

An Investor's Guide to the Oil and Gas Methane Partnership 2.0

A comprehensive reporting framework for oil and gas companies
to measure and report methane emissions

Overview

Methane emissions from oil and gas operations present an urgent and material financial risk to institutional investors.

A powerful agent of near-term warming over 80 times more potent than carbon dioxide, methane emissions exacerbate the climate crisis, undermining the long-term stability of investment portfolios across asset classes.¹ As the world seeks to transition to a decarbonized energy system, the oil and gas industry and its investors will face escalating policy, legal, and market risks if these emissions are not curtailed.^{2,3}

For governments, companies, and financiers committed to net-zero, reducing oil and gas methane emissions represents the single fastest, most cost-effective way to slow the rate of warming right now.⁴ However, the oil and gas industry faces a methane emission data challenge. Despite increasing numbers of reduction targets within the industry, current standards for estimating and disclosing methane levels provide limited insights to stakeholders.

Traditional estimates of methane from oil and gas production have been found to underestimate emissions by 60% or more.⁵ In certain oil and gas basins, studies have found emission rates to be more than 10 times higher than industry disclosed figures, misrepresenting any reported progress.^{6,7}

The **Oil and Gas Methane Partnership 2.0 (OGMP)**, managed by the United Nations Environment Programme (UNEP), provides a reporting framework for oil and gas companies to accurately measure and report their methane emissions. The framework offers a transparent and standardized reporting protocol, allowing stakeholders to credibly differentiate industry leaders and laggards. The goal is to enable the oil and gas industry to realize deep reductions in methane emissions over the next decade in a way that is transparent to civil society, governments, and their investors.

Better quality emissions data also allows operators to accurately understand and characterize methane emissions from their assets, informing a more effective mitigation strategy. Without measured data, companies may misallocate capital to less impactful and less cost-effective mitigation opportunities.

¹ <https://www.edf.org/climate/methane-crucial-opportunity-climate-fight>

² <https://www.blackrock.com/uk/individual/larry-fink-ceo-letter>

³ https://www.morningstar.com/features/esg-risk?promo_name=mstartcom_content&promo_position=esg&promo_creative=ad

⁴ <https://www.washingtonpost.com/climate-environment/2021/04/27/cut-methane-emissions-30-percent/>

⁵ <https://science.sciencemag.org/content/361/6398/186.full?ijkey=42lcrJ/vdyzA&keytype=ref&siteid=sci>

⁶ <https://acp.copernicus.org/preprints/acp-2020-1175/>

⁷ <https://oilandgasclimateinitiative.com/ogci-reports-significant-progress-on-aggregate-upstream-methane-and-carbon-intensity-targets/>

Key Takeaways

The OGMP represents a step change in the quality of methane emissions reporting from the energy sector for a few key reasons:

- For the first time, participating companies are committing to regularly measure their methane emissions using strict science-based standards as opposed to using engineering estimates, which have been shown to significantly underestimate the actual problem.
- Companies will be reporting all material methane emissions across all assets. This includes not only a company's own operations, but also the many joint ventures responsible for a substantial share of their production.⁸
- The reporting framework standardizes a rigorous and transparent emissions accounting practice so that company performance against targets, and performance against their peers, can be compared.

To mitigate climate risk and ensure best-in-class reporting of methane emissions, investors can constructively engage with portfolio companies, encouraging them to:

- Join the OGMP, the only direct measurement-based reporting framework for methane emissions from the oil and gas sector, covering operated and non-operated assets along all segments of the value chain.
- Achieve “Gold Standard” reporting under the OGMP framework with the vast majority of assets reported at Level 4 and Level 5.
- Set, meet, and report on ambitious, near-term methane reduction targets:
 - a ‘near zero’ emissions intensity, such as the Oil and Gas Climate Initiative collective average target for upstream operations of 0.25% by 2025; or alternatively
 - 45% emissions reductions in methane emissions below estimated 2015 levels by 2025, with 60-75% reductions by 2030.

