

**Investor Call for Ambitious Federal Methane Regulation for the Oil and Gas Industry**  
**Background document**  
Sign on to the statement [here](#).

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**Context: The Biden Administration will Reintroduce and Reinforce Methane Regulations for the Oil and Gas Industry**

- Following an [executive order](#) from the Biden Administration, the Environmental Protection Agency (EPA) is taking the following actions regarding methane regulations:
  - Review the Trump Administration's rollback of federal methane regulations for the oil and gas sector ([85 Fed. Reg. 57398](#)), and publish a proposed rule suspending, revising, or rescinding the regulation.
  - Propose new regulations to establish comprehensive standards of performance and emission guidelines for methane and volatile organic compound (VOC) emissions from existing operations in the oil and gas sector, including the exploration and production, transmission, processing, and storage segments.
- Under the Trump Administration, the EPA [weakened clean air standards](#) by:
  - Eliminating all methane standards for new sources across the oil and gas supply chain.
  - Exempting facilities in the transmission and storage segment from any federal standards.
  - Preventing any future regulation of pollution from existing oil and gas sources.

- Rolling back cost-effective rules that require companies to regularly find and repair leaks.
- The cumulative impacts of Trump's methane rollbacks would lead to [5 million metric tons](#) of methane released annually.
- While the administration has made clear that it will move to regulate methane, what isn't yet certain is how strong those proposed regulations will be. Much of the debate about how ambitious the rules should be will take place on economic grounds, meaning that it will be particularly critical for investors to weigh in, and to do so early in the process, before the rule drafting process gets fully underway.

### **Process and Timeline**

- The EPA's proposed rulings are expected to be announced in September 2021, followed by a 60-day public comment period. Final rules are expected before fall 2022.
- We plan to submit the letter on May 3rd, as the Biden Administration is expected to be evaluating their plans for the proposed rules around this time. By registering our support for strong regulations early in the process, we increase the likelihood that the draft regulations released in September will be as ambitious as possible.
- **If you are interested in signing on, please use [this link](#). The signing deadline is April 28th.**

### **Climate Change poses a Risk to the Economy and the Financial System**

- The U.S. Commodity Futures Trading Commission ([CTFC](#)) is just the latest regulatory body to conclude that climate change poses significant risks to the stability of the U.S. financial system.
- These risks include disorderly price adjustments in various asset classes, potential disruption of the proper functioning of financial markets, and the need for a large-scale transition to a net-zero emissions economy, requiring market participants to adjust to rapid changes in policy, technology, and consumer preferences.

### **The Oil and Gas Industry is one of the Largest Sources of Methane**

- Methane is a greenhouse gas from natural and manmade sources that is [84 times](#) more potent than carbon dioxide over 20 years. It is estimated to be contributing [25%](#) of the warming seen today.
- The oil and gas sector is one of the [largest](#) (and [underestimated](#)) anthropogenic contributors to methane emissions, contributing to 30% of U.S. methane emissions.
  - Methane is emitted during the extraction of oil and is the main component of natural gas. Emissions occur at the well head through venting or flaring and may leak during the transmission of natural gas from production to end use (i.e. fugitive emissions from equipment failure or human error; [EPA](#)).

### **Despite Voluntary Industry Action, Strong Regulations are Needed**

- According to the International Energy Agency ([IEA](#)), governmental policies and regulations play a vital role to ensure that oil and gas companies have the right tools and incentives to implement methane mitigation efforts, alongside voluntary action.
- Voluntary measures alone have not been sufficient to achieve meaningful reductions.

- Leading oil and gas industry targets are striving for methane intensity of 0.2% or less, but the average methane intensity of U.S. production remains much higher at [2.3%](#). This figure is even worse in the Permian Basin at [3.5-3.7%](#).
- A Dallas Federal Reserve survey found [only 36%](#) of Texas firms surveyed had plans to reduce methane.

