

UK and US share a similar mindset when it comes to horizontal drilling for shale energy: study

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UK and US share a similar mindset when it comes to horizontal drilling for shale energy, say Cardiff University researchers and colleagues

While an entire ocean separates the UK from the US, when the issue of fracking arises, the great divide—philosophically speaking—narrows considerably.

Concerns about short-term and long-term impacts of horizontal drilling for shale energy are prevalent in both countries. According to a new study by Cardiff University researchers and colleagues, key issues include the risk of water contamination as well as preferences for [renewable energy sources](#) over fossil fuels to meet national energy needs.

"This—and other research we have conducted—shows that the public in both countries clearly want a move toward a cleaner, more sustainable energy system in the future," said corresponding author Nick Pidgeon, a professor of environmental psychology at Cardiff University. "The results confirm that shale development is not compatible with that vision."

Shale gas and oil production in the US has increased rapidly in the past decade, and the UK government is interested in potential development. Understanding public views is a crucial first step in creating more informed energy debates and promoting better decision-making.

The researchers held a series of carefully formatted, daylong deliberation workshops with diverse members of the public in four cities: London, Cardiff, Los Angeles and Santa Barbara. These in-depth discussions enabled the investigators to look beyond existing evidence on public views about [hydraulic fracturing](#) based primarily in already impacted areas.

"The results showed that shale development was widely seen as a short-term fix leading to an unwanted dependency on finite [fossil fuels](#) at the expense of renewables development," said co-author Merryn Thomas, a research associate at Cardiff University. "Participants in both countries noted that the majority of proposed benefits, such as specialized jobs of limited duration, would be relatively short-term, while the risks, such as environmental degradation, would almost certainly be longer."

The study found that those surveyed viewed potential impacts as inequitably distributed, arguing that the economic and employment benefits attributed to shale development were not unique and would apply equally to significant investment and scaling-up of renewable technologies.

Different concerns in the two countries reflected different models of governance of extractive industries. In the US, some participants wanted more standardized federal guidelines and long-term accountability. Conversely, in the UK, where regulation is predominantly at the national level, there were calls for more local control. Regardless of location, participants expressed deep-seated distrust of government and institutions.

In California, past and current experiences with the regional oil industry minimized concern for some about future shale development. However, for others, personal experiences of water shortages and earthquakes amplified this sense of risk. In the UK, where onshore oil and gas

extraction is less common, participants drew on tangential experiences of coal and heavy industries when making sense of what shale [development](#) might mean for them in the future.

"This study found surprisingly high levels of environmental and societal concern about hydraulic fracturing in areas with no direct experience with the technology," said co-author Barbara Harthorn, director of the CNS and a professor in the Department of Anthropology at UCSB. "This method provides strong evidence that diverse members of the public are able to weigh in thoughtfully and critically about local and collective [energy](#) system decisions and their impacts."

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Drawing on more than a decade of research developed by Cardiff University and University of California Santa Barbara Center for Nanotechnology in Society (UCSB-CNS) in the US, this is the first qualitative, interdisciplinary, cross-national study of UK and US public perceptions of shale extraction. The results appear in the journal *Nature Energy*.

More information: Deliberating the perceived risks, benefits and societal implications of shale gas and oil extraction by hydraulic fracturing in the US and UK, *Nature Energy* (2017).

[nature.com/articles/doi:10.1038/nenergy.2017.54](https://doi.org/10.1038/nenergy.2017.54)

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