

Prospects for Natural Gas Certification

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Jason Switzer	Equitable Origin
Georges Tijbosch	MiQ
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Table of contents

Executive summary	6
1. The role of certification in natural gas supply chains	8
Natural gas operations result in around 5% of global energy-related greenhouse gas emissions	8
Methane emissions account for most of the natural gas sector's greenhouse gas emissions	9
The emissions intensity of natural gas varies significantly between and within countries	12
Defining certified natural gas	13
Potential benefits of certified natural gas for companies and countries	13
2. Status and landscape	17
Overview of voluntary initiatives in the natural gas sector	17
Certification schemes	17
Corporate reporting initiatives	21
Supply chain protocols	23
Volume of certified natural gas globally and across regions	25
3. Limitations of current natural gas certification	28
Inconsistencies in robustness, integrity and transparency	28
Measurement-based information is encouraged but not universally required	29
Fragmented landscape of voluntary initiatives, hindering comparability	30
Partial coverage of GHG emissions along the natural gas supply chain	30
Uneven adoption across countries and companies	31
4. Policy recommendations	33
Collaborate internationally to harmonise voluntary initiatives along the full supply chain	33
Establish minimum standards for certification to ensure credibility and robustness ..	34
Integrate certification into market-based and buyer-driven incentive frameworks	35
Clarify the role of certification in supporting compliance with emerging methane regulations	36
General annex	37
Abbreviations and acronyms	37
Glossary	37

Executive summary

Governments and industry are working to improve resource efficiency and reduce emissions from natural gas supply – from both domestic production and imports – to help deliver on their climate goals, while also looking to improve energy security. One emerging approach is natural gas certification, which can help buyers make more informed decisions by providing independently verified greenhouse gas (GHG) intensity data at select stages of the supply chain, from production and processing to storage and transport, but excluding final consumption. This can support the implementation of best practices throughout the entire supply chain, and help importing countries and regions better understand how natural gas consumption fits within their wider emissions reduction policies and pledges.

Certified natural gas is natural gas whose environmental and social attributes – such as GHG emissions performance, water use, local community impacts and worker safety – have been independently verified against defined criteria or benchmarks. In 2024, around 320 billion cubic metres (bcm) of produced natural gas was certified – coming entirely from North America – equivalent to 7.5% of global natural gas production.

Certification by itself does not reduce methane or carbon dioxide (CO₂) emissions from natural gas operations, nor does it eliminate emissions from its end-use combustion. However, by improving transparency on GHG emissions along the natural gas supply chain – particularly on methane, a potent short-lived climate pollutant – certification can incentivise operators to introduce measures to reduce these emissions. Since methane is the main component of natural gas, action to reduce methane emissions can also bring additional gas to market. More than 50 bcm of additional gas could be brought to markets by reducing methane leaks and flaring along natural gas supply chains.

This report examines the current status of natural gas certification and related voluntary initiatives around the world. It highlights that existing voluntary schemes and reporting initiatives have shown the potential for natural gas certification to reduce emissions and improve energy security. However, it also notes that there are both overlaps and gaps in existing schemes that could undermine natural gas buyers' trust, confidence and interest in certified natural gas. For example, most schemes do not require measurement-based emissions data, instead simply encouraging operators to deploy measurement technologies. Certification schemes often have different focuses and methodologies, reducing the ability of gas buyers to understand how different suppliers of certified natural gas compared to each other. Certified facilities are overwhelmingly in the upstream segment, with

limited attention paid to GHG emissions along the fully supply chain. Certification also remains limited outside North America. Finally, some certification schemes have been questioned for their perceived lack of transparency and integrity, reducing some of the trust in certified natural gas.

To address these challenges, one key policy action that governments can take is to develop an internationally recognised and harmonised framework for measuring and verifying the GHG intensity of natural gas supply chains. Developing such a framework, building on the work already initiated under the US-led MMRV initiative, can reduce buyer confusion, enhance trust in GHG emission claims and facilitate market-based differentiation between various natural gas supplies – potentially paving the way towards price premiums for low-intensity natural gas. Harmonisation can also enhance transparency, enable interoperability across supply chains, reduce regulatory burden, and provide a consistent basis for comparing GHG emissions performance, all of which are essential for scaling up the role of certified natural gas.

Policy makers can also support natural gas certification by ensuring that certification standards meet certain minimum requirements, including as regards third-party verification, direct measurement and transparency. Legislation on environmental claims provides an avenue for governments to ensure that certification programmes comply with such minimum requirements.

To scale effectively and remain sustainable, certification schemes must also be cost-efficient for operators and be paired with clear market mechanisms that reward lower-emissions gas. Governments can foster greater adoption of certification through public procurement and targeted measures to unlock private sector demand and financing.

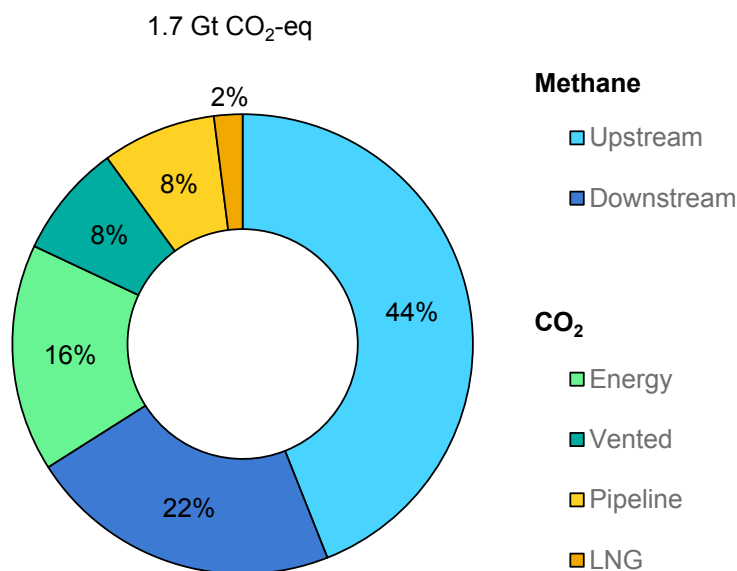
Certification is not a standalone solution, but it can increase GHG emissions transparency and performance for natural gas and therefore support broader efforts to reduce GHG emissions and improve security of supplies.

1. The role of certification in natural gas supply chains

Natural gas operations result in around 5% of global energy-related greenhouse gas emissions

The natural gas sector is an important contributor to global greenhouse gas (GHG) emissions. The process of extracting natural gas from the ground, processing it and transporting it to consumers results in considerable GHG emissions. [According to IEA estimates](#), natural gas operations (production, processing and transport) resulted in around 1.7 billion tonnes (Gt) in annual carbon dioxide equivalent (CO₂-eq) emissions in 2022. Since global energy-related GHG emissions were around 40 Gt CO₂-eq, natural gas operations were directly responsible for nearly 5% of total energy-related GHG emissions. End-use gas combustion resulted in an additional 8 Gt in CO₂ emissions, meaning that gas use was responsible for nearly 25% of total energy-related GHG emissions.