Further Reading



OGMP 2.0 Signatories and Member List
<http://ogmpartnership.com/partners>



OGMP 2.0 Reporting Framework
http://ogmpartnership.com/sites/default/files/files/OGMP_20_Reporting_Framework.pdf

⁸ <https://business.edf.org/insights/emission-omission/>

What is the Oil and Gas Methane Partnership?

A **global multi-stakeholder partnership** with over 70 member companies, representing more than 30% of global oil and gas production, in over 30 countries across 6 continents.



Offering **guidance to the oil and gas industry** and its stakeholders on methane emissions disclosure, including:

- ✓ Comprehensive, measurement-based reporting for methane emissions from the oil and gas industry
- ✓ Operational best practice protocols to help measure, manage, and mitigate methane emissions

Informing **methane policy under consideration in the European Union**, including standards potentially extending to all gas consumed in the Union.



“[The OGMP] is the best existing vehicle for improving measurement reporting and verification capability in the energy sector.”

European Commission, EU Strategy to Reduce Methane Emissions

⁹ Rystad 2018 data, including production from assets operated by OGMP members and production from assets not operated by an OGMP member but where at least one member holds more than 5% equity.

How does it work?

Upon joining, member companies announce their own **methane reduction targets** to UNEP, which are encouraged to be consistent with the overall targets for the industry.

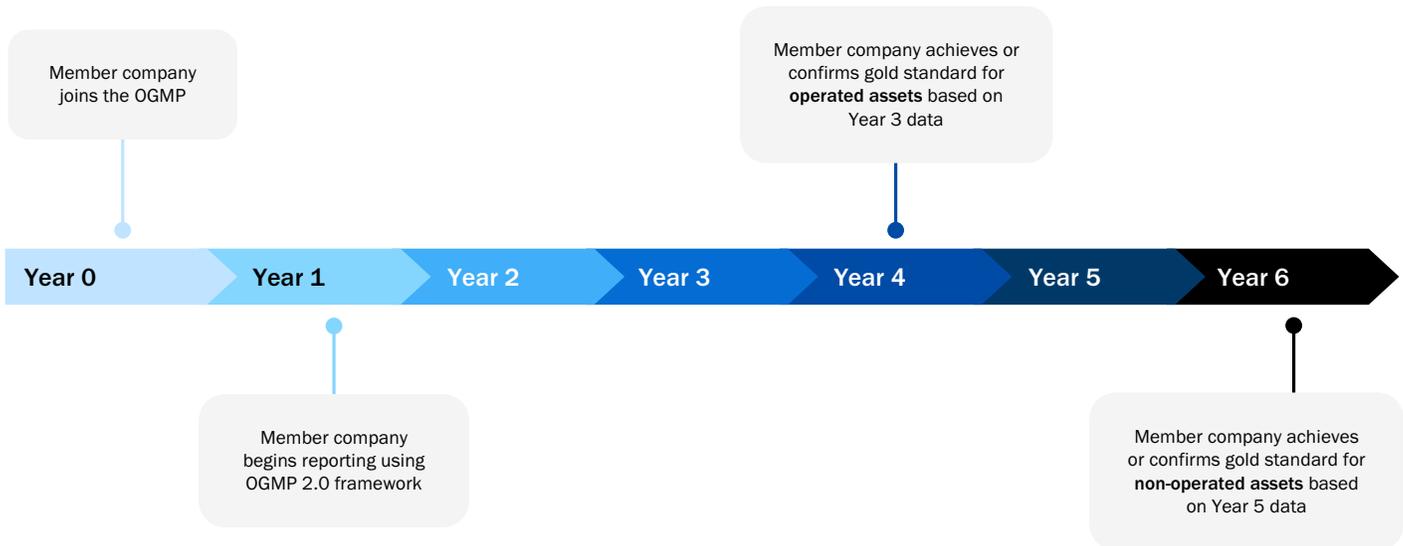
These targets will be reviewed by companies on a periodic basis and should be modified to stay aligned with evolving industry best practices.

Member companies then report on methane emissions along **5 levels of reporting**, increasing in granularity by quantification methodology, level and sources of geography, and uncertainty in quantification.