### **Methane Policy Offers a First Step towards Industry Decarbonization**

- Net zero commitments are becoming the norm for the oil and gas industry leaders, financial stakeholders and policy makers.
  - This is demonstrated by [bp's](#) commitment to achieve net zero across its operations by 2050 or sooner, the EU's [economy-wide targets](#) to reduce emissions 55% below 1990 levels by 2030 and achieve net zero by 2050, and most recently, action by all [six major U.S. banks](#) (among many others) to commit to net zero financed emissions by 2050.
- Robust methane policy can help mitigate short-term risk across the U.S. oil and gas industry on the path towards net zero.
  - Regulations offer a baseline of performance for the thousands of individual U.S. producers and merging [satellite technology](#) will soon bring new levels of emissions transparency globally.
- If unaddressed, methane emissions could have negative economic consequences, such as limiting American companies' access to global gas export markets.
  - In October, the European Commission released its [Methane Strategy](#) as part of the European Green Deal, which included an energy sector strategy. Within this strategy, legislation is being considered to impose standards on methane emissions along the oil and gas supply chain, including imports, which could manifest as incentives or fees on gas imports that would increase costs for producers with high methane intensity or even cut-off access to the EU market entirely. Any EU import standard could have meaningful implications for exporters around the world – including the U.S – given that the EU is the world's largest importer of LNG.
  - As an example, the French utility Engie recently [canceled talks](#) with Texas LNG exporter NextDecade for a potential long-term gas supply deal due to concerns over methane and flaring practices in the Permian basin. The news came soon after the announcement of the EU's Methane Strategy.

### **Cost-effective Technologies are Available to Significantly Reduce Methane Emissions**

- The [IEA](#) estimates that oil and gas companies can cut around 40% of global methane emissions at **no net cost** (at 2019 natural gas prices).
  - Barclays' Equity Research (2021) found that based on the IEA's 2020 abatement cost curve, the average cost to reduce U.S. upstream (conventional, unconventional, offshore oil and gas) methane emissions is only ~\$20/mtCO<sub>2</sub>e excluding the benefit of selling the methane. Further, the cost required to achieve a 90% reduction in methane emission intensity over 3 years was estimated to be <1.5% of capex for the 13 North American exploration and production companies analyzed.

- McKinsey has estimated that reducing fugitive emissions and flaring from upstream operations could contribute 1.5 GtCO<sub>2</sub>e in annual abatement by 2050, at a cost of less than \$15/tCO<sub>2</sub>e.
- The potential economic value is even more notable when looking at flaring reductions. A [recent report](#) by the EDF and Rystad focused on Permian operators found that about 84% of routine flaring volumes and 40% of total flared volumes in the basin could be mitigated without cost. Further, Permian operators would realize an additional \$400 million of wellhead value by 2025 if they were required to capture 98% of the gas they produce.
- Example: Colorado's implementation of state regulations on methane pollution demonstrates the potential for economic growth for the industry while simultaneously reducing emissions. In 2014, it became the first state in the nation to regulate the oil and gas industry's methane pollution and strengthened standards in both 2017 and 2019. Those rules led to a [significant drop](#) in the number of methane leaks at well sites across the state, while Colorado concurrently experienced uninterrupted [economic growth](#) since the passage of the rule (pre-COVID). Both [natural gas](#) and [oil](#) production levels were increasing after the adoption of these rulemakings through the end of 2019.

### **Broad Coverage of Emission Sources with Frequent Monitoring is Critical**

- All potentially significant sources of methane from the oil and gas industry must be addressed in regulations.
  - Sources of methane emissions are diffuse, occurring across sites and operators.
  - Large, episodic sources dominate emissions of methane, including from malfunctioning flares, large super-emitter events and small, marginal and inactive wells. For example, in 2018, the [3.2 million](#) inactive wells in the U.S. leaked more than 280,000 metric tons of methane, or the climate-damage equivalent of consuming about 16 million barrels of crude oil.
- By addressing significant sources of new and existing methane emissions, meaningful reductions are **achievable now**.
  - Around 75% of methane emissions from global oil and gas operations could be avoided using existing technologies ([IEA](#)).
  - In the U.S., the oil and gas sector can reduce methane emissions at least 65% ([Clean Air Task Force](#)) below 2012 levels as soon as 2025 using currently available technologies to target new and existing sources of methane.
  - Existing solutions that can achieve such emissions reductions include new leak detection technology for frequent leak detection and repair (LDAR), low- or zero-bleed instruments to replace high-bleed gas-driven pneumatic equipment, compressors to reduce emissions from equipment blowdowns, and more.
  - Among other new technologies, [satellite detection](#) can help locate and reduce methane leaks.

### **Methane has Significant Climate, Health, Environmental Justice and Safety Impacts**

- Methane emissions have significant impacts on the climate and the environment.