Breakdown of global GHG emissions from natural gas operations, 2022



IEA. CC BY 4.0.

Notes: One tonne of methane is taken to be equivalent to 30 tonnes of CO₂ based on a 100-year global warming potential ([IPCC, 2021](#)). LNG = liquefied natural gas, which includes CO₂ emissions from liquefaction, shipping and regasification.

For further details on these emissions and their sources, see IEA (2023), [The Oil and Gas Industry in Net Zero Transitions](#).

GHG emissions associated with natural gas operations come from a variety of sources along the supply chain. Extracting natural gas from the subsurface requires large amounts of energy to power equipment (such as drilling rigs, pumps and other process equipment) and to provide heat. Natural gas needs to undergo processing to separate natural gas liquids and remove impurities such as CO₂ and hydrogen sulphide. Natural gas is often transported – often over long distances – by both ship (in liquefied form) and pipeline (in gaseous form), which is an important source of GHG emissions. Finally, natural gas operations generate significant methane emissions, both from intentional sources (for example flaring and venting) and unintentional ones (for example undetected leaks).

Upstream operations (the extraction and processing of natural gas) accounted for nearly 70% of GHG emissions from natural gas operations. The remainder came from downstream operations, including natural gas storage, liquefaction, transportation and regasification. The transportation of natural gas is the main source of emissions in the downstream segment, whether the gas is conveyed in its gaseous form through long-distance pipelines or shipped overseas as liquefied natural gas (LNG).

Methane emissions account for most of the natural gas sector's greenhouse gas emissions

While methane emissions vary significantly across operators and in different countries, IEA estimates suggest that, overall, methane emissions account for around two-thirds of the natural gas sector's scope 1 and 2 GHG emissions globally. Methane – the main component of natural gas – is a potent GHG that is the second largest contributor to global warming after CO₂. One tonne of methane is [considered to be equivalent](#) to 82.5 tonnes of CO₂ on a 20-year timescale (global warming potential [GWP]20) and 29.8 tonnes of CO₂ on a 100-year timescale (GWP100), according to the 6th Assessment Report (AR6) of the Intergovernmental Panel on Climate Change.¹

¹ In this report, unless otherwise stated, one tonne of methane is considered to be equivalent to 30 tonnes of CO₂.

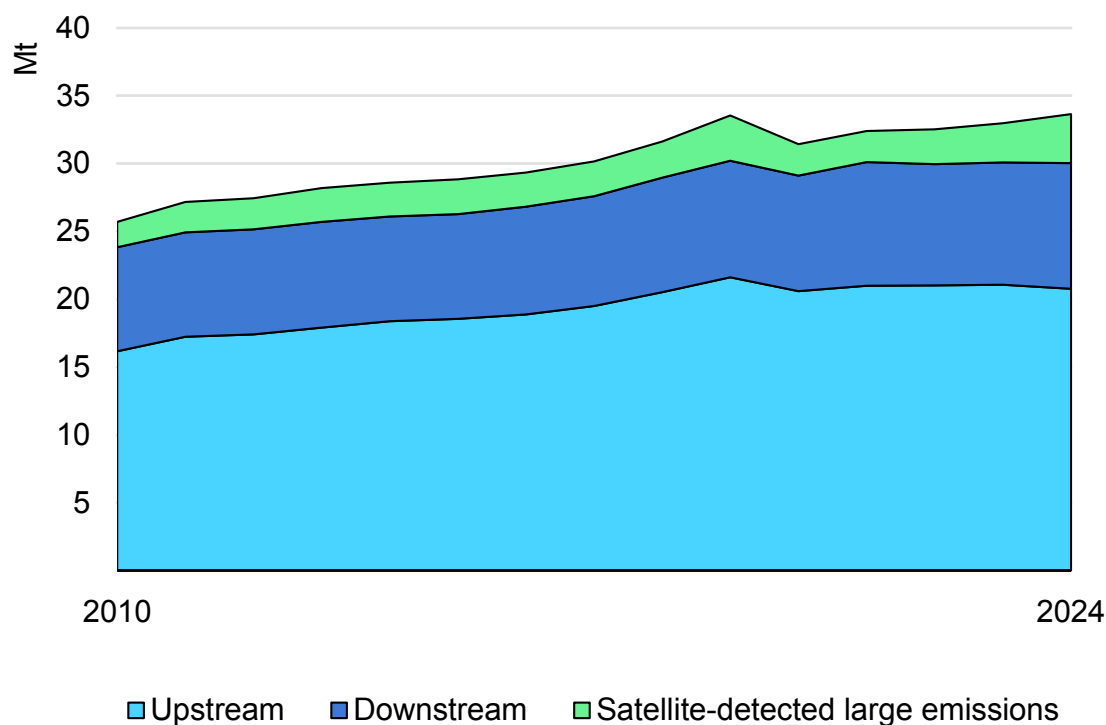
Understanding scope 1, 2 and 3 emissions reporting

GHG emissions can occur at many stages along the value chain, from extraction to end-use. Different “scopes” of emissions are used to help companies distinguish between the various ways that their business activities can result in emissions. For natural gas operators, “scope 1” emissions are emissions that come directly from operators themselves (e.g. fuel combustion, flaring or venting); “scope 2” emissions are indirect emissions that arise from the generation of energy that the gas operators purchase (e.g. heat or electricity); and “scope 3” emissions are all other indirect emissions that occur across the value chain, include those that occur prior to the purchase of gas by a company and from the combustion of the gas by end-users.

For natural gas producers, the largest source of emissions is scope 3 emissions associated with gas combustion: around 85% of the lifecycle emissions of natural gas are associated with its combustion at the point of end-use. Oil and gas companies can cut their scope 3 emissions in a number of ways, including: supporting the use of their products in non-combustion applications, promoting fuel switching and energy efficiency among end-users, or, where feasible, reducing the volume of oil and natural gas sold. More advanced measures, such as integrating carbon capture, utilisation and storage at the point of use, may also play a role over time as technologies and infrastructure mature. Scope 3 targets can be a useful signal of a company’s plans and how it intends to achieve these, but they could also lead to some perverse incentives that limit the real emissions reductions achieved. For example, there is no clear designation of who should take the lead on reducing scope 3 emissions; scope 3 emissions are often reported multiple times by different entities along the value chain; and targets to cut down on scope 3 emissions may encourage companies to change the ownership of and responsibility for products to reduce emissions on paper, but without any real emissions reductions (or potentially even increased emissions, depending on the new owner's approach).

The [IEA estimates](#) that the energy sector was responsible for around 145 million tonnes (Mt) of methane emissions in 2024 – more than 35% of the total amount attributable to human activity. Natural gas operations – including the extraction, processing and transport of the gas – were responsible for around 35 Mt of methane emissions (just over 1 Gt CO₂-eq).

