

# US probes impact of natural gas extraction

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Oil and gas companies, including Halliburton and Schlumberger, are facing scrutiny on Capitol Hill about the environmental impact of natural gas extraction because of growing concerns about chemicals used in the process.

Henry Waxman, the Democratic chairman of the House energy committee, sent eight companies information requests about the chemicals they use in fracturing fluids and their potential impact on the environment and human health.

“Hydraulic fracturing could help us unlock vast domestic natural gas reserves once thought unattainable,” said Mr Waxman. “As we use this technology in more parts of the country on a much larger scale, we must ensure that we are not creating new environmental and public health problems.”

Mr Waxman said initial information received by his committee from the largest hydraulic fracturing companies - Halliburton, BJ Services and Schlumberger - showed that all apart from Schlumberger had used diesel fuel in the fracturing fluids between 2005 and 2007. Mr Waxman said this “potentially” violated a voluntary agreement the companies had made with environmental regulators to cease using diesel.

The companies were told to produce documents detailing their practices by March 5.

The environmental concerns about extracting gas from shale rock came to the fore when ExxonMobil, the biggest western publicly listed oil company, agreed in December to pay \$31bn in stock for XTO Energy to gain a large position in the booming domestic natural gas scene.

The deal followed moves by other majors to obtain some of the experience and expertise developed by the US’s small, independent producers to increase estimates of reserves from 30 years’ worth to more than 100, at current usage rates.

The process involves drilling down, up to 20,000 feet, and then up to 4,500 feet across, accessing a much broader area than conventional oil and gas development, with ultimately less effort, environmental impact and expense.

Once a well has been drilled, water with fine grains of sand is pumped through at high pressure, fracturing the shale and leaving the sand to prop open the rock so the gas can escape. It is this so-called “fracking” process which is under scrutiny.

While fracking is not banned federally, individual states, lawmakers and local authorities are considering regulations.

Fracturing the rock requires large quantities of water laced with chemicals, which critics fear could leak into groundwater and aquifers. Shale developments have been blamed for contaminating wells and the death of livestock.

Yet gas is about 30 per cent less carbon intensive than oil and 50 per cent less than coal. This has led consultants and analysts to wonder what is the cause of the sudden fears about drilling for shale gas underground when it can reduce carbon emissions above ground.