	Reporting requirements	Implications for investors
Level 1	Venture or Asset Reporting <ul style="list-style-type: none"> • Single, consolidated reported emissions number • Based on generic emissions factors 	A single emissions factor-based number offers limited data credibility, allowing investors little to no insight into actual company performance.
Level 2	Emissions Category <ul style="list-style-type: none"> • Emissions reported based on IOGP and Marcogas defined emissions categories • Based on generic emissions factors 	Broad emissions reporting categories can offer more granularity than a single figure, but reliance on emissions factors still provides limited accuracy.
Level 3	Generic Emission Source Level <ul style="list-style-type: none"> • Emissions reported by detailed source type • Based on generic emissions factors 	Generic source-level emissions factors can help identify certain non-fugitive emission sources, but broadly misrepresent the scope and distribution of emissions, constraining data driven ESG investment decisions and limiting companies' ability to identify the most cost-effective mitigation options.
Level 4	Company-Specific Emissions Source Level <ul style="list-style-type: none"> • Emissions reported by detailed source type using company-specific emissions and activity factors • Based on direct measurement methodologies 	Measurement-based source-level emission factors offer companies valuable insight into the distribution of emissions – aiding in mitigation efforts – but they alone cannot deliver a comprehensive, accurate estimate. Greater assurance and accuracy can only be provided with additional site-level measurements.
Level 5	Site Level <ul style="list-style-type: none"> • Emissions reported at a site or facility level, typically through the use of sensors mounted on a mobile platform • Based on direct measurement methodologies 	Site level measurement provides a “top-down” view of methane emissions at a site or a cluster of sites. These measurements alone cannot provide a comprehensive picture of emissions but ensure the magnitude of emissions measured from source-level measurements is reasonable.
Gold Standard	Level 4 and 5 Reconciliation <ul style="list-style-type: none"> • “Bottom-up” source-level (Level 4) reporting is reconciled with “top-down” site level emissions measurements (Level 5) • Based on direct measurement methodologies 	“Integrates “bottom-up” source-level reporting, with independent “top-down” site-level measurements, taken from a representative sample of facilities. This independent verification of reported emissions improves accuracy and offers investors the highest assurances of data integrity.

Companies progress along the reporting framework, increasing the accuracy of reported emissions with each level, with the goal of achieving **“Gold Standard” reporting**, the highest reporting level under OGMP. **Gold Standard reporting** is achieved once companies empirically reconcile measurements at source (Level 4) and site (Level 5) level for the vast majority of their assets.

Under the framework, member companies have three years to achieve Gold Standard compliance for operated assets and five years for non-operated assets. However, in the interim, **Gold Standard pathway** is awarded to companies that demonstrate a credible and explicit path towards Level 4/5 reporting within 3 years for operated assets, and 5 years for non-operated assets.



As a final step, emissions reporting from OGMP member companies will be incorporated into the United Nations Environment Programme’s International Methane Emissions Observatory (IMEO). IMEO will aggregate and analyze OGMP member data with emissions data from commissioned science studies, satellite data, other independent measurement-based datasets to verify and better understand any inconsistencies in company reporting.

Frequently Asked Questions

Why address methane emissions?

While carbon dioxide is often the focus of greenhouse gas emission discussions, at least a quarter of today's warming is caused by methane emissions from human sources. Methane is over 80 times more potent than carbon dioxide in the first two decades after its release. The IPCC's latest report confirms that cutting short-lived pollutants like methane is the single fastest, most effective way to slow the current rate of warming.^{10,11}

As a major source of global methane emissions, the oil and gas industry bears a special responsibility for urgent action to bring methane leakage and flaring under control. Ongoing advancements in oil and gas emissions measurement and management technology make abatement a low-hanging fruit for significant climate

system impact. Recent analysis from the International Energy Agency (IEA) finds that 40% of global methane emissions from upstream operations can be mitigated at no net cost.¹²

How does the OGMP compare to other existing reporting frameworks for methane emissions?

The OGMP represents a new approach to reporting oil and gas industry methane emissions. It is the first comprehensive, measurement-based framework specifically designed for the oil and gas industry. Below is a comparison of the OGMP to other reporting and disclosure frameworks available for methane emissions reporting today.