Global methane emissions from natural gas operations, 2010-2024



IEA. CC BY 4.0.

Note: For further details on these emissions and their sources, see IEA (2025), [Global Methane Tracker](#).

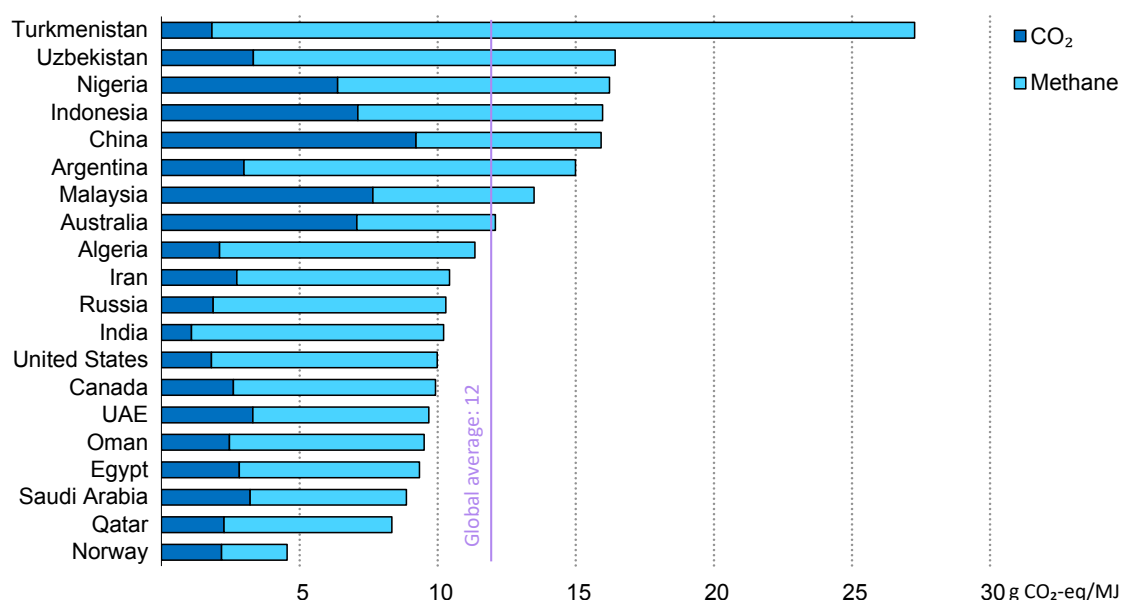
Compared with other sectors (i.e. agriculture and waste), the energy sector holds the largest potential for rapid and low-cost reductions in methane emissions. According to [IEA estimates](#), 75% of natural gas methane emissions could be avoided through the deployment of existing technologies and measures – with no need for technological breakthroughs. A large share of these technologies and measures can be deployed at low or no cost. This is because the required outlays are less than the market value of the additional gas that is captured and sold. Around 40% of methane emissions from the natural gas sector could have been avoided at no net cost in 2024 (based on 2024 energy prices).

Cutting methane emissions from gas operations is essential not only for limiting global warming but also for improving air quality, as methane is a key contributor to ground-level ozone formation. Beyond its climate and health benefits, reducing methane emissions also enhances the availability of natural gas supplies. According to IEA estimates, more than 50 bcm of additional gas could be brought to markets by reducing methane leaks and flaring along natural gas supply chains. Even though methane reduction measures are often low-hanging fruit, they are not fully implemented due to a combination of policy gaps, economic disincentives, and practical barriers. Nevertheless, reducing methane emissions helps maximise the effective gas volume available to the market by minimising losses, contributing to energy security.

The emissions intensity of natural gas varies significantly between and within countries

Globally, on average, natural gas operations result in around 12 g of CO₂-eq emissions per megajoule (MJ) produced, 15% of the full lifecycle emissions of natural gas that is combusted. The emissions intensity of natural gas supply varies widely across gas-producing countries, mainly due to differences in methane emissions that occur during production and transport. For example, Norway has the lowest methane emissions intensity in the world (approximately 2 g CO₂-eq/MJ), while Turkmenistan has the highest (approximately 25 g CO₂-eq/MJ). Emissions intensity also varies significantly within countries, with wide disparities among production facilities located in the same country.

Average GHG emissions intensity of the world's largest natural gas producers by country, 2022



IEA. CC BY 4.0.

Note: UAE = United Arab Emirates.

While reducing scope 1 and 2 emissions from natural gas operations is achievable, costs vary depending on the emission source, technology and site-specific conditions. [Multiple levers](#) can be used to drive down GHG emissions associated with natural gas operations, in particular: minimising methane emissions through operational changes or low-cost technological adoption; eliminating non-emergency flaring; electrifying upstream facilities with low-emissions electricity; and equipping gas processes with carbon capture, utilisation and storage (CCUS).

Defining certified natural gas

Certified natural gas – sometimes referred to as “differentiated gas” – is natural gas whose attributes have been independently verified against a defined standard. Natural gas certification standards vary in scope and methodology, but all are designed to assess the environmental or social performance of natural gas supplies at different stages along the supply chain. Interest in certification programmes has largely focused on these programmes’ ability to assess GHG emissions performance (including methane emissions performance), but some certification programmes also assess broader attributes, such as water use, ethical business practices, local community impact and worker safety.

Certification is most often a voluntary process, with no obligation for operators to undergo certification. When an operator chooses to have its natural gas certified, the operator’s facilities will be examined by an independent third party against the relevant standard. Natural gas that has been examined against a given standard is deemed to be “certified”. Natural gas operators can then use this certification to distinguish their gas from gas supplied by other operators.

Natural gas certification does not directly reduce a natural gas operator’s scope 1 and 2 GHG emissions. Certification is instead intended to provide evidence of the GHG emissions performance of production, processing or transport operations. It does not presume that emissions are low, but offers a basis for buyers, regulators and other stakeholders to assess and compare GHG emission outcomes. This, in turn, can incentivise GHG emissions reductions (as detailed further below).

Certified natural gas should also be distinguished from biomethane (sometimes called renewable natural gas) and from e-methane. The chemical composition of these is very similar to natural gas, but they often have significantly lower lifecycle emissions (depending on the feedstock, emission management standards and accounting methodology). While certified natural gas currently refers to fossil-based gas, blending it with lower-emission alternatives like biomethane can help reduce its overall GHG intensity.

Potential benefits of certified natural gas for companies and countries

A credible natural gas certification scheme can provide evidence that natural gas was produced with minimal GHG emissions or through responsible environment, social and governance (ESG) practices. This can help governments and operators achieve several objectives.

