



Methane Emissions

Why they matter and how to limit them

What is methane's role in climate change?

In the near term, methane is a more potent greenhouse gas than carbon dioxide (CO₂), trapping more heat than CO₂ pound for pound, and is responsible for around a quarter of today's warming.

Methane impacts the climate in fundamentally different ways than CO₂, because the two greenhouse gases have vastly different atmospheric lifetimes. CO₂ can last for centuries in the atmosphere, building up over time and committing our planet to warming for generations to come. On the other hand, methane packs its biggest punch in the first two decades. So we can think of it as CO₂ controlling how hot the planet ultimately gets, and methane controlling how fast it heats up.

Methane reductions can have a near-immediate impact on cooling the planet because it is so rapidly removed from the atmosphere. This can limit warming during our lifetimes, and is an important and necessary complement to simultaneous reductions in CO₂.

Where does methane come from?

Oil and gas operations are among the largest sources of methane and there are proven technologies to cost-effectively reduce methane pollution from this sector. The latest science indicates that the U.S. oil and gas industry emits at least 13 million metric tons of methane per year. And since methane is the main component of natural gas, that's the waste of a valuable product worth an estimated \$2 billion and one that could heat 10 million homes for a year.

What can we do about it?

The oil and gas industry could cut methane emissions by 40% at an average annual cost of less than one cent per thousand cubic feet of produced natural gas by adopting available emissions-control technologies and operating practices.

By volume, the largest opportunities target leak detection and repair of fugitive emissions ("leaks") at production facilities and gas compressors, reduced venting of associated gas, and replacement of high-emitting pneumatic devices.

States such as Utah, Wyoming, Colorado, Pennsylvania, Ohio and California have stepped up to limit these sources of pollution and better protect the health of impacted communities.

Unfortunately the Trump Administration is fighting at every turn to weaken and water down recently enacted methane protections from both the Environmental Protection Agency and Bureau of Land Management.

Federal methane protections must be reinforced, not weakened.