	OGMP	Task Force on Climate-Related Financial Disclosures (TCFD)	Value Reporting Foundation (SASB)	ONE Future	EPA Greenhouse Gas Reporting Program
Industry Focus	✓ Specifically designed for the oil and gas sector		✓ Oil and gas specific reporting protocol	✓ Oil and gas specific reporting protocol	✓ Oil and gas specific protocol (Subpart W)
Methane Disclosure	✓ Reports methane emissions separately from CO ₂ and other GHG	✗ Establishes recommendations for climate related financial disclosures, rather than industry specific guidelines	✗ Methane reported as percentage of total CO ₂ emissions using a 100-year GWP	– Reports methane emissions separately from CO ₂ , but not by individual company	✓ Reports methane emissions separately from CO ₂
Asset Coverage	✓ Covers all segments and material assets of the oil and gas value chain		– Emission reporting boundaries vary by approach selected	✗ Emissions only reported from operated assets	✓ Owners and operators from all parts of the U.S. value chain must report emissions
Measurement Requirements	✓ Utilizes direct measurement-based reporting	✗ Emissions are calculated in line with the GHG protocol, which does not require direct measurement	✗ No requirement to utilize direct measurement	✗ Relies on emissions factor approaches	✗ Relies on emissions factor approaches

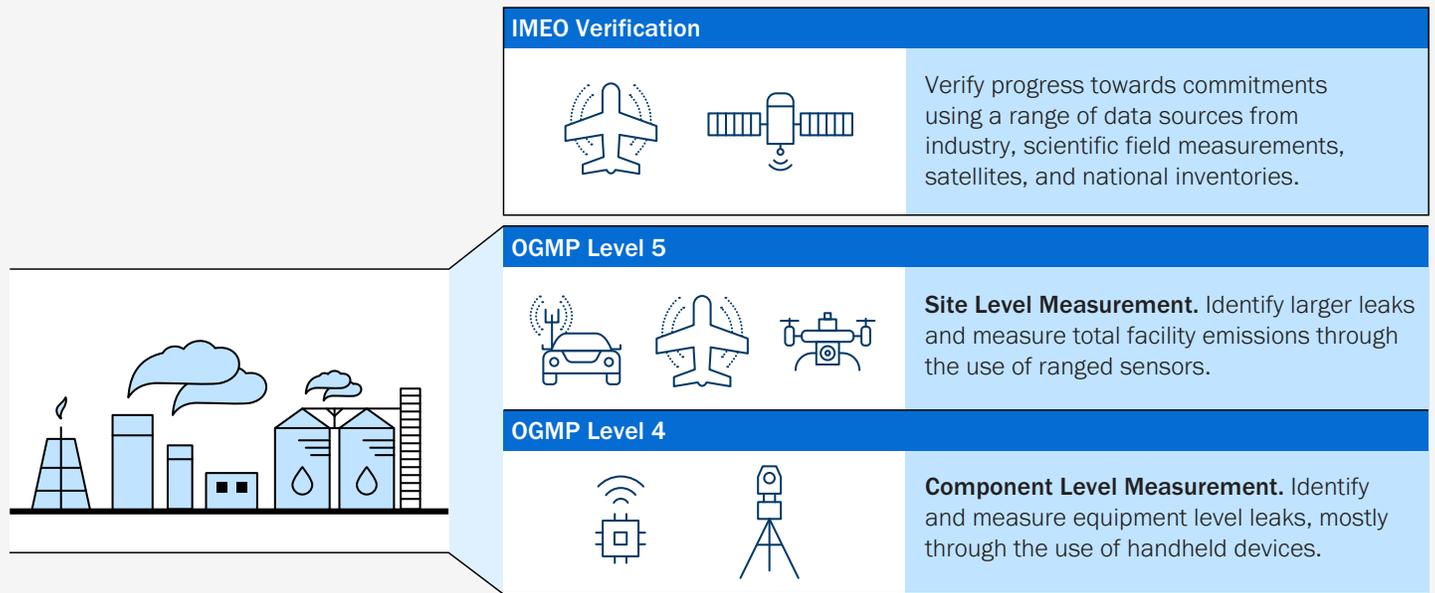
In the future OGMP will generate emissions data that could feed into broader industry reporting frameworks, positively supporting disclosure across the board.