Allowing product differentiation

Natural gas certification can allow gas producers to differentiate the performance of their own gas from other gas, particularly that associated with higher GHG emissions or with less responsible ESG practices. This can allow gas producers to attract new customers (or retain existing ones) interested in purchasing lower-GHG emissions gas, providing a competitive advantage to the producer. Certified natural gas may not currently command a significant price premium, but this may emerge in the future.

Enabling gas operators to comply with regulatory requirements and preserve market access

Importing countries are introducing stricter regulations to reduce methane emissions associated with imported natural gas. For example, starting in 2027, the [EU Methane Regulation](#) will require EU importers to demonstrate that imported natural gas is subject to measurement, reporting and verification (MRV) standards equivalent to those applied within the European Union. From 2028, importers must also report the methane intensity of their imported gas, defined as the volume of methane emitted per unit of energy delivered. Beginning in 2030, natural gas placed on the EU market will have to comply with a methane intensity threshold set by the European Union. Non-compliant imports may face restrictions, including potential barriers to market access. Although the Regulation provides the overall framework for enforcement, it is the responsibility of Member States to apply effective, proportionate and dissuasive penalties, such as fines or administrative actions, based on national implementation frameworks. The European Union also recently introduced the [Corporate Sustainability Due Diligence Directive](#), which will require certain companies to address adverse ESG impacts in their value chains. Natural gas certification can help gas operators meet regulatory requirements by providing evidence that the imported natural gas was produced with low GHG emissions or in a responsible manner – though this depends on certification programmes being carefully aligned with the importing country's regulatory requirements.

Helping companies purchasing natural gas achieve their GHG emissions reduction targets

Many companies have made commitments to reduce GHG emissions within their operations or to achieve net zero emissions by a particular date. Natural gas certification can help companies purchasing natural gas to have a more informed understanding of the environmental impacts of the natural gas prior to purchase. Companies that select lower-GHG intensity natural gas can lower the emissions associated with their products and services, helping them reach their voluntary

emissions reduction targets. More broadly, natural gas certification can be used by gas-consuming companies to showcase their commitment to lowering GHG emissions across the entire supply chain, boosting these companies' reputational profile.

Helping natural gas-producing countries achieve GHG emissions reduction targets

Natural gas certification can allow gas operators to differentiate their gas, creating an incentive for gas operators to reduce scope 1 and 2 emissions within their operations. The potential for differentiation can accelerate industry action on GHG abatement and lead to wider implementation of abatement technologies. If operators reduce their scope 1 and 2 emissions, this would translate into a reduction in the gas-producing country's total domestic GHG emissions and help it reach its GHG emissions reduction targets. Natural gas certification can also establish precedents that prove the feasibility of abatement measures and technologies, paving the way for industry-wide abatement regulations – leading to further reductions in the gas-producing country's domestic GHG emissions.

Helping natural gas-importing countries realise climate objectives

Natural gas certification does not directly assist importers in achieving domestic GHG emissions reduction targets. However, many energy-importing countries now recognise that fossil fuel demand within their borders contributes to GHG emissions globally. As such, many importers have expressed an interest in actions to reduce GHG emissions associated with their imports. For example, in 2022, a number of countries issued the [Joint Declaration from Energy Importers and Exporters](#) on Reducing Greenhouse Gas Emissions from Fossil Fuels, which calls on energy-importing countries to “take steps to reduce the methane emissions associated with their energy consumption”. Certification can help natural gas purchasers in importing countries determine which gas is associated with low GHG emissions, allowing them to prioritise lower-emissions natural gas.

Improving energy security

Large amounts of natural gas are currently lost due to methane leaks, flaring and venting, which means that large volumes of gas are currently [produced without being used productively](#). The IEA estimates that around 70 billion cubic metres (bcm) of gas was wasted in 2024 due to leaks, flaring and venting in the natural gas sector. While not all of this wasted gas could have been captured and used

as an energy source, the IEA estimates that more than 50 bcm of additional gas could be brought to markets by reducing methane leaks and flaring along natural gas supply chains.

Demand for certified natural gas can create an incentive for natural gas producers to reduce methane emissions within their operations by helping them know more precisely how much they are losing and from where, reducing the information barriers that often make mitigation more costly. By accelerating the deployment of methane abatement measures and technologies, natural gas certification can therefore assist in making additional volumes of gas available to the market, improving energy security. In addition, natural gas certification can provide evidence that delivered gas was produced with low GHG emissions. This can help purchasing countries better understand how natural gas consumption fits within their wider emissions reduction plans.

Reducing the risk of crossing climate tipping points

Rapid cuts in methane emissions from fossil fuels through targeted abatement measures – alongside deep cuts in CO₂ emissions – are essential to achieve global climate targets. Since methane is such a potent greenhouse gas, [targeted actions to tackle methane emissions from fossil fuel production and use are essential to limit the risk of crossing irreversible climate tipping points](#). Natural gas certification can incentivise operators to implement technologies and practices to reduce methane emissions within their operations, contributing to the achievement of global climate targets.

2. Status and landscape

Overview of voluntary initiatives in the natural gas sector

Several voluntary initiatives have emerged in recent years with the goal to increase emissions transparency in the natural gas sector and differentiate gas with higher environment, social and governance (ESG) performance. Existing initiatives differ in scope and purpose but can be divided into three broad categories: (1) certification schemes; (2) corporate reporting initiatives; and (3) supply chain protocols. This chapter provides an overview of the different existing initiatives.

Certification schemes

Certification schemes aim to provide evidence that the natural gas in question was produced with low GHG emissions or in accordance with certain sustainability criteria. Currently, the main existing gas certification schemes are Equitable Origin (EO) and Methane Intelligence Quotient (MiQ). A previous scheme operated by Project Canary stopped certifying new customers in 2024.

Equitable Origin

Founded in 2009 and based in the United States, Equitable Origin (EO) is a non-profit organisation that aims to promote responsible energy development through high ESG standards. In 2012, EO launched its flagship framework, the [EO100™ Standard for Responsible Energy Development](#) (“EO Standard”), designed to recognise and certify energy sites that demonstrate best practices across a wide range of ESG criteria, including human rights, Indigenous Peoples’ rights, fair labour and working conditions, and environmental impacts. The [first site certified under EO](#) was an oil production facility in Colombia in 2014.

The EO scheme applies to both renewable and non-renewable energy operations, including oil and gas, solar, wind and hydroelectric facilities. For natural gas operations, three technical supplements to the EO Standard have been developed, focusing on [natural gas production](#), [natural gas gathering and boosting](#) and [natural gas transmission and storage](#). These set out a number of specific performance targets (PTs), which are measurable indicators used during an assessment.

EO certifications for natural gas operations are site-specific. A site's boundaries include all facilities located within a single geographical area, including ageing and inactive assets. Sites are scored against roughly 500 PTs, with sites receiving a grade from A+ to C based on the extent to which they meet, exceed or lead industry best practices. Sites undergo a multi-step process: self-assessment, third-party on-site audit, production of a peer-reviewed assessment report, and certification decision by EO. Certification lasts three years, with annual audits and mandatory improvement plans required.

