Ecologist questions emissions from 'fracking'

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Natural gas procured through hydraulic fracturing, or "fracking," may not be a clean alternative to coal or oil when the carbon footprint of the processes used to obtain it is considered, a Cornell University ecologist says.

Though natural gas has been eyed as an environmentally friendly alternative to traditional fuels, since it produces only about half the emissions of coal when burned, that calculation fails to factor in the greenhouse gas emissions from its production. That would include the drilling, water-trucking, pipeline laying and tree cutting that are part of the process of obtaining natural gas via hydraulic fracturing, ecologist Robert Howarth asserted in a draft paper published last month.

Howarth, who has served on National Academy of Sciences panels looking into climate change and has been a Cornell professor for 25 years, estimates that the total greenhouse gases from the combustion, production, distribution and leaked methane from natural gas obtained via hydraulic fracturing give the fuel comparable emissions to coal. His preliminary numbers also suggest that natural gas emissions, when hydraulic fracturing is considered, are actually 30 percent higher than those given off by diesel or gasoline.

"A complete consideration of all emissions from using natural gas seems likely to make natural gas far less attractive than other fossil fuels in terms of the consequences for global warming," Howarth wrote.

Based on his data, Howarth says there should be a moratorium on further hydraulic fracturing until more can be learned about the emissions from the process. "Government and industry should not be moving ahead on the basis of what is already misleading and incomplete information," he said. The findings were of such concern that they warranted early publication, he said, though he acknowledges his work contains many qualifiers.

Dan Whitten, a spokesman for the industry group America's Natural Gas Alliance, dismissed Howarth's assertions as preliminary, speculative and not backed by hard data (Jon Hurdle, Reuters, March 31).