

ISSUE BRIEF

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Methane Regulations Add to the Price Tag of the Administration's Climate Plan

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The Obama Administration recently announced plans to regulate methane emissions from the energy industry. The goal of the proposal is to cut methane emissions from the oil and gas sector 40 percent to 45 percent from 2012 levels by 2025.

The federal government's proposed methane regulation is yet another costly climate proposal that will drive up energy costs and drain resources already invested in reducing methane emissions, all the while yielding negligible, if any, climate benefits. Congress should use every legislative and budgetary tool in its arsenal to roll back the Administration's attack on affordable energy.

Are Methane Emissions Even a Problem?

Methane emissions in the United States present no human health or environmental threat. Indeed, the Occupational Safety and Health Administration (OSHA) does not list any exposure threshold for methane, nor does the agency list any long-term health effects.¹ As such, there is no health or environmental incentive behind the Administration's proposal to cut methane emissions from the oil and gas industry.

The purpose of the Administration's plan to reduce methane is the emissions' alleged impact on the climate. While methane is the second larg-

est contributor to greenhouse gas emissions in the United States, methane still constitutes less than 9 percent of the U.S.'s total manmade greenhouse gas emissions. Methane is approximately 20 times more powerful of a greenhouse gas than carbon dioxide (over a 100-year period).² However, methane changes into carbon dioxide and water vapor in the atmosphere over time, so the warming impact depends on the time horizon.³

Globally, 60 percent of methane emissions are manmade, while 40 percent occur naturally.⁴ In the United States, the single largest source of manmade emissions comes from enteric fermentation, or the digestive processes of livestock.⁵ The next most predominant source is natural gas systems followed by landfills, coal mining, manure management, and petroleum systems. Wetlands cause nearly 80 percent of all naturally occurring methane output, followed by termites and leakage from the ocean surface.⁶

Free Markets Driving Methane Reduction

The Obama Administration's proposed methane regulations represent unnecessary government intervention to address a non-problem. Despite dramatic increases in natural gas production, methane emissions have been falling. According to the Environmental Protection Agency (EPA), emissions from natural gas systems have dropped 17 percent since 1990, and field production emissions have dropped 40 percent since 2006.⁷ A 2014 University of Texas field study found that methane emissions from natural gas production and development comprise a meager 0.38 percent of total emissions, which is a 10 percent decrease from the previous year.⁸

This paper, in its entirety, can be found at <http://report.heritage.org/ib4341>

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The reason for declining methane emissions is simple. Energy producers have an incentive to capture and sell methane, the main component in natural gas, because it has valuable economic use for the production of electricity and heat. In fact, the EPA cites “voluntary reductions” as the primary reason emissions have fallen. According to Department of Energy Secretary Ernest Moniz, “More than half...of the current frack jobs are so-called ‘green completions,’ where the methane is captured and is [used] for economic benefit.”⁹ Investments in new drilling, extraction, and production technologies have increased productivity, lowered costs, and captured methane to sell. Institute for Energy Research President Thomas Pyle argued that implementing new methane regulations is like “issuing regulations forcing ice cream makers to spill less ice cream.”¹⁰ Clearly, the industry has every incentive to continue reductions without government intervention.

Despite the Administration’s effort to build off the private sector’s voluntary actions, federal regulations institute burdensome, complex processes that will likely slow the industry’s current efforts to reduce emissions. Furthermore, regulations will result in additional compliance costs and force the industry to implement control technologies that are not profitable. Producers will then pass higher costs from those regulations onto families and businesses.

One Cog in a Costly Climate Plan

The proposed methane regulation is only one part of the Administration’s climate plan, which taken as a whole, will drive up prices in the United States yet achieve no meaningful impact on global temperatures. The first step taken by the federal government is regulating greenhouse gas emissions from light and heavy duty vehicles. The bulk of the Administration’s climate plan limits emissions from new and existing power plants.

According to a Heritage Foundation study, these regulations will have damaging economic effects. Heritage Foundation economists modeled the effects of implementing a carbon tax equivalent to the Administration’s social cost of carbon (SCC), which the EPA defines as the economic damage a ton of CO₂ emitted today will cause over the next 300 years.

