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Cornell Researchers' Updated Analysis Challenges Gas Industry Claims on Climate

Ithaca, NY – In an updated analysis presented at Cornell University, "Still a Bridge to Nowhere: Methane Emissions and the Greenhouse Gas Footprint of Natural Gas," Cornell University scientists Robert Howarth and Anthony Ingraffea present new findings refuting industry claims that natural gas is a bridge fuel to renewables.

Their latest work was presented on the fourth anniversary of their groundbreaking paper of 2011, "Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations," which first documented serious greenhouse effects from natural gas production.

Howarth and Ingraffea, citing the latest synthesis report from the Intergovernmental Panel on Climate Change as well as a number of new studies spurred on by their 2011 paper, present further evidence that a serious reduction of natural gas use for power generation, and for commercial and residential heating, is vital to climate stability. Their conclusions challenge the current policy of replacing coal fire power plants with gas rather than with renewable energy.

The *updated analysis* shows that the greenhouse gas consequences of reliance on natural gas are enormous, even larger than predicted in the 2011 paper. "If the natural gas is shale gas," Professor Howarth notes, "emissions for the typical in-home domestic hot water heater fueled by gas are four-fold, or 400%, higher than from a coal-electric powered modern heat pump in the home."

video presentation of *updated analysis:*
https://www.youtube.com/watch?v=sq2ro95DAzQ&feature=youtu.be&a

Howarth and Ingraffea emphasize the critical need to control both CO2 and methane emissions, but pointed out that the effect on climate of these two gases is quite different. CO2 emitted today will have a climate influence for thousands of years to come, but because of lags in the climate system, controlling CO2 emissions will not slow global warming over the coming few decades. On the

other hand, the climate responds quickly to changes in methane, and reducing methane emissions now will slow global warming immediately. To do so is essential, since otherwise the Earth will warm to dangerously high temperatures within 15 to 35 years, , increasing the risk of runaway global warming.

If Howarth and Ingraffea, as well the many researchers they cite, are correct, natural gas is no better than any other fossil fuels, and even worse in some circumstances. Their presentation concludes that combustion of all fossil fuels—oil, gas or coal—severely damages Earth's climate. To continue relying on fossil fuels, Professor Ingraffea notes, "is to engage in an experiment we shouldn't be doing." Discussions over differences among fossil fuels, if they are correct, are irrelevant, and a rapid transition from fossil fuels to renewables is imperative.

A video of their updated analysis – first presented on 12 April 2015 at Cornell University – is available here:

https://www.youtube.com/watch?v=sq2ro95DAzQ&feature=youtu.be&a

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