

FRACKING THE COUNTRY...



Andy Melhuish unearths the latest news on fracking, a modern technique to extract fossil fuels

Quaint as they come, Balcombe is a West Sussex village suddenly making tremors across the world. What activities could bring dozens of protesters, including one MP, to set up camp and cause peaceful havoc in this otherwise sleepy region of the South Coast?

The company behind the Balcombe fracking site is Cuadrilla, who has been given the green-light by the government to search for oil and gas in the UK. Fracking is the common term for hydraulic fracturing, which was first patented in the US in 1939 as a way of obtaining unreachable oil and gas. With many decades of technological advancement, fracking now involves drilling deep into the ground then drilling sideways to the desired point in the rock – usually coal or shale. Once the well is in place a mixture of water, sand and chemicals is forced in to break apart the rock thus releasing the trapped payload, which is drawn back up and processed into fuel. The water-chemical mixture is also drawn back up and stored in steel containers until it can be disposed of. In the short term, the process seems like an excellent way to ensure our country's energy needs are met for the next few years. But the economy vs. ecology argument is one that has been raging between politicians and green campaigners for years.

the cons

On the other side of the fence is Frack Off, a campaign network founded in 2011, who were a part of the protests at the Balcombe site. "A major issue is that the rock trapping the gas/oil is impermeable, meaning the desired fuel won't flow to a single drilled well," says Alex Llewellyn, a campaigner with Frack Off. "That's why you end up with astronomical well-numbers in an area. In the UK, to get at the amount of gas companies are boasting about we'd be looking at tens of thousands of wells."

Faced with so many wells, what are the potential dangers we could encounter? "A big issue throughout the US and Australia has been water contamination," clarifies Alex. "When you sink a steel well into the ground and cement it into place everything seems fine, but over time steel rusts and cement rots. When you do this a thousand times some wells leak immediately and, over time as they degrade, the number of leaking wells will increase." Alex reminds us that in addition to the toxic materials already present in the shale, we also have to be concerned about the cocktail of chemicals the industry uses

in the fracking process itself. Formaldehyde, acetic acids, citric acids, boric acids and many other toxic substances are all contained in the fracking fluid. Adding to concerns, each well requires 5 million gallons of local fresh water, which is 100 times more than traditional methods.

fracking sites

Fossil fuels have been prevalent in the news for decades, referring usually to oil from the Middle East or the dangers of industrialisation of less-developed countries. But this is one of the first modern instances where the UK and the US have to face real-world environmental concerns on our own land. Cuadrilla has recently withdrawn an application to test drill for another 90 days at Balcombe, but that was not the only potential fracking site in the UK. Shale gas is currently being drilled for in the North West of England, with new sites approved and under construction in the South East and Wales. Besides vocal opposition from Green Party MP Caroline Lucas – including her famously taking part and getting arrested in the Balcombe protest – politicians throughout the land seem unanimously in favour of fracking, and West Sussex county council have been instructed to give no comment on the topic. Disturbing reports of minor earthquakes, related to existing drilling sites near the Blackpool coast, seem to add evidence that whatever goals the government and the companies have may cause substantially more problems than positives.

the future

As our oil and gas reserves appear to be running low, a wonderful new technique seemingly emerges to make a finite resource appear infinite. Fortuitous as it seems, we all need to keep asking questions. Concentrating on the financial aspect is risky even if the pay-off local communities have been promised is true, because it is an uncertain future that the beneficiaries will be walking into. Even top investors and heads of government have to live on the planet that they are creating. Money seems to be key in this discussion, and with so much of it floating around perhaps instead of temporary solutions, investment should be made into more sustainable power and renewable technologies. It is likely that more and more fracking sites will be planned for the UK, and certain that these will be met with opposition just like Balcombe. And as further issues rise to the surface, it is also certain that we all need to take a genuine interest and help shape the future of our country and the world.