

# Stunning new research finds fracking a major source of carbon pollution in Pennsylvania

Methane leaks in the state's oil and gas industry equal 11 coal-fired power plants.



Flaring takes place after a gas well has been drilled and before it is put into operation.  
CREDIT: Carolyn Cole/L.A. Times via Getty Images

The evidence is now overwhelming that **natural gas is not part of the climate solution**, it is part of the problem.

A **new study** finds that the methane escaping from Pennsylvania's oil and gas industry

*"causes the same near-term climate pollution as 11 coal-fired power plants."*

And that is

"five times higher than what oil and gas companies report" to the state, according to analysis from the Environmental Defense Fund (EDF) based on **16 peer-reviewed studies**.

Natural gas is **mostly methane**, a super-potent greenhouse gas, which traps **86 times** as much heat as CO<sub>2</sub> over a 20-year period. So even a **small leakage rate** from the natural gas supply chain (production to delivery to combustion) can have a large climate impact — enough to gut the entire benefit of switching from coal-fired power to gas for a long, long time.

Yet even though **many earlier studies** have found that natural gas production spews out huge amounts of carbon pollution all across the country, **just last week**, the Trump administration moved to undo an Obama-era rule aimed at limiting the methane leakage from gas and oil production on public lands.

As EDF's president Fred Krupp **told** the New York Times,

*"Gutting the rule would allow unchecked waste of natural gas, unnecessary pollution and the loss of revenue to communities and tribes to address critical needs such as schools and roads,"*

Methane leakage is widespread. In November, a **study** found the methane emissions escaping from New Mexico's oil and gas industry are

*"equivalent to the climate impact of approximately 12 coal-fired power plants."*

And last month a new NASA **study** that found most of the huge rise in global methane emissions in the past decade is from the fossil fuel industry — and that this rise is "substantially larger" than

previously thought. Methane emissions are responsible for about a quarter of the human-caused global warming the world is experiencing today.

Meanwhile, many other studies find that natural gas plants don't replace only high-carbon coal plants. They often replace very low carbon power sources like solar, wind, nuclear, and even energy efficiency. That means even a **very low methane leakage rate** wipes out the climate benefit of fracking.

But researchers confirmed **in 2014** that — even if methane leakage were zero percent —

*“increased natural gas use for electricity will not substantially reduce US GHG [greenhouse gas] emissions, and by delaying deployment of renewable energy technologies, may actually exacerbate the climate change problem in the long term.”*

Indeed, a **2016** study found that natural gas and renewables are competing directly with each other to replace coal plants in this country.

All of this evidence shows natural gas is not a climate solution, despite the Trump administration and gas industry arguing that it is a lower carbon source of energy that can help bridge the gap while transitioning from fossil fuels to renewable energy.

**Reports**, however, make clear that renewables are already able to handle the job of running a modern economy — so there's no more need to argue for the use of polluting natural gas as a “bridge” to a carbon-free future.

### **Further readings :**

- **Methane Leaks Erase Climate Benefit Of Fracked Gas, Countless Studies Find**
- **Up To A Million Abandoned Wells In Pennsylvania Spew Heat-Trapping Methane**