- The combustion of natural gas for electricity has a lower climate impact than that of coal, but methane emissions from the upstream oil and gas production process can cancel out any climate benefit if not managed appropriately. When methane leakage along the supply chain is mitigated, natural gas offers modest climate benefits compared to coal. If unaddressed, methane emissions could jeopardize the role of natural gas in a decarbonizing economy.
- Ambitious EPA standards to reduce emissions from new and existing sources in the oil and gas sector should seek to reduce methane emissions by 65% below 2012 levels by 2025, with similar reductions possible in 2030. This corresponds to approximately 6-9 million metric tons of methane (near-term climate equivalent of 119-170 million cars driving for one year), along with 1.8-2.6 million metric tons of VOCs and 67,000-97,000 tons of hazardous air pollutants.
- Methane emissions, along with harmful smog-forming and hazardous pollution, have significant impacts on public health, especially in overburdened communities.
  - Methane released alongside toxic air pollution during oil and gas production can worsen respiratory illness. Methane-related VOC emissions have significant impacts on public health, contributing to ground-level ozone or smog, worsening respiratory disease and increasing the risk of heart disease and heart attacks.
  - [Studies](#) have shown that individuals who live close to well pads are exposed to harmful chemicals from polluted air and water at dramatically higher rates than the average American household, leading to increased risk of harmful health impacts, from skin and respiratory irritation to organ damage and increased cancer risk. These disproportionate impacts are often felt most by vulnerable populations and communities of color. One study found that [69% of residents](#) that live within a mile of at least one oil and gas well in California are people of color.
- Methane-related safety risks are also important.
  - According to the [National Institute for Occupational Safety and Health \(NIOSH\) and the Occupational Safety and Health Administration \(OSHA\)](#), when workers open thief hatches and manually gauge and sample fluids from production and flowback tanks, which leads to methane being vented, they can be exposed to oxygen-deficient atmospheres or can inhale concentrated petroleum hydrocarbon gases and vapors. Additionally, there is a risk of fires and explosions.

### **Known Support/Opposition to Federal Methane Regulations**

- Environmental, public health, faith, youth and conservation advocates support strengthening methane regulations to reduce air pollution and methane waste from the oil and gas industry.
- In the wake of the Trump rollbacks, operators like [Jonah](#), [Pioneer](#), [Shell](#), [bp](#), and others have underscored their support for direct regulation of methane emissions, including standards for both new and existing sources.
- Large power companies have likewise underscored their support for federal methane standards. These include associations like [EEI which said](#) “Strong and cost-effective federal regulations on methane emissions across the value chain are essential.”

- The [US Chamber of Commerce](#) supports federal methane regulation, as does the [American Petroleum Institute](#) and the [Center for Liquefied Natural Gas](#).

### Financial Institutions Carry an Important Voice

- Adding to the broad chorus of voices that support methane regulations, the investor voice is a necessary policy advocacy intervention to support ambition and timely recommendations.
  - The conversation is not about *whether* the administration will regulate methane, but *how strong* those regulations will be. Given that opposition to strong regulation will likely rely on economic arguments, financial institutions carry an important message: there is a strong business case for setting a very high standard on methane in the oil and gas sector.
- Investors can support this advocacy by emphasizing that methane emission reductions can help the finance community manage climate risk and reach net zero financed emissions.
- Investor voices can set the tone and expectations for how the industry should be acting.
  - While some companies within the industry are demonstrating leadership on managing methane emissions, industry performance is not uniform. Without a level playing field, the poorest performers will shape the public narrative on oil and natural gas, overshadowing proactive measures of industry leaders and risking the industry's social license to operate. These are risks that investors understand and can speak to well.
  - The [IEA](#) believes that the current economic conditions could mean that some companies will fail to address methane emissions and expect a slight rise in emissions.

### Selected Voluntary Efforts to Address Methane Emissions and Flaring

- The [Oil & Gas Climate Initiative](#) (OGCI) is a consortium of major oil and gas producers. In [2018](#) OGCI set a target to reduce average methane emission intensity across aggregated upstream oil and gas operations to below 0.25% with the ambition to reach 0.20% by 2025.
- [One Future](#) is a "coalition of 26 Natural Gas companies working together to voluntarily reduce methane emissions across the Natural Gas value chain to 1% (or less) by 2025."
- The [Methane Guiding Principles](#), which includes large oil and gas operators, provides guidance but does not include specific goals for reducing methane emissions.
- [Oil and Gas Methane Partnership](#) (OGMP) specifies the quality level of reported emissions and includes all member companies' operated and non-operated assets. The ten founding partner companies, including both international and national oil companies account for over 20% of global oil and gas production. They will also report methane emissions from non-operated assets under the framework, increasing the quality of the reporting to the highest level within five years.
- The World Bank [Zero Routine Flaring by 2030](#), which more than 40 oil companies worldwide have committed to (incl. [Occidental](#), [ConocoPhillips](#), [Pioneer](#) and [ExxonMobil](#)). Pioneer and ConocoPhillips even stated their aspiration to achieve that goal by 2025.