FRACKING MYTHS AND FACTS

MYTH #1: "FRACKING WILL PROVIDE ENERGY SECURITY FOR THE UK."

FACT: The UK is part of an integrated European energy market, which means all the gas produced in the UK is traded on the open market and sold to the highest bidder. The Government cannot therefore 'reserve gas for the UK', or control the price. If private companies can earn more money by selling gas abroad, they will. In fact, the UK currently *exports* nearly 30% of the gas it produces. Also, despite what politicians would have you believe, we do not rely on Russia for our gas supply. According to the 2014 Government DUKES report, 97% of our imported gas comes from Norway (57.4%), Qatar (24.4%) and Holland (15.1%) – but not Russia.

MYTH #2: "FRACKING WILL LOWER UK ENERGY PRICES."

FACT: Although this claim has been made by politicians, most economists and gas industry executives do not believe this is the case because of the nature of the EU energy market and the amount of gas available. David Kennedy, head of the Committee on Climate Change – the government's official adviser – said that "*fundamental economics*" showed bills were unlikely to fall. "*It is highly unlikely to happen here. There isn't enough shale gas in the UK and in Europe to change the European market price.*"

"We're part of a well-connected European gas market and unless it is a gigantic amount of gas, it is not going to have material impact on price." Lord Browne, ex-Chairman of fracking company Cuadrilla

MYTH #3 "FRACKING HAS BEEN GOING ON IN THE UK FOR DECADES."

FACT: The technique causing such controversy is known as High Volume Hydraulic Fracturing (HVHF), or 'fracking' for short. This requires millions of gallons of fresh water, sand and chemicals, is done at very high pressure in vertical and horizontal wells, and is designed to fracture solid rock deep underground. It is a very different process from the long-used technique of pumping water at low pressure into conventional wells to increase the amount of oil and gas recovered. According to the Department of Energy and Climate Change (DECC): "*Cuadrilla is so far the only operator in the UK to use High Volume hydraulic fracturing – this technique was used on the Preese Hall well in Lancashire in 2011.*" (Letter Ref: TO2013/15618/RL, 20/08/13)

MYTH #4: "FRACKING POSES NO RISK TO PUBLIC HEALTH."

FACT: Recent research studies in Pennsylvania have found that drilling and fracking activities have been associated with a 27% increase in cardiology hospitalisations, increased numbers of skin conditions and upper respiratory conditions, and high-risk pregnancy, pre-term birth, and low birth weight in infants. New York State banned fracking on grounds of serious risk to public health following a rigorous six-year study. Many other parts of the world, including France, Holland, Bulgaria, Tasmania and Victoria (Australia) have all banned fracking due to public health concerns.

"Would I let my family live in a community with fracking? The answer is no. The potential risks of fracking are too great. In fact, they are not even fully known." Dr. Howard A. Zucker, NY State Health Commissioner.

MYTH #5: "THE UK HAS GOLD-STANDARD FRACKING REGULATIONS."

FACT: The regulations that would govern fracking were created for the *conventional* oil and gas industry, not fracking, despite the very different – and in the UK, untried – technology that would be used. The Environmental Law Review stated: *"These controls were designed pre-fracking and their application leaves a number of gaps, which may risk harm to human health and/or damage to the environment. Under the current regulatory system, the uncertainty and risk associated with fracking is not justifiable."* The Environment Agency (EA) is the main body responsible for policing the fracking industry – the same EA that has failed to maintain flood protection across the UK and is suffering budget cuts of up to 30% over the next four years. How could they possibly cope if there were thousands of new fracking wells to monitor?

MYTH #6: "FRACKING WILL NOT AFFECT HOUSE PRICES."

FACT: The government's draft Shale Gas Rural Economy Impacts Paper (released July 2015) says: "*House prices in close proximity to the drilling operations are likely to fall. There could be a 7% reduction in property values within one mile of an extraction site.*" A study of house prices in the USA, published in the American Economic Review, concluded that the value of homes in Pennsylvania within 1 km of fracking wells fell by 12.9%. Furthermore, according to an investigation by the Independent on Sunday (09/01/16), companies representing two thirds of the UK insurance market will not insure against damage caused as a result of fracking, or else have exemptions covering pollution of water from the controversial technique.

MYTH #7: "FRACKING HAS NEVER CONTAMINATED DRINKING WATER."

FACT: There are hundreds of cases of people having their private drinking water supplies contaminated by the fracking industry, particularly those who have their own boreholes. A recent investigation found that the Department of Environmental Protection in Pennsylvania has been routinely covering up hundreds of complaints about contamination of drinking water. This can be caused by leaking wells, chemical spills, blowouts, flood damage, waste water disposal and underground migration of methane and other toxic chemicals.

"Cases of drinking water sources contaminated by drilling activities, as well as waste disposal, are now proven." Physicians for Social Responsibility, Oct 2015

MYTH #8: "FRACKING IS A BRIDGE FUEL TO A LOW-CARBON ECONOMY."

FACT: It is true that burning gas in power stations does produce less CO_2 compared to burning coal. However, by focusing only on CO_2 emissions, supporters of fracking are not telling the whole story. A far more dangerous greenhouse gas is methane – the main gas produced by fracking – which is 86 times more potent than CO_2 over a 20-year time frame, according to the International Panel on Climate Change. Studies vary in their methods and measurement of fugitive (i.e. leaking) methane, but there is a growing consensus that up to 10% may be lost to the atmosphere during exploration and production, and that even more is lost from leaking abandoned wells. This would make fracked gas even more damaging for the climate than coal.

MYTH #9: "A FRACKED WELL CAN PRODUCE GAS FOR OVER 20 YEARS."

FACT: A conventional well can produce gas for about 20 years or more, whereas most fracked wells will only produce commercial quantities of gas for 1-3 years. According to Lord Oxburgh, former Chairman of Shell, *"The flow rates of the majority of fracked shale gas wells halved in the first twelve months. 84% of fracking wells became uneconomic within just three years."* This is why companies have to keep drilling more and more wells just to stay in business.

"To recover 15% of shale gas in Lancashire would need 33,000 wells on 5,500 pads. To be independent of gas imports, we need to continue drilling 1,000 wells every year." Andy Aplin, Professor of Unconventional Petroleum at Durham University

MYTH #10: "FRACKING WILL CREATE OVER 64,000 JOBS."

FACT: This oft-quoted figure comes from a report commissioned by fracking industry trade body UKOOG in April 2014. However, what they don't tell you is how this headline figure is arrived at. The report's estimate of 64,500 jobs relates to a best-case scenario of 4,000 fracking wells in 2024-26 (requiring a total spend of £33 billion). However, only about 6,100 of these would be direct jobs in the gas industry. The extra 58,400 jobs are described as indirect or induced jobs, with little explanation how this figure is arrived at. Compare this to a similar report commissioned by DECC, which stated that only 15,900 to 24,300 full-time jobs – direct *and* indirect – would be created at peak construction by the shale gas industry. This is fewer than the 27,000 jobs already lost or under threat because of the government's cuts in support to the solar industry alone.

This leaflet was brought to you by **Concerned Yorkshire Residents Against Fracking**.

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