
How to fix flaring for a quick emissions win



A thought piece by  **capterio**

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Introduction

A new year has arrived, and with the new presidential administration, climate change is again on the agenda in the United States, the world's largest gas producer. The oil and gas industry has a quick win within reach to cut emissions—by putting out the fire of natural gas flaring.

Oil and gas producers too often resort to burning off, or flaring, their unwanted gas. This practice not only wastes valuable natural gas, it also warms the planet by releasing CO₂, methane, black carbon, and other greenhouse gases (GHGs). The resulting CO₂ emissions alone are equivalent to more than 6 million passenger vehicles.

Poorly maintained flares, in particular, cause a significant increase in emissions and are proving to be [more of a concern](#) than previously assumed. Inefficient or unlit flares release excess amounts of methane, a powerful pollutant with a warming potential that is 86 times greater than carbon dioxide. However, there are several actions that industry actors and policymakers all around the globe can take to accelerate changes in flaring practices.

State of US Gas Flaring

US natural gas production has surged from 20 trillion cubic feet (tcf) in 2009 to over 33 tcf in 2019. In 2011 the United States became the top global producer of natural gas, a position it has held ever since. Unfortunately, gas flaring is increasing as well. Although estimates vary widely for the total amount of methane flared in the United States, the [US Energy Information Administration](#) reported 538 billion cubic feet (bcf) of gas went up in smoke in 2019, which exceeded the total gas [consumption](#) of the state of Colorado in that same year.

The reported volume of flared gas more than doubled from 2017 to 2019, and [satellite-based estimates](#) suggest even larger numbers. The drastic increase is occurring for several reasons, including lack of pipeline capacity to take away gas in oil-dominant fields and the perception that flared gas is not economical to capture, particularly in low gas price environments.

The US gas industry has the power to eradicate this wasteful, polluting practice. Unlike other regions, such as Europe, the United States imports very little gas and is building out liquefied natural gas (LNG) facilities to grow its gas export capacity. As such, US companies and policymakers have direct control and can dramatically reduce emissions associated with both domestic and international consumption.

Motions are mounting to eliminate flaring and cut methane. The French energy giant [Engie stopped a deal for US LNG](#) (stating that the gas was “too dirty”) based in part on US inaction on flaring. Alaska and Colorado have [banned routine flaring](#). Investors with trillions in assets under management are calling for an end to routine flaring. And buyers, such as utilities, are interested in buying [differentiated gas](#) that is lower in methane emissions.

The Seven Steps for Flaring Abatement

Industry actors, regulators, and policymakers around the world can implement these steps to rapidly decrease flaring in the coming months:

1. Prohibit routine flaring: Policymakers should follow the leadership of [Alaska and Colorado](#) to prohibit routine venting and flaring by 2025 at the latest. This action will need to be coupled with a clear definition of routine versus nonroutine flaring. Going further, the United States should join the World Bank’s Global Gas Flaring Reduction initiative and push toward zero routine flaring worldwide at forums such as the 2021 UN Climate Change Conference (COP26).
2. Increase emissions transparency: Through voluntary reporting, policy action, and/or third-party measurements, the industry needs to improve the data quality on flare emissions to build trust:
 - a. Disclose metered volumes of flared, vented, and leaked gas separately, rather than a summed estimate of vented and flared emissions as is currently reported to the EPA. Data should also include combustion efficiency and gas composition measurements/assumptions at an asset level.
 - b. Quantify “methane slip” associated with flaring by measuring and reporting it using the CCAC or Colorado School of Mines programs, for example.
 - c. Develop and use tools to benchmark industry performance and identify top actors. Aggregate already available data to increase confidence for financiers and gas buyers.
3. Buy and lend on principles
 - a. Companies that buy gas should demand transparency and public reporting on the quality of this gas, including full life-cycle emissions analysis. Those analyses should be supported by clear reporting standards, such as OGMP 2.0, and independent verification or certifications, such as the methane certification being developed by [MiQ](#).

- b. Financiers and government agencies should establish climate-aligned lending terms that incentivize flare capture projects and prohibit routine flaring.
4. Enable takeaway options: Regulators should encourage improved cooperation between producers and pipeline companies to ensure that market access is achievable.
5. Implement carbon pricing: Norway's carbon pricing rules, in combination with strict flare permitting and volume limits, have led to the [lowest flare intensity](#) of any country's oil production. Any jurisdiction considering this method should ensure that companies do not attempt to avoid taxes by shifting to gas venting.
6. Create comprehensive strategy: Federal, state, and industry actors should cooperate to follow the [EU](#) and develop a methane strategy that includes a flare elimination plan.
7. Promote best practices and collaboration: Industry, states, and the federal government can use improved emissions transparency and flare capture project experience to build capacity, deploy technology, and evaluate future actions.

While the United States will benefit from following these actions, other countries and regions should consider how they apply to their own unique circumstances. [A comprehensive list for the EU is here.](#)

These seven actions may seem small, but cumulatively they could begin to reshape the oil and gas sector. Together, US industry, policymakers, and regulators are well positioned to take a leading role in developing the rules, procedures, and innovations needed to cut gas flaring emissions. And while the road to getting rid of methane emissions doesn't end here, these immediate steps are within reach.

Here's to 2021—and to putting out flaring fires.