

**Testimony of Bernard L. Weinstein, Ph.D.**  
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**Before the House Committee on Science, Space, and Technology**  
**Subcommittee on Environment**  
**Hearing on EPA Methane Regulations on Oil and Gas Production**  
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Mr. Chairman and Members of the Committee, my name is Bernard Weinstein and I am the Associate Director of the Maguire Energy Institute at Southern Methodist University (SMU) and an adjunct professor of business economics at SMU's Cox School of Business. Thank you for this opportunity to speak to you today.

Contrary to his "all of the above" energy strategy announced several years ago, President Barack Obama has now jumped on the "keep it in the ground" bandwagon that is currently being voiced by most of his environmental constituency. Over the past year he has vetoed the Keystone Pipeline, put limits on coal development on federally-owned land, and yanked the Atlantic offshore leasing program—all in the name of combating climate change.

Then in June of this year, the Environmental Protection Agency (EPA) finalized a rule requiring drilling companies to install new monitors to detect methane emissions during the production and transmission of oil and natural gas. The EPA estimates the cost of complying with the rule at \$530 million annually by 2025. The agency is also expected to move forward with additional rules governing methane leaks from existing wells by the end of the year while at the same time initiating a data collection program on tens of thousands of oil and gas operation, an effort that could result in even more intrusive regulations in a few years.

The White House justifies these new regulations by arguing that methane traps 50 to 75 times as much heat as carbon dioxide (CO<sub>2</sub>) in the atmosphere over a 20-year period, thereby contributing significantly to human-induced global warming. But if the goal is to significantly reduce greenhouse gas emissions (GHGs), including methane, the oil and gas industry is the wrong whipping boy.

Here are some facts. Methane releases from the oil and gas industry represent only about 3.4 percent of all GHG emissions, which reached a 25 year low last year. This is an astounding accomplishment considering the American economy is 75 percent larger than it was in 1990 while domestic oil and gas production has nearly doubled over the past decade. What's more, total U.S. methane emissions have dropped 15 percent since 1990. Emissions from fracked oil and gas wells have fallen 79 percent while natural gas pipeline leaks have been reduced by 94 percent.

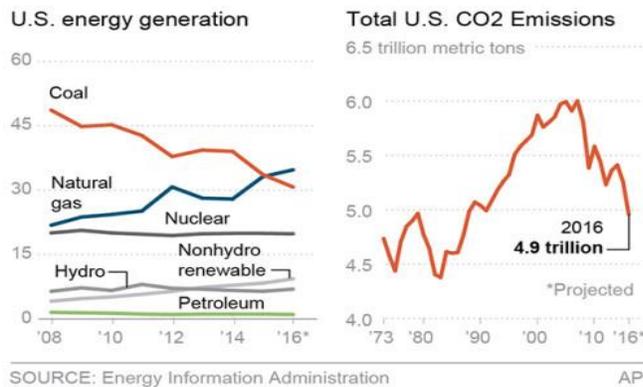
It's true that methane emissions globally are still increasing. But a recent study by the National Oceanic and Atmospheric Administration (NOAA) finds that "the U.S. energy industry contributes little to the overall burden of global fossil fuel emissions." Rather, according to NOAA, wetlands and agriculture are the main culprits.

Studies by National Economic Research Associates (NERA) and other energy researchers have challenged assertions by the EPA that reducing methane leaks 45 percent by 2025, which is the Obama administration's target, will benefit the climate to the same degree as shuttering one-third of the world's coal-fired power plants. NERA concludes that the alleged benefits of its methane rules are "highly uncertain and very likely overstated" while an analysis by Energy in Depth finds that the rule would reduce global warming by a mere 0.004 degrees Celsius. Put differently, we could shut-in all American oil and gas production and the impact on climate change would be virtually zero.

Ironically, the oil and gas industry—not the EPA—deserves most of the credit for lower GHG emissions, in particular the substitution of clean-burning natural gas for coal in electric power generation (see chart below). A decade ago, coal plants provided 50 percent of the nation's electricity compared with 18 percent for gas. This year, coal's share will drop to 30 percent while gas will increase to 33 percent of power generation.

## Coal and Carbon falling

US consumption of coal has declined over the past eight years. Carbon dioxide emissions have also dropped during the same period.



Acknowledging the environmental benefits of natural gas, the Intergovernmental Panel on Climate Change (IPCC) recently observed that an “increased and diversified gas supply is an important reason for a reduction of GHG emissions in the United States” while the International Energy Agency (IEA) contends that natural gas is a “valuable component of a gradually decarbonizing electricity and energy system.”

Regulation is never cost free, and the new methane rules are no exception. With oil and natural gas prices close to 10-year lows, producers and service companies laying off tens of thousands of workers, and bankruptcies rising, does it make sense to increase the cost of staying in business?

Costly new regulations on methane emissions from oil and gas production, processing and transmission are also unnecessary because the industry is adopting stricter controls on its own. For example, Southwestern Energy—the nation’s third largest natural gas producer—is leading an industry group called One Future that aims to reduce methane leakage to less than one percent of natural gas production. To this end, Southwestern has upgraded pumps and compressors, deployed new tanks to capture methane that is vented by hydraulic fracturing, and replaced leaky gas-powered control equipment with solar panels and fuel cells. Southwestern is also participating in projects with the Environmental Defense Fund and several tech companies to test continuous methane detection systems using lasers, sensors and even drones.

Southwestern Energy and other producers are not taking these steps because of environmental altruism but because they recognize that methane, the principal component of

natural gas, has economic value when it is captured and used to generate electricity, heat homes, and produce petrochemicals.

Energy policies and regulations should not be driven by environmental alarmists, which is clearly the case today, but rather by sound science and careful cost-benefit assessments. I hope that is one of the goals of today's hearing.

Thank you again for the opportunity to express my views before this committee.