

"Shale is important for our country, it could bring 74,000 jobs, over £3bn of investment, give us cheaper energy for the future, and increase our energy security."

(David Cameron, 13 January 2014)

74,000 jobs? The DECC report Shale Gas Rural Economy Impacts (March 2014) stated that only 15,900 to 24,300 full-time jobs – direct and indirect – would be created short term 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 and does not take into account the loss of jobs in tourism and other rural employment. Evidence from the USA shows that the claims made for employment potential are often massively over-hyped. The 6 state study by the Multi-State Shale Research Collaborative tells us 'Between 2005 and 2012, less than four new shale-related jobs have been created for each new well.' (<http://www.multistateshale.org/shale-employment-report>, Nov 2013).

£3bn investment? Investment in fracking companies industrialising the whole of our countryside? The Select Committee on Economic Affairs enquiry (2013) heard that for fracking to have any economic impact 2,000 to 3,000 wells would need to be drilled every year (Sir David Smith, former Chief Scientist TUC Conference 2013).

Cheaper energy? "...unless it is a gigantic amount of gas, it is not going to have material impact on price" (Lord Browne, former Chairman of Cuadrilla (unconventional gas company), 2013)

Energy Security? To be independent of gas imports Britain would need to drill 1,000 wells a year (Prof Aplin, Shale UK Conference 2014) and these are private companies - if they can earn more by selling gas abroad, then they will.

Shale gas planning applications in England will be fast-tracked under new government measures to crack down on councils that delay decisions.

Ministers have been granted the right to take decisions on controversial shale gas applications away from local authorities in a bid to fast-track fracking. Under the new measures, local authorities could forfeit the right to determine an application if they take over 16 weeks.

The Local Government Association's environment spokesman Councillor Peter Box said: "People living near fracking sites - who are most affected by them - have a right to be heard. Local planning procedure exists for a reason, to ensure a thorough and detailed consultation with those communities." (BBC News 13 August 2015)



HEALTH ENVIRONMENT

The Medact Report: 'Health & Fracking: the impacts and opportunity costs'

The Medact report (2015) concludes that fracking generates numerous public health risks, including:

- Potential health hazards associated with air pollution and water contamination: these include toxins that are linked to increased risks of cancer, birth defects and lung disease;
- Negative health impacts associated with noise, traffic, spoilage of the natural environment, and local social and economic disruption.
- The indirect effects of climate change produced by greenhouse gas emissions.

In addition, the report describes how the regulatory system for fracking is currently incomplete and inadequately robust. The report has been supported by a letter, which calls for shale gas development to be put on hold, published in the British Medical Journal, signed by Medact and the Climate and Health Council and senior health professionals.

Studies from North America

- Hospitalisations for cancer, heart conditions, neurological illness, and skin conditions were higher among people who live near unconventional gas and oil drilling. (Research from University of Pennsylvania and Columbia University, July 2015)
- Pregnant women living close to a high density of natural gas wells drilled with hydraulic fracturing were more likely to have babies with lower birth weights than women living farther from such wells" (analysis of southwestern Pennsylvania birth records by University of Pittsburgh, June 2015)
- more congenital heart defects in babies born to mothers living near gas wells. (Bloomberg, August 2014)

PROPERTY VALUE

"Fracking is likely to wipe up to seven per cent off house prices and deter tourists, according to an internal Government report that ministers battled to keep secret." (The Telegraph, July 2015)

A survey of 60 estate agents estimates the loss of value to be more than 8-11%. (Survey conducted by leading marketing research agency Redshift and commissioned by Greenpeace UK, May 2015)

Researchers examined property data from Pennsylvania one of the fracking hotspots in the US and found that property values could be negatively affected by up to 14 per cent (American Economic Review, 2015)

Shale gas extraction raises environmental concerns in relation to:

- carbon dioxide (CO2) and methane (CH4) emissions, particularly the potential for increased fugitive CH4 emissions during drilling compared with drilling for conventional gas
- the volumes of water and the chemicals used in fracking and their subsequent disposal
- the possible risk of contaminating groundwater
- competing land-use requirements in densely populated areas
- the physical effects of fracking in the form of increased seismic activity

(British Geological Survey 2016)

"There is an urgent need for more evidence about the impact of fracking on the hydrology, ecology and geology of landscapes. This is needed for informed decision-making about any future for fracking in the UK." (National Trust, 2015)

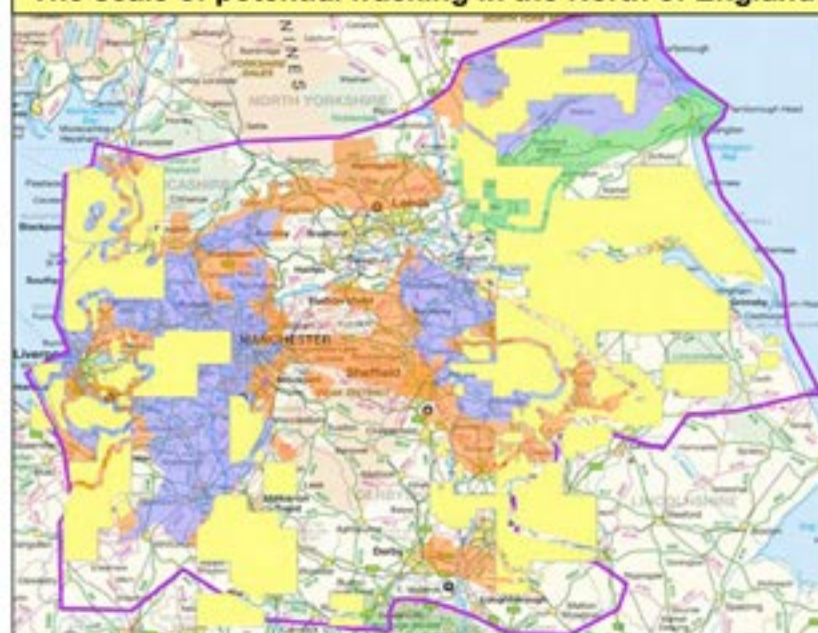
Methane is about 34 times as potent as a climate change-fueling greenhouse gas than carbon dioxide over a span of 100 years. Over 20 years, it's 86 times more potent. Of all the greenhouse gases emitted by humans worldwide, methane contributes more than 40 percent of all radiative forcing, a measure of trapped heat in the atmosphere and a measuring stick of a changing climate.



Industry studies clearly show that 5 to 7 per cent of all new oil and gas wells leak. As wells age, the percentage of leakers can increase to 30 or 60 per cent in as little as 16yrs. The worst leakers remain "deviated" or horizontal wells commonly used for hydraulic fracturing. (The Tyee.ca, 2013)

Methane, by its very lightness, wants to go up. Where ever drillers have not properly sealed and cemented wellbores in deep shale rock, or where the casing starts to erode, the gas will escape and move through rock fractures (existing or industry-made ones) into groundwater, stream beds, water wells and even the basements of houses

The scale of potential fracking in the North of England



If exploration is successful in licensed areas, gas companies will no doubt look for licensing in other areas of the Bowland Shale

- ◆ Areas Licensed for exploration in 2015
- ◆ Lower Bowland Shale - potential future licensing
- ◆ Upper Bowland Shale - potential future licensing
- ◆ Both Upper & Lower Bowland Shale - potential future licensing

Research it for yourself - Google Fracking