

The facts about fracking

Your questions answered

What is fracking?

Fracking, or hydraulic fracturing, is a process used to extract fossil fuels locked in rock formations thousands of metres below the Earth's surface. A mixture of water, sand and chemicals is injected deep underground at high pressure to fracture the rocks and release the shale gas or shale oil. Fracking can also be used to extract coal bed methane, another fossil fuel.

What are the dangers of fracking?

Industry statistics from North America show that around 6% of fracking wells leak immediately. We already know that 50% of conventional oil and gas wells leak within 30 years – but fracking hasn't been around long enough for this kind of data to exist for fracking wells.

Leaking wells lead to a risk of water contamination. Lord Smith, former chair of the Environment Agency, has said this is the biggest risk posed by fracking. So it's particularly concerning that the Government has now said it will allow fracking companies to drill through aquifers which provide household drinking water.

The Government now admits fracking presents risks to human health. Fracking could also affect house prices.

Would fracking bring down energy bills?

It's very unlikely. Fracking company Cuadrilla has admitted that any impact on bills would be "basically insignificant". Claims that fracking would create a lot of jobs have also been overstated. According to Cuadrilla, each of its proposed six year projects in Lancashire that were recently rejected by the council would only have created 11 jobs. Meanwhile the cost of renewable energy is tumbling. The price of solar panels has fallen 70% since 2009.

Don't we face an energy crisis though?

Fracking can't help any short term or medium term energy crisis. Even if the industry was able to move ahead as fast as it wants, we wouldn't see significant production until about 2025. The best thing we can do in the short term is reduce demand in our homes and workplaces by improving energy efficiency. Read our report on a green energy future for Britain: bit.ly/cleanbritishenergy

Will fracking help us to tackle climate change?

Shale gas and shale oil are fossil fuels. They emit greenhouse gases. Avoiding the worst impacts of climate change means getting off fossil fuels as soon as possible. Scientists agree that to stop dangerous climate change, 80% of fossil fuels that we know about need to stay in the ground. Setting up a whole new fossil fuel industry is going in completely the wrong direction, if the UK is to do its fair share to stop climate change.

Isn't it better to have our own gas rather than importing it?

We'll need some gas in the future. Importing gas from secure and conventional sources, like Norway, the world's third largest natural gas exporter, will help as we move over to low carbon sources of energy. We can reduce the amount we rely on imports by investing in green technologies. If we improve energy efficiency and use sustainably sourced renewable gas we could reduce our dependence on gas imports by 30%. If we went all out for shale, our gas imports would stay at current levels as the North Sea supply declines – and imports could increase by 11%.

It's also worth remembering that gas fracked in the UK wouldn't necessarily be used here: if companies could earn more by selling it abroad, they would.

Aren't opponents of fracking just nimbys and scaremongers?

People opposing fracking have well-founded concerns for their health and environment, based on evidence from countries like the US and Australia. The French and Bulgarian governments, and the US states of Vermont and New York, have banned fracking. More than 130 MPs have called for a halt to fracking. And the UN Environment Programme says even if fracking is done properly, it may cause unavoidable environmental impacts.

How will we meet our energy needs in the future?

Cutting energy waste and developing the UK's huge renewable energy potential will secure affordable power in the long term and protect our environment.

The Government must set a legally binding target to take fossil fuels out of our power sector by 2030 – and drive forward investment in renewable energy, energy efficiency and UK supply chains. These measures will create hundreds of thousands of jobs.

For the latest news on our fracking campaign go to **www.foe.co.uk**