To neutralize the analytical impacts of a tax’s income transfer, The Heritage Foundation modeled a scenario in which 100 percent of carbon-tax revenue is returned to taxpayers. While the macroeconomic impacts of a regulatory scheme or a carbon tax should be broadly comparable, economists generally agree that, in practice, a carbon tax induces desired responses more efficiently than regulations.¹¹ Heritage analysis found that the U.S. economy would experience the following by 2030:

- An average employment shortfall of nearly 300,000 jobs;

1. Department of Energy Atmospheric Radiation Measurement (ARM) Program, “Ask a Scientist,” http://www.arm.gov/education/studyhall/ask/past_question.php?id=420 (accessed January 23, 2015).
2. U.S. Environmental Protection Agency, “EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2012,” April 15, 2014, <http://epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2014-Main-Text.pdf> (accessed January 30, 2014).
3. Gavin Schmidt, “Methane: A Scientific Journey from Obscurity to Climate Super-Stardom,” National Aeronautics and Space Administration, September 2004, http://www.giss.nasa.gov/research/features/200409_methane/ (accessed January 30, 2015).
4. U.S. Environmental Protection Agency, Office of Atmospheric Programs, “Methane and Nitrous Oxide Emissions from Natural Sources,” April 2010, <http://www.epa.gov/outreach/pdfs/Methane-and-Nitrous-Oxide-Emissions-From-Natural-Sources.pdf> (accessed January 30, 2015).
5. U.S. Environmental Protection Agency, “EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks.”
6. P. Bousquet et al., “Contribution of Anthropogenic and Natural Sources to Atmospheric Methane Variability,” *Nature*, September 28, 2006, pp. 439-443.
7. U.S. Environmental Protection Agency, “EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks.”
8. University of Texas at Austin, “Measurements of Methane Emissions at Natural Gas Production Sites in the United States,” <http://dept.ceer.utexas.edu/methane/study/docs/Study%20Summary%20Final%20with%20animations.pdf> (accessed January 30, 2015).
9. U.S. Environmental Protection Agency, “EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks,” and “Rep. Latta and DOE Sec. Moniz Talk Fracking,” YouTube, January 1, 2014, <https://www.youtube.com/watch?v=ZAysHvQzyWk> (accessed January 30, 2015).
10. Thomas Pyle, “Obama Continues His Relentless Attack on Affordable, Reliable Energy,” Institute for Energy Research, January 14, 2015, <http://instituteeforenergyresearch.org/press/obama-continues-relentless-attack-affordable-reliable-energy/> (accessed January 30, 2015).
11. For example, see Centre for Climate and Energy Solutions, “Options and Considerations for a Federal Carbon Tax,” February 28, 2013, <http://www.c2es.org/docUploads/options-considerations-federal-carbon-tax.pdf> (accessed January 30, 2015).

- A peak employment shortfall of more than 1 million jobs;
- 500,000 jobs lost in manufacturing;
- An aggregate gross domestic product loss of more than \$2.5 trillion (inflation-adjusted); and
- A total income loss of more than \$7,000 per person (inflation-adjusted).¹²

To make matters worse, the climate impact of the government's climate plan will be almost too small to measure.¹³

Opportunity for Congress to Lead

In the most recent State of the Union address, President Barack Obama affirmed he would not let "Congress endanger the health of our children by turning back the clock on our efforts" on cli-

mate change.¹⁴ Enacting climate regulations, however, will have no impact on the health of our children and our environment. In fact, the proposed climate regulations are endangering future generations by promising a world with less prosperity and opportunity.

Congress should do everything in its power to stop these regulations, including prohibiting any federal government agency from regulating methane, carbon dioxide, and other greenhouse gas emissions; using the Congressional Review Act when applicable to stop any final regulations; and using its budgetary authority to strip funding for the promulgation and enforcement of climate regulations.

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12. Kevin D. Dayaratna et al., "The Obama Administration's Climate Agenda: Underestimated Costs and Exaggerated Benefits," Heritage Foundation *Backgrounder* No. 2975, November 13, 2014, http://www.heritage.org/research/reports/2014/11/the-obama-administrations-climate-agenda-underestimated-costs-and-exaggerated-benefits#_ftn16.

13. Patrick Michaels and Paul C. "Chip" Knappenberger, "Fuel Efficiency Standards for New Trucks—Can't We Decide These for Ourselves?" Cato Institute, February 19, 2014, <http://www.cato.org/blog/fuel-efficiency-standards-new-trucks-cant-we-decide-these-ourselves> (accessed January 23, 2015).

14. News release, "Remarks of President Barack Obama—As Prepared for Delivery State of the Union Address," The White House, January 20, 2015, <http://www.whitehouse.gov/the-press-office/2015/01/20/president-obamas-state-union-address-prepared-delivery> (accessed January 30, 2015).