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James Verdon misleads on IPCC 'support' for shale gas

Posted on 10th December 2014 (http://www.davidsmythe.org/frackland/?p=57) by Professor David Smythe (http://www.davidsmythe.org/frackland/?author=1)

Dr James Verdon published a letter in *The Independent* on 13 May 2014 claiming that the IPCC supported unconventional natural gas production. This was followed a few days later by a response by Dr Robin Russell-Jones. Here I show why Dr Verdon is misleading us with his IPCC comment. Here are the two letters:

From James Verdon (13 May)

Several letters that were published in response to your recent shale-gas editorial (10 May) failed to take into account the most recent conclusions of the IPCC, generally recognised as the last word on climate-related issues. In the Summary for Policymakers of the latest assessment report (AR5), they state that in scenarios where CO2 is limited to 450ppm CO2eq by 2100, global natural gas consumption increases, before peaking, and only falls back below current levels after 2050, four decades from now.
When questioned on the role for shale gas during the press conference that accompanied the report's release, co-chair Ottmar Edenhofer stated: "We have in the energy supply also the shale gas revolution, and we say that this can be very consistent with low carbon development, with decarbonisation. That's quite clear."
The IPCC has made its position clear, supporting the use of natural gas as a "bridging" fuel up to and beyond 2050. Whatever their reasons for opposing shale-gas development, your correspondents should not use concerns over global climate change as justification, unless they wish to deny the contents of the latest IPCC report.
Dr James Verdon, NERC Research Fellow, University of Bristol

Wed 21 May 2014 (print): Sorry, shale gas isn't green
Dr James Verdon (letter, 13 May) misrepresents the position of the IPCC. Natural gas is less polluting than coal but this does not apply to shale gas because of the large amounts of methane released by fracking. Shale gas could only be part of a future energy mix if three important conditions are met. First that shale gas replaces coal and doesn't just displace it to other countries. Second that methane releases are 10 times lower than current practices. And third that gas-fired power stations are fitted with an effective method of carbon capture (as stated in the IPCC press conference). Since none of these conditions currently apply, shale gas is inconsistent with a low carbon future.
Dr Robin Russell-Jones, Stoke Poges, Buckinghamshire

Dr Robin Russell-Jones is a consultant dermatologist (http://robinrussell-jones.com/) who has published professionally on environmental and health problems. He therefore has sound reasons to be worried about the environmental impact of fracking for shale gas. He wrote (http://www.independent.co.uk/voices/comment/the-pursuit-of-shale-gas-is-another-example-of-the-coalitions-betrayal-of-the-environment-8726892.html) about the shale gas emission problem in *The Independent* on 23 July 2013.

Back to James Verdon's citation of the IPCC assessment report no. 5. Firstly, in the Summary for policymakers (http://www.ipcc.ch/report/ar5/syr/), cited by Dr Verdon, there is **no mention of shale gas**. Nor could I find any support for shale gas development in the main report. In the Working Group III report, Mitigation of Climate Change (http://www.ipcc.ch/report/ar5/wg3/), chapter 7, Energy Systems, only **concerns about emissions** are voiced:

At the same time, the increasing utilization of gas has raised the issue of fugitive emissions of methane from both conventional and shale gas production. While some studies estimate that around 5 % of the produced gas escapes in the supply chain, other analyses estimate emissions as low as 1 %. Central emission estimates of recent analyses are 2 % — 3 % (+ / – 1 %) of the gas produced, where the emissions from conventional and unconventional gas are comparable. Fugitive emissions depend to a significant degree on whether low-emission practices, such as the separation and capture of hydrocarbons during well completion and the detection and repair of leaks throughout gas extraction and transport, are mandated and how they are implemented in the field. Empirical research is required to reduce uncertainties and to better understand the variability of fugitive gas emissions as well as to provide a more-global perspective. Recent empirical research has not yet resolved these uncertainties. The main focus of the discussion has been drilling, well completion, and gas product, but gas grids and liquefaction are also important.

…

Leakage of chemicals used in hydraulic fracturing during shale gas and geothermal operations can potentially contaminate local water flows and reservoirs.

[NB citations omitted]

Chapter 1 states: *This potential for large new gas supplies — not only from shale gas but also coal-bed methane, deep gas, and other sources — could lower emissions where gas competes with coal if gas losses and additional energy requirements for the fracturing process can be kept relatively small.* This can hardly be quoted as endorsing shale gas development.

So the reason why Dr Verdon resorts to a quote from a press conference is evidently because **there is nothing to support his case in the body of the IPCC report**. I consider that sort of citation to be **poor science**. In contrast, Dr Russell-Jones has hit the nail on the head with his concise response.

In conclusion, I suggest that Dr Verdon concentrates on solid earth geophysics, and leaves discussion of the wider environmental problems of shale gas exploitation to experts such as Dr Russell-Jones.

Categories: Frackademics, Tags: errors, UK, Verdon