Certified sites are [publicly listed on EO's website](#), together with a summary of certification results that includes the site's achieved grade. Given that EO focuses not on methane emissions performance, but on a broader set of ESG metrics, EO has [launched a partnership with MiQ](#) so that facilities can be jointly certified under both schemes. This allows facilities to obtain independent assessments of both methane emissions intensity and of ESG performance, while [simultaneously reducing costs](#) through the use of a single auditor for both certification processes. Currently, five facilities are jointly certified under MiQ and EO, representing approximately 130 bcm of annual natural gas production.

As of May 2025, EO has certified natural gas production facilities operated by eight companies across North America, including Expand Energy², EQT and ARC Resources.

Methane Intelligence Quotient

Founded in 2020 and based in the United States, Methane Intelligence Quotient (MiQ) is a non-profit organisation that aims to accelerate emissions reductions in the oil and gas sector by developing GHG emission standards.

MiQ has issued [a range of standards](#) covering various segments of the natural gas supply chain, including onshore and offshore production, processing, transmission, storage, liquefaction, shipping and regasification. Facilities voluntarily register for MiQ certification and undergo third-party audits performed at the facility level, ensuring detailed verification of methane emissions. Audits evaluate three main categories: methane intensity, methane management practices, and monitoring technology deployment. MiQ is expanding its certification from methane to include CO₂ and N₂O, moving toward broader GHG coverage.

Facilities receive a grade from A to F based on their methane intensity and on points awarded depending on their practices and technology. Grades D to F

² Expand Energy is the result of the merger in October 2024 between Chesapeake Energy and Southwestern Energy.

indicate that the facility meets all the minimum requirements for company practices and monitoring technology deployment, while grades A to C require obtaining additional points based on enhanced company practices and monitoring. Scoring of monitoring practices is based on a combination of survey frequency, percentage of coverage of identified emission sources within a facility and minimum detection limits of the monitoring technology deployed. Auditing results are valid for a period of 12 months. MiQ publishes a [list of certified facilities](#), but leaves publication of achieved ratings to the operator's discretion.

MiQ certificates can be traded through bilateral agreements or trading platforms, such as [Certified Gas Hub](#) and [Xpansiv's CBL Global Spot Exchange](#). They can be sold either bundled with physical gas, linking environmental attributes to the gas, or unbundled, allowing buyers to claim emissions reductions without receiving the certified gas itself. This enables companies, including downstream gas consumers, to use MiQ certificates to reduce their reported scope 3 emissions.

MiQ released an open-source [Supply Chain Protocol](#) in 2024 to enable the construction of full well-to-gate emissions profiles for natural gas by integrating both certified and uncertified data sources across the supply chain. Each input is assessed using defined quality indicators to ensure consistency and credibility. MiQ also allows certificates from different certified facilities to be "linked" with each other to create a sequence of certified facilities along the natural gas supply chain.

In 2025, MiQ announced a collaboration with the Oil and Gas Methane Partnership 2.0 (OGMP 2.0) to enable third-party verification of OGMP 2.0 Level 5 emission estimates across full supply chains, aligning certification with global best practices on MRV.

As of May 2025, [16 operators](#) – including BP, Expand Energy, ExxonMobil, EQT and Repsol – have certified some of their facilities under MiQ. Certified facilities are mostly located in the United States, though MiQ recently [expanded to the Isle of Grain LNG terminal in the United Kingdom](#).

Project Canary

A previous natural gas certification scheme was offered by Project Canary, a for-profit company founded in 2018 in Denver, United States. In 2020, after merging with Independent Energy Standards, Project Canary began offering certification services, with assessments at the well or basin level. Scores were awarded either based on risk profiles and mitigation controls (referred to as the TrustWell certification standard) or based on eligibility criteria related to methane reduction commitments, testing, corrective actions and methane intensities (which it called the Low Methane Rating Protocol [LMRP]). In September 2024, Project Canary ceased offering its certification scheme for new customers, having announced a

[shift in focus](#) to the software and data side of the business. Prior to this date, it was working with more than 60 customers, certifying over 100 bcm per year. Certificates issued prior to this date remain valid, with Project Canary continuing to support existing contracts covering just over 45 bcm. These customers are expected in time to transition to other certification schemes or voluntary initiatives.

Comparison of natural gas certification schemes

	Methane Intelligence Quotient (MIQ)	Equitable Origin (EO)	Project Canary (discontinued for new clients)
Performance Criteria	Methane emissions performance	Environmental, social and governance performance	Environmental and social impacts, including methane emissions
Public Standard	Yes	Yes	Partial
Independent Third-Party Verification	Yes	Yes	No, in-house auditors from Project Canary instead
Assessment Level	Facility level	Facility level	Well level
Grading System	A to F	A+ to C	Platinum, Gold, Silver
Organisational Structure	Non-profit	Non-profit	For-profit
Public Disclosure of Ratings	No, list of certified facilities only	Yes	No, list of participating operators only
Validity Period of Certificates	1 year	3 years (with annual verifications)	1 year
Total Certified Produced Gas	255 bcm	168 bcm	45 bcm

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Note: Some assets are certified under multiple certification schemes, as different standards can overlap in scope or address complementary aspects.

Other related initiatives

There have been other voluntary company initiatives seeking to differentiate natural gas based on its ESG attributes. For example, in 2023, US natural gas processor and transporter Williams Companies launched its own certification process, referred to as [NextGen Gas](#). Under this initiative, Williams partnered with upstream producer Coterra Energy and downstream utility Dominion Energy Virginia to [monitor emissions along the entire value chain](#) (from production to delivery). Environmental attributes are verified by auditing firm KPMG and registered on [Context Labs' blockchain platform](#).

In 2021, the US LNG producer Cheniere partnered with five upstream natural gas producers and several academic institutions to establish a [quantification, monitoring, reporting and verification scheme](#) (“QMRV”) of GHG emissions performance at natural gas production sites. Based in part on this QMRV scheme, Cheniere [began offering “Cargo Emission Tags” in 2022](#), providing LNG customers with GHG emissions data associated with each LNG cargo produced at Cheniere’s Sabine Pass and Corpus Christi liquefaction facilities.

While such initiatives present some parallels with certification – with Williams referring to its own initiative as a [certification process](#) – they differ from formal certification schemes in that they do not involve the use of a third-party standard developed by an independent body. Instead, these initiatives involve reliance on internally-developed schemes and criteria. Although these initiatives still involve third-party auditing of reported emissions, they remain proprietary programmes without the full characteristics of a formal certification scheme. As such, we do not include associated volumes within the scope of our report.

Corporate reporting initiatives

In addition to certification programmes, several corporate reporting initiatives have emerged in recent years. These initiatives differ from certification programmes in that companies are not independently assessed against a defined standard; they instead self-report the relevant data. Further, reporting is done at the company level, as opposed to facility-level verification under certification schemes.

