THE FANATICSâ€™ FIVE LIES ABOUT FRACKING

It was US Senator Daniel Patrick Moynihan who once said: "You are entitled to your opinions, but not to your own facts." In the debate over shale gas - I refuse to call it the fracking debate since fracking has been happening in Britain for 50 years - the opponents do seem to be astonishingly cavalier with the facts.

Here are five things they keep saying which are just not true:

First, that shale gas production has polluted aquifers in the United States.

Second, that it releases more methane than other forms of gas production.

Third, that it uses a worryingly large amount of water.

Fourth, that it uses hundreds of toxic chemicals.

Fifth, that it causes damaging earthquakes.

Here are the facts for each:

*The total number of aquifers that have been found to be polluted by either fracking fluid or methane gas as a result of fracking in the United States is *zero*. Case after case has been alleged and found to be untrue.

The Environmental Protection Agency closed its investigation at Dimock, in Pennsylvania, concluding there was no evidence of contamination; abandoned its claim that drilling in Parker County, Texas, had caused methane gas to come out of people's taps; and withdrew its allegations of water contamination at Pavilion in Wyoming for lack of evidence.

Two recent peer-reviewed studies concluded that groundwater contamination from fracking is "not physically plausible."

The movie Gasland showed a case of entirely natural gas contamination of water and the director knew it, but he still pretended it might have been caused by fracking. Ernest Moniz, the US Energy Secretary, said earlier this month: "I still have not seen any evidence of fracking per se contaminating groundwater."

Tens of thousands of wells drilled, two million fracking operations completed and not a single proven case of groundwater contamination. Not one. It may happen one day, of course, but there's few industries that can claim a pollution record that good.

*Next comes the claim that shale gas production results in more methane release to the atmosphere and hence could be as bad for climate change as coal. (Methane is a more powerful greenhouse gas than carbon dioxide, but stays in the atmosphere for a shorter time and its concentration is not currently rising fast.)

This claim originated with a Cornell biology professor with an axe to grind. Study after study has refuted it. As a team from Massachusetts Institute of Technology put it: "It is incorrect to suggest that shale gas-related hydraulic fracturing has substantially altered the overall [greenhouse gas] intensity of natural gas production."

*Third comes the claim that fracking uses too much water. The London Guardian carried a report last week (8/11) implying that a town in Texas is running dry because of the water used for fracking. Yet in Texas 1% of water use is for fracking, in the United States as a whole 0.3% -- less than is used by golf courses.

If parts of Texas run out of water, blame farming, by far the biggest user.

*Fourth, the ever-so-neutral BBC in a background briefing recently described fracking as releasing "hundreds of chemicals" into the rock. Out by an order of magnitude, Auntie.

Fracking fluid is 99.51% water and sand. In the remaining 0.49% there are just 13 chemicals, all of which can be found in your kitchen, garage or bathroom:

Citric acid (lemon juice), hydrochloric acid (swimming pools), glutaraldehyde (disinfectant), guar (ice cream), dimethylformamide (plastics), isopropanol (deodorant), borate (hand soap); ammonium persulphate (hair dye); potassium chloride (intravenous drips), sodium carbonate (detergent), ethylene glycol (de-icer), ammonium bisulphite (cosmetics), petroleum distillate (cosmetics).

*As for earthquakes, Durham University's definitive survey of all induced earthquakes over many decades concluded that "almost all of the resultant seismic activity [from fracking] was on such a small scale that only geoscientists would be able to detect it" and that mining, geothermal activity or reservoir water storage causes more and bigger tremors.

The media has done a poor job of challenging the Frack Off rent-a-celeb mob with such factual rebuttals. So the debate is not between two sincerely held but opposite arguments; it is an unequal contest between truth and lies. No wonder honest folk like the residents of Balcombe are frightened.

Now it appears that the Diocese of Blackburn has circulated a leaflet about how fracking "has lured landowners to sign leases to drill on their land" and that it could cause lasting harm to "God's glorious Creation." Hang on, reverends. Did you say the same thing about wind power? Let's run a

quick comparison.

Luring landowners with money: wind farms pay up to £100,000 per turbine to landowners and most of that money comes from additions to ordinary people's electricity bills. What has the church to say about that?

Spoiling God's glorious creation: as Clive Hambler of Oxford University has documented, each year between 6 to 18 million birds and bats are killed in Spain alone by wind turbines, including rare griffon vultures, 400 of which were killed in one year, and even rarer Egyptian vultures.

In Tasmania wedge-tailed eagles are in danger of extinction because of wind turbines. Norwegian wind farms kill ten white-tailed eagles each year. German wind turbines kill 200,000 bats a year, many of which have migrated hundreds of miles.

The wind industry, which is *immune from prosecution* for wildlife crime, counters that far more birds are killed by cars and cats, and likes to point to a spurious calculation that if the climate gets very warm and habitats change then the oil industry could one day be said to have killed off many birds. But when was the last time your cat brought home an Imperial Eagle or a needle-tailed swift?

Says Dr Hambler: "Climate change won't drive those species to extinction; well-meaning environmentalists might." Here's a video of a vulture hitting a turbine blade in Crete.

Wind turbines are not only far more conspicuous than gas drilling rigs, but cover vastly more area. Just ten hectares (25 acres) of oil or gas drilling pads can produce more energy that the entire British wind industry. Which does the greatest harm to God's glorious creation, reverends?

Wind provided about 1% of our total energy last year. Last weekend I drove from Caithness to Northumberland. View after view was spoiled by the spinning monsters: alongside the Pentland Firth, above Dornoch, in the Monadliaths, in the Lammermuirs, in the Cheviots, on Simonside.

I was looking at maybe one-tenth of one percent of all our energy production and an even smaller impact on our carbon emissions. Trivial benefit; vast cost.

You see, in criticizing wind power on environmental grounds, you do not even need to lie. The truth is shocking enough.

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