

# METHANE

**A Global Challenge — A Global Opportunity**

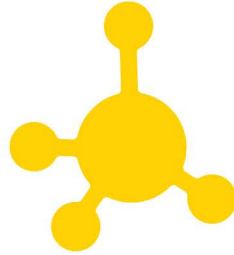
# **Record-breaking warming happens year after year, heightening public awareness and calls for action.**

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**And Europe, with its long history of climate leadership, has a major role to play in driving the next wave of efforts—a new frontier that must include oil and gas methane reductions.**

**Science tells us—and smart strategy demands—that to effectively deal with climate change we must pursue both methane and carbon dioxide reductions.**

**Fortunately, reducing methane emissions from the oil and gas sector is our simplest, most affordable option to slow the rate of warming now.**



About **25%**  
of warming today  
is caused by  
**methane.**

## The Role of the Oil and Gas Industry

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**Natural gas is mostly methane, and globally, the oil and gas sector is a major source of methane emissions.**

Emissions of this pollutant are projected to rise—particularly in parts of the world where natural gas use is expanding. Europe is the largest global gas importer today, and the International Energy Agency estimates the continent’s gas use will increase over the next decade.

Natural gas is widely marketed as a low-carbon fuel, emitting roughly half the CO<sub>2</sub> of coal when burned. But that ignores the problem posed by methane. Whether gas can truly be seen as a greener substitute for coal and oil depends on *if* methane emissions are measured, monitored and reduced.

IEA has called reducing oil and gas methane one of five proven strategies to curb climate pollution from the energy sector. Indeed, avoiding these emissions is often as simple as finding and fixing leaks. Solutions available to cut these emissions can also recover about half a billion dollars of gas a year.



*Environmental Defense Fund scientist Dr. Ramón Alvarez (right), an authority on methane emissions, tours an Arkansas shale gas drilling site with Mark Boling, a senior executive with Southwestern Energy, while discussing methane mitigation opportunities.*



# Growing this momentum and ambition is critical.

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## An Attainable Goal for Reducing Emissions

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Companies, countries and continents are beginning to act.

- Eight major oil and gas companies began surveying parts of their operations for emissions and disclosing that information—a first step toward reductions.
- All five Nordic states committed to developing a global methane goal.
- Europe has made early progress in decreasing its methane emissions, but E.U. data shows there are significant opportunities for European nations to push further.
- The three North American nations—the United States, Canada and Mexico—each have agreed to curb oil and gas methane emissions up to 45 percent by 2025.



**Cutting global oil and gas methane emissions 45 percent by 2025** would have the same climate benefit over 20 years as closing one-third of the world's coal plants.



**Total E.U. oil and gas methane emissions rank higher than those reported for Iran or Saudi Arabia.**

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## Europe Can Lead the Way

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Europe could be instrumental in developing a global oil and gas methane goal, building on earlier commitments and cultivating support around the world, similar to how it led global action to limit aviation and refrigerant industry emissions.

Europe is also a central part of this industry. It is home to four of the world's top 15 gas-producing corporations. The continent produces eight percent of the world's natural gas.

Despite this footprint, so far only a few European companies have an action plan to curb their global methane emissions, and none have specific reduction targets. All of them should have both.

There is also an opportunity for European nations to revise and implement oil and gas methane standards to help them fulfill their national greenhouse gas reduction goals agreed to in Paris.

## ENVIRONMENTAL DEFENSE FUND: A HISTORY OF PARTNERSHIPS

At Environmental Defense Fund, we believe that the world's biggest companies can be instrumental in addressing the world's biggest environmental problems. Over the last 25 years, we've partnered with some of the world's leading brands to make meaningful change.



### McDonald's

Environmental Defense Fund initiated a first of its kind partnership with McDonald's in 1990 to find ways to reduce its packaging and waste. As a result of our partnership, McDonald's eliminated more than 300 million pounds of packaging, recycled 1 million tons of corrugated boxes and reduced restaurant waste by 30 percent in a decade.



### Starbucks

When Environmental Defense Fund began working with Starbucks to reduce waste, the company still served its hot coffee in double cups. As a result of our partnership, the company designed a corrugated cup sleeve from 60 percent post-consumer recycled fiber that was 45 percent lighter than a second cup.



### Google Earth

Environmental Defense Fund and Google Earth Outreach are working together to explore and unlock the potential of new sensing and analytical technologies to measure key environmental data. The initial project uses sensors attached to Google Street View cars to create detailed maps of natural gas leaks under city streets.



Environmental Defense Fund spearheaded a groundbreaking series of scientific studies to assess oil and gas methane emissions in the United States, and through its work with global energy companies and entrepreneurs, is helping to catalyze the next-generation of methane sensing technology.

For more information about our global methane work, contact Mark Brownstein in our New York office at [mbrownstein@edf.org](mailto:mbrownstein@edf.org) or 212-505-2100.

Or visit [edf.org/globalmethane](http://edf.org/globalmethane)



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