Oil and Gas Methane Partnership 2.0

Oil and Gas Methane Partnership 2.0 (OGMP 2.0) is a multi-stakeholder initiative that seeks to improve the accuracy and transparency of methane emissions reporting in the oil and gas sector. Led by the United Nations Environmental Programme (UNEP), [membership](#) includes over 150 companies with assets in more than 90 countries, representing approximately 42% of global oil and gas production.

Companies participating in OGMP 2.0 commit to reporting their scope 1 methane emissions from all assets (both operated and non-operated) on an annual basis. They are also required to establish a company-wide methane emissions reduction target.

OGMP 2.0's [reporting framework](#) covers all segments of the oil and gas value chain from upstream production to distribution, excluding end-use. It includes five different levels for reporting methane emissions according to the detail, assumptions, scope and incorporation of measured data into companies' disclosures. OGMP 2.0 awards a "Gold Standard" to companies that demonstrate progress towards its Level 4 and 5 reporting, typically within three years for operated assets and five years for non-operated assets.

Data reported under OGMP 2.0 is collected by UNEP's International Methane Emissions Observatory (IMEO), which corroborates the data against other sources to ensure there are no discrepancies. IMEO also publishes annual [fact sheets](#) that summarise companies' total aggregated methane emissions (across all assets) as well as company progress towards declared methane reduction targets. Asset-level data is only publicly disclosed on a voluntary basis.

OGMP 2.0's reporting framework has been incorporated into the [EU Methane Regulation](#), which requires EU natural gas importers to demonstrate that foreign gas is subject to EU-equivalent MMRV requirements. To demonstrate this, EU gas importers can show that the imported natural gas is subject to OGMP 2.0 reporting and monitoring at Level 5, provided that this is confirmed through independent verification at a reasonable assurance level. The Regulation specifies that such independent verification must be carried out by a qualified third party that is functionally and financially independent from the reporting entity.

Coalition for LNG Emission Abatement toward Net Zero

The [Coalition for LNG Emission Abatement toward Net Zero \(CLEAN\) initiative](#) is a public-private project that was launched in July 2023 by JERA Co. Inc. and the Korea Gas Corporation (KOGAS), with support from the Japan Organization for Metals and Energy Security (JOGMEC).³ Participating LNG buyers commit to sending annual questionnaires to their LNG suppliers, with the goal of obtaining information on LNG producers' methane emissions management and emissions reduction efforts on a project-by-project basis. JOGMEC provides support to LNG importers participating in the initiative by maintaining an information platform to host collected questionnaires and disseminate best practices on methane

³ The governments of Japan, Korea, Australia and the United States have also [expressed support](#) for the initiative, as has the European Commission.

emissions management. Through these measures, the CLEAN initiative aims to increase transparency on methane emissions associated with LNG imports into the Asian market.

CLEAN now includes more than [20 LNG purchasers](#) (primarily Japanese electric and gas utilities). In 2024, LNG purchasers obtained responses from [80% of LNG sellers](#) (16 LNG projects out of 20), with 35% of sellers providing data on estimated methane emissions in their operations and on efforts to reduce these emissions.

Supply chain protocols

Supply chain protocols are structured frameworks that seek to support consistent measurement and reporting of GHG emissions. These protocols usually cover the entire natural gas supply chain (from production to delivery) to provide a full lifecycle profile of delivered natural gas. Supply chain protocols address several key areas, including emissions quantification methodologies, third-party verification criteria and reporting requirements. Alongside [MiQ's Supply Chain Protocol](#), there are three supply chain protocols that have been established in recent years: the Natural Gas Sustainability Initiative (NGSI) Protocol; the International Group of Liquefied Natural Gas Importers (GIIGNL) Framework; and the GTI Veritas Protocol.

The Natural Gas Sustainability Initiative Protocol

The Natural Gas Sustainability Initiative (NGSI) is a voluntary initiative launched in 2018 to address sustainability issues throughout the US natural gas value chain. In 2021, NGSI published the [NGSI Methane Emissions Intensity Protocol](#) ("NGSI Protocol"), a publicly-available framework that seeks to establish a consistent methodology for calculating and comparing methane intensity across different segments of the value chain.

Companies operating within the US natural gas value chain can use the NGSI Protocol to calculate and report methane emissions intensity from their natural gas operations according to segment. Calculation of emissions is done by leveraging existing US Environmental Protection Agency (EPA) methodologies, including those established under the [Greenhouse Gas Reporting Program](#) (GHGRP) and the [Greenhouse Gas Inventory](#). Reporting is done at the company level, with intensity calculated as methane emissions from NGSI-covered sources allocated to natural gas, divided by the methane content of the company's throughput, resulting in a gas-specific emissions metric. Companies must report methane intensity according to the industry segment in which they operate, with the NGSI Protocol covering five segments of the US natural gas value chain, each requiring [intensity reporting](#) using a standard, segment-specific methodology and template.

In February 2024, NGS released Version 2.0, which updates the Protocol to ensure continued alignment with the latest EPA methodologies. This does not yet incorporate the most recent changes to [Subpart W of the GHGRP](#), which became effective in January 2025.

International Group of Liquefied Natural Gas Importers Framework

In 2021, the Paris-based International Group of Liquefied Natural Gas Importers (GIIGNL) published its [MRV and GHG-Neutral Framework](#), aiming to establish consistent criteria for calculating the GHG footprint of delivered LNG cargoes. The framework enables users to report their GHG emissions using various pathways, ranging from specific stages of the LNG supply chain to the full lifecycle (from wellhead to end-use), including emissions reduction strategies and carbon offset credits. Emission claims must be independently verified by a third party. While GIIGNL recommends the use of primary data, it allows secondary data where direct measurements are not feasible, provided that sources are transparent and well-documented. The GHG footprint of a delivered LNG cargo, along with any related claims, is set out in a Cargo Statement. This document can be used by importing companies can use to provide evidence regarding the cargo's environmental impact.

In 2023, [Shell delivered the first LNG cargo](#) with its associated GHG emissions offset in accordance with this framework. GIIGNL initiated an update to its framework in 2025, incorporating feedback from its members' practical experiences, and specifically addressing improvements in methodologies for quantifying methane emissions, enhancing data validation processes, and integrating the latest advancements in global GHG emissions reporting standards and certifications.

GTI Veritas

Veritas was created by GTI Energy, a US-based non-profit research and development organisation, to facilitate the calculation of methane emissions along the natural gas value chain. GTI Veritas consists of a series of technology-neutral technical measurement protocols designed to ensure credible and consistent emissions measurement. Groups involved in the initiative include oil and gas producers, utilities, environmental NGOs and other organisations.