¹⁰ <https://www.ipcc.ch/report/ar6/wg1/>

¹² <https://www.iea.org/reports/methane-tracker-2020>

¹¹ <https://blogs.edf.org/energyexchange/2021/08/09/new-ipcc-report-zeroes-in-on-urgency-of-reducing-methane/>

What kinds of technologies can be used to directly measure, report, and verify emissions?



What are some challenges to implementing the framework, and how can they be addressed?

Potential Implementation Challenges	How They Can Be Addressed	
Given the perceived current state of methane emissions measurement and quantification technology, it can be challenging for some companies to commit to meeting OGMP's target of achieving OGMP Gold Standard Level 4 and 5 reporting within the three-year designated timeframe.	Major oil and gas companies around the world and across the gas supply chain have already committed to achieving OGMP Gold Standard reporting within three years, demonstrating they back their ability to achieve this goal with on-going advancements in technology.	However, the OGMP framework does also acknowledge there may be challenges in meeting Gold Standard reporting and allows for flexibility in achieving Gold Standard reporting if companies can demonstrate good faith efforts have been made.
The scale and complexity of measuring methane emissions from all material sources can feel like an overwhelming challenge for companies.	New signatories are not expected to start from scratch and will have access to industry best practices on how to tackle this challenge. Technical guidance is being jointly developed and updated by OGMP members in order to provide companies with a detailed and actionable roadmap to achieve Gold Standard reporting.	Further, the OGMP encourages the most significant sources of methane emissions to be prioritized, with assets accounting for 95% of an operator's emissions considered as material. This reduces the burden on operators for smaller sources that might be impractical or costly to measure.
Companies cite their limited influence over joint venture partners as a challenge to reporting emissions from non-operated assets.	Despite comprising on average 40% of supermajor production, non-operated assets remain largely unaccounted for in oil and gas ESG disclosures, representing a material risk for investors. Companies have a responsibility to influence joint venture partners to manage and disclose emissions from non-operated assets as with material financial KPIs.	The industry initiative the Methane Guiding Principles is building a bank of resources for engagement with joint venture partners, providing tools and frameworks for companies to successfully report and reduce emissions from non-operated assets.

What enforcement mechanisms exist within the framework?

Member companies that report at the highest levels – which we refer to as Level 4/5 reporting – within the defined timeline achieve a “Gold Standard” status. However, companies that do not achieve level 4/5 will not lose the OGMP membership, but they will not have the critical “Gold Standard” qualification until they do. It is the “Gold Standard” qualification that investors, civil society, and regulators like the European Union are looking to as an indication of proper methane emission management.

It is important to acknowledge that not all companies have the same capacity for direct measurement – which is required to achieve Level 4/5 – and thus some may not aim for Gold Standard immediately. The OGMP is open to any companies that are interested in methane mitigation, regardless of their current emissions levels, measurement capacity, and mitigation progress.

Why does OGMP reporting cover emissions from both operated and non-operated assets?

While an estimated 70% to 90% of upstream assets from oil majors are held in joint venture partnerships, most targets set by those same companies only cover those ventures where the company is the operator.¹³ To address this reporting gap, the OGMP has expanded its reporting scope and includes all member companies’ operated and non-operated assets.

What type of companies can join the OGMP?

The OGMP is currently open to any company with operational control of oil and gas activities, including upstream, midstream, and downstream companies.

How can companies join the OGMP?

To join the OGMP 2.0, member companies sign a Memorandum of Understanding (MoU) with the UNEP, at no cost, to formally express adherence to the Framework, which is annexed to the MoU.

If you have any questions, feedback or are interested in learning more, please contact [Giulia Ferrini, giulia.ferrini@un.org](mailto:giulia.ferrini@un.org)

¹³ <https://www.waterstreetpartners.net/blog/the-web-of-partnerships-between-bp-chevron-eni-exxonmobil-shell-and-total>