economic and energy benefits simply too large to ignore? Is fracking an example of human ingenuity and progress, or an environmental disaster waiting to happen, and ultimately, a hindrance to tackling climate change? Should the UK embrace the use of fracking?



## ESSENTIAL READING

Both sides are wrong in the fracking debate

Tom Greatrex *New Statesman* 17 December 2013

Fracks and figures

John Vidal *Guardian* 19 August 2013

## FOR

Frack to the future

Tim Black *spiked* 27 March 2014

Exposing the anti fracking myths

Tony Allwright *The Times* 2 March 2014

Why we should embrace fracking

Chris Faulkner *Guardian* 19 December 2013

We cannot afford to miss out on shale gas

David Cameron *Telegraph* 11 August 2013

Ignore the doom merchants; Britain should get Fracking

Boris Johnson *Telegraph* 9 December 2012

## AGAINST

Why we need an outright ban on fracking

Natalie Hynde *Guardian* 26 February 2014

Why fracking is not the solution

Bianca Jagger *New Statesman* 19 September 2013

Whats behind this Fracking mania?

George Monbiot *Guardian* 19 August 2013

Fracking isn't a fairytale; it's a nightmare

Natalie Bennett *Huffington Post* 27 July 2013

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The Government has betrayed the environment

Robin Russell Jones *Independent* 23 July 2013

## IN DEPTH

Boomtown USA

Peter Foster and Alastair Good *Telegraph* 25 November 2013

From sunset to new dawn

*Economist* 6 November 2013

The myths and realities of shale gas exploration

Ed Davey *GOV.UK* 9 September 2013

Frackpots

Tim Rayment *The Times* 4 August 2013

A colossal fracking mess

Christopher Bateman *Vanity Fair* 21 June 2010

## ORGANISATIONS

Cuadrilla

Frack-Off

IPCC



## BACKGROUNDEERS

Frack, Baby, Frack

*The Times* 20 July 2014

Shale Fracking Bonanza

*The Times* 24 April 2014

Anti-Fracking environmentalists are holding back the US

John Stossel *Reason* 13 March 2014

Fracking Shame

Tom Bawden *Independent* 13 March 2014

Shale gas rush is a liability to slowing down climate change

Suzanne Goldenberg *Guardian* 26 February 2014

Focus on fracking misses the point intentionally

David Blackmon *Forbes* 10 February 2014

The whole country must benefit from Fracking

Anne Perkins *Guardian* 5 February 2014

The Truth about Cameron's fracking fairytale

Chris Huhne *Guardian* 26 January 2014

Is shale gas greener

Fiona Harvey *Guardian* 24 January 2014

Heres why fracking won't work in the UK

Paul Stevens *Guardian* 19 January 2014

In Shale, the UK has a second chance to mend its fortunes

Misha Glenny *Financial Times* 17 January 2014

Power to the people, we must back fracking

Alice Thomson *The Times* 15 January 2014

Cameron attempts to ease the way for Fracking in the UK

Jim Pickard and Guy Chazan *Financial Times* 13 January 2014

Energy and Jobs

*The Times* 12 December 2013

Why I risked arrest to protest against fracking

Caroline Lucas *Guardian* 16 October 2013

Opposition to fracking is anti science

*The Times* 15 October 2013

How fracking can work in Britain

Tim Stone *Guardian* 9 September 2013

Fracking brings climate change closer to home

George Monbiot *Guardian* 30 August 2013

Anti-Fracking zealots are the enemies of progress

*Telegraph* 19 August 2013

Fracking Vs renewables?

Zoe Williams *Guardian* 15 August 2013

What is fracking and why is it controversial.

*BBC News* 27 July 2013

The UK will fail to replicate the US gas boom

Heidi Vella *New Statesman* 23 July 2013

The Plan for shale should be plan Z, not plan A

Tony Juniper *Independent* 28 June 2013

A review of hydraulic fracturing

Royal Society 1 June 2012

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## IN THE NEWS

Fracking push gets go-ahead across UK as ministers tighten safeguards

*Guardian* 28 July 2014

Fracking: Council throws out drilling plans

*Telegraph* 22 July 2014

UK looks to boost fracking with new land access rules

*BBC News* 23 May 2014

Support for fracking falls below 50%

*BBC News* 20 May 2014

Cuadrilla plans fracking in Lancashire

*Energy and Technology Magazine* 19 May 2014

The UK must embrace Fracking

*Bloomberg* 5 May 2014

Landmark patout for family made ill by fracking

*The Times* 29 April 2014

Texan family wins \$3 million against fracking firm over water contamination

*Huffington Post* 24 April 2014

Fracking could £33bn and generate 64,000 jobs

*Guardian* 24 April 2014

Onshore wind farm subsidies would be scrapped by the Tories

*BBC News* 24 April 2014

Start fracking now, EU urges Merkel

*The Times* 23 April 2014

Baby health risks near fracking sites

*The Times* 18 April 2014

Fracking to be used to help environment

*Telegraph* 13 April 2014

Fracking can be part of the global warming solution report says

*Telegraph* 13 April 2014

IPPC Report; the world must urgently switch to cleaner sources of energy

*Guardian* 12 April 2014

Fracking safety; report warns of 'Significant unknowns'

*Guardian* 25 March 2014

Fallon calls for home grown energy

*Telegraph* 23 March 2014

Fracking could harm wildlife

*BBC News* 13 March 2014

Shale gas can help countries move towards Green energy

*The Times* 6 March 2014

Shale gas viability will take five years

*Guardian* 31 January 2014

Combustible levels of methane found in drinking water

*Russia Today* 13 January 2014

Shale gas has considerable potential

*Independent* 8 January 2014

Fracking can help lower industry footprint

*Energy Voice* 18 September 2013

Baseless economics

*Independent* 3 September 2013

Fracking tremor likely caused earthquakes

*BBC News* 2 November 2011

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