The Veritas Version 1 protocols were released in February 2023 and the Version 2 protocols in December 2024. The first set of protocols included six segments, while the Version 2 protocols consolidate the reporting into three: an “upstream”

segment that includes production, gathering and boosting; a “midstream” segment that includes processing, transmission and storage, and LNG; and a standalone “distribution” segment.

Veritas protocols address different elements of emissions measurement and verification, including measurement and reconciliation; methane emissions intensity; value chain aggregation; and assurance.

Veritas requires companies who state that they conform to Veritas protocols to publicly disclose certain elements of their methane measurement in a public-facing report or dashboard annually. Veritas’ protocol on assurance recommends but does not require a third-party audit.

Volume of certified natural gas globally and across regions

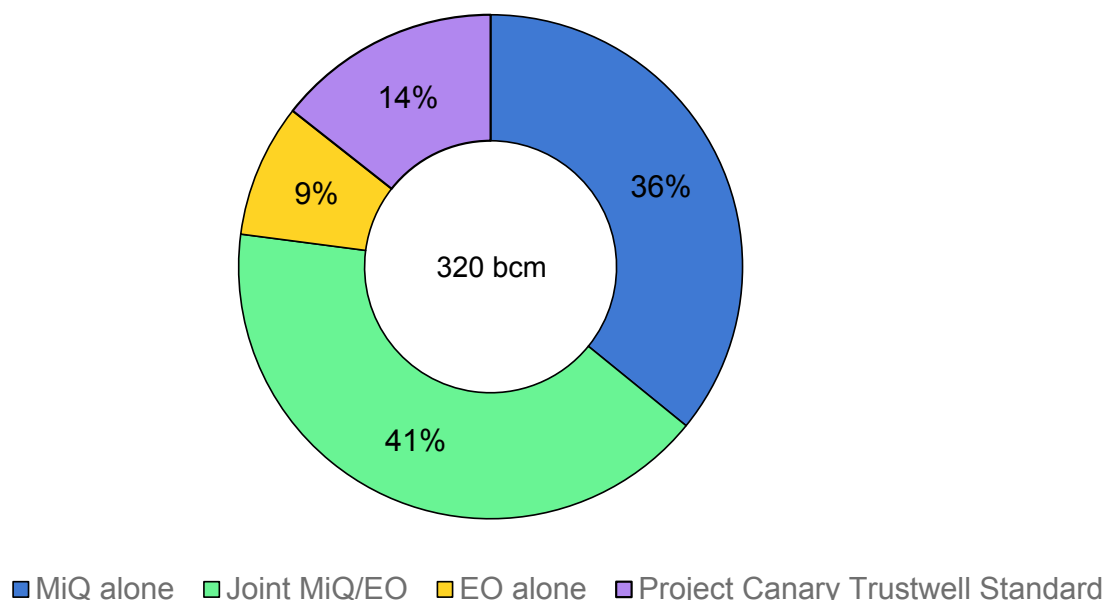
Certification of natural gas facilities has increased significantly over the past decade. As mentioned, EO certified its first site – an oil production facility located in Colombia – in 2014. In 2018, Southwestern Energy and New Jersey Natural Gas entered into [the first reported contract for certified natural gas](#), with natural gas certified under Independent Energy Standards’ (IES) TrustWell standard in exchange for a premium.

Following IES’ merger with Project Canary in 2019 and MiQ’s launch in 2020, certification announcements increased dramatically, with [several US gas operators pledging to certify upstream operations during 2021](#) – including EQT, PureWest Energy, Expand Energy, Northeast Natural Energy, ExxonMobil, Seneca Resources and Comstock. Also in 2021, Vermilion Energy received EO certification for its [West Pembina \(Alberta\) operations](#), while Petronas Canada received EO certification for its [North Montney \(British Columbia\) operations](#) in 2023. 2024 saw the [first LNG import terminal](#) receive certification (on the Isle of Grain, east of London), as well as a [commitment from Commonwealth LNG](#) (Houston, United States) to certify its natural gas operations, including for LNG offtake. Natural gas certification increased significantly between 2020 and 2022, but momentum has since slowed: the number of facilities certified under MiQ and EO increased by 13% between 2022 and 2023, before plateauing in 2024.

We estimate that approximately 320 bcm of gas produced in 2024 was certified under one or more of the existing certification schemes, representing roughly 7.5% of global gas production. Gas certified in downstream facilities accounted for an additional 20 bcm (although there is some potential overlap with gas already certified at the upstream level). Approximately 125 bcm of gas (across all segments of the supply chain) is presently certified solely under MiQ, 38 bcm is certified solely under EO and 130 bcm is currently certified under both schemes.

Just over 45 bcm is still certified under Project Canary's Trustwell Standard. As of May 2025, a total of 30 facilities across 22 different operators have received certification (excluding those certified by Project Canary).

Proportion of certified natural gas by certification programme, 2024



IEA. CC BY 4.0

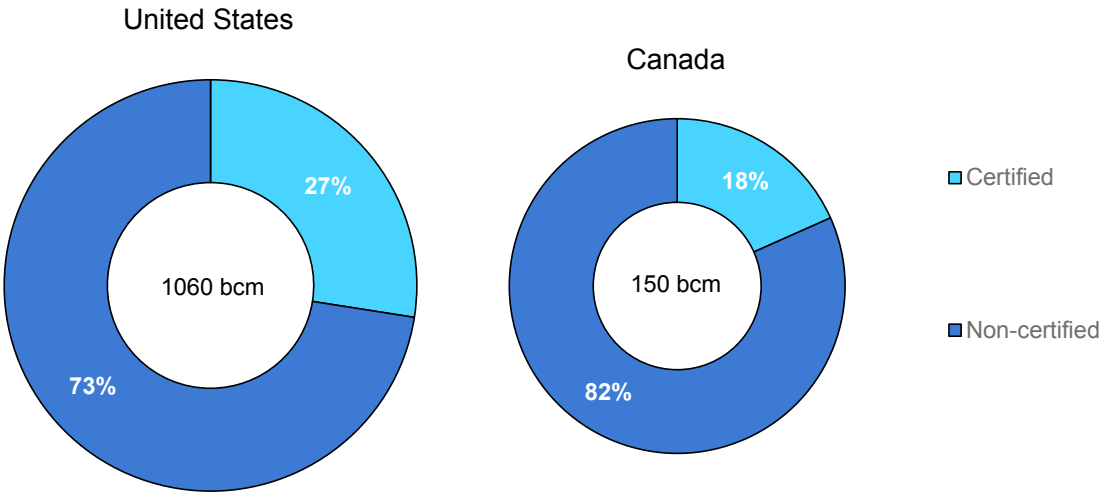
Notes: MiQ = Methane Intelligence Quotient. EO = Equitable Origin. Gas volumes counted under the Project Canary TrustWell Standard currently retain their certified status even though the certification was discontinued for new customers in 2024. Proportions for all programmes are based on certified volumes for the upstream segment.

Nearly all certified facilities (29 out of 30) are located in North America. Approximately one-quarter of total North American gas production in 2024 was certified, including 27% (290 bcm) of total US gas production and 18% (27 bcm) of total Canadian gas production. This includes production from several major gas operators, such as ExxonMobil, EQT, Expand Energy, Ascent Resources and BP. Several Canadian operators (including ARC Resources, Pacific Canbriam, Petronas and Vermilion Energy) have achieved full certification of their Canadian upstream operations [under the EO100 standard](#). However, a number of the largest producers within North America (including ConocoPhillips, Devon and Oxy) have not certified any of their facilities (although these companies are members of OGMP 2.0). Certification also remains incomplete within company portfolios, with most operators choosing to certify certain facilities but not all.

As mentioned, one facility in Europe has received certification: National Grid's [Grain LNG import terminal](#) in the United Kingdom, which received certification

under MiQ in 2024.⁴ No European gas production site has been certified, but European gas importers have shown interest in purchasing certified gas. Examples include [a multi-year sales agreement](#) signed in 2022 between Southwestern Energy and the North American subsidiary of Uniper to supply certified gas for domestic and international distribution, [a 15-year sales agreement](#) signed in 2022 between Sempra and ENGIE S.A. for the supply for LNG sourced from certified upstream producers, and MiQ's [pilot collaboration](#) in 2024 with EQT and Uniper.

Volume of natural gas production in the United States and Canada, 2024



IEA. CC BY 4.0.

Note: Certified production includes natural gas certified under MiQ, EO or Project Canary's TrustWell programme. Trustwell is included as some customers retain active certificates, despite the standard being discontinued for new customers.

⁴ Prior to its discontinuation for new customers in 2024, Project Canary had certified one facility in the United Kingdom belonging to Kellas Midstream.

3. Limitations of current natural gas certification

Inconsistencies in robustness, integrity and transparency

There are currently no common criteria for certification and each certification programme is free to determine its own methodology for assessing facilities. Some certification programmes have faced scrutiny regarding the independence of their verification processes and the transparency of their methodologies. For example, Project Canary's Trustwell Standard relied on [internal Project Canary auditors](#) to conduct verifications, giving rise to a [perception of conflict of interest](#). This has undermined some of the trust in gas certification schemes. In February 2024, [seven US Senators wrote to the Federal Trade Commission](#) expressing concerns that certified natural gas could serve as a “greenwashing scheme” and requesting that the Commission investigate certification bodies for false or misleading practices.

Central to efforts to boost credibility is to enhance transparency surrounding certification standards and assessment findings. While the MiQ and EO standards are publicly available on each programme's website, other certification programmes only include [partial disclosure of the standard](#) – preventing consumers, regulators and the broader public from understanding what criteria the gas was examined against. Disclosure of assessment findings is also varied. Currently, as mentioned, EO publishes [summary reports for all certified sites](#) on its website. However, MiQ does not require public disclosure of achieved ratings, letting operators decide whether or not to publish achieved ratings. Data collected under OGMP 2.0 and CLEAN are confidential, with disclosure only upon consent from relevant companies. Regulators and gas buyers could require or at least encourage companies to report on methane intensities and certification grades or assurance processes as part of their corporate reporting.

Confidence in gas certification also hinges on the credibility of underlying MRV systems. Market actors can strengthen these systems by supporting harmonisation of measurement, monitoring and quantification methodologies and engaging with recognised standard-setting bodies.

Measurement-based information is encouraged but not universally required

Another issue for certified natural gas concerns the reliability of methane emissions reported at certified facilities, as existing standards give considerable latitude in deciding how to quantify these emissions.

Currently, most certification programmes require operators to quantify emissions through emission factors (EFs). Direct methane emissions measurement and bottom-up/top-down reconciliation is encouraged – with operators incentivised to deploy measurement technologies to improve the accuracy and representativeness of quantified emissions, but not always required.

Both EO and MiQ require operators to demonstrate the existence of practices and technologies to minimise and prevent methane emissions. MiQ's standards further require that operators provide evidence of monitoring technology deployment and that they reconcile bottom-up inventories with detected emissions; however, the standards require a measurement-informed inventory only for the highest grades. EO requires operators to report the facility's methane intensity using [NGSI's calculation methodology](#), while the facility's GHG emissions intensity must be reported using [EO's methodology for quantifying carbon intensity](#) (or an equivalent methodology). Both methodologies rely primarily on generic EFs rather than direct measurement.

Inventories based solely on EFs often [underestimate methane emissions](#), particularly from high-emitting sources. Measurements from satellites and airborne observations suggest that actual emission levels are often higher than reported (e.g. in [Europe](#) and [South America](#)). EFs can also [overestimate methane emissions from low-emitting sources](#). Reliance on EFs to calculate methane intensities at facilities or along supply routes risks [undermining confidence](#) that the certificates issued reflect actual emissions levels. It can also complicate the ability of certification programmes to serve as a tool to demonstrate compliance with importing requirements such as the EU Methane Regulation, which requires upstream producers to report intensity based on EU-equivalent MMRV standards.

Standards should also ensure that they cover all relevant sources and facilities for an entity or supply route looking to be certified. Standards that allow operators to choose specific areas only – for example individual well pads – can create perverse incentives by encouraging operators to self-select their best-performing facilities and [ignore emissions from worse-performing areas](#). Even if only gas produced at certified well pads would be eligible to be marketed as “certified natural gas”, this can mislead buyers and other stakeholders and undermine the credibility of the certification. [MiQ and EO do not allow operators to certify](#)

[individual well pads](#), instead requiring operators to include all interconnected gas operation sites.

Fragmented landscape of voluntary initiatives, hindering comparability

Several certification schemes have emerged in recent years. These often have different focuses and methodologies. The divergence in scope and grading approaches can create confusion for buyers and other stakeholders, [who may struggle to understand](#) how the company is being assessed and how well it is performing. The emergence of other corporate reporting initiatives and supply chain protocols – such as OGMP 2.0 and CLEAN – can add to this confusion, as buyers and stakeholders seek to understand how these various initiatives relate to or differ from one another.

Inconsistent standards and grading approaches can also hurt international gas purchasers' ability to understand how different supplies of certified natural gas compare to each other. This lack of comparability is exacerbated by the absence of any certified upstream facilities outside North America, which makes it difficult to compare natural gas produced in North America with natural gas produced elsewhere. This highlights the importance of establishing agreed-upon standards and processes, including in support of regulatory requirements, such as the EU Methane Regulation.

Partial coverage of GHG emissions along the natural gas supply chain

Of the 30 facilities certified under MiQ and EO, 27 are in the upstream segment. While both MiQ and EO have developed standards for the downstream segment of the natural gas supply chain, the incentives for downstream operators to certify are weaker since they often do not own the gas they handle.

The limited adoption of certification beyond the upstream segment means that natural gas is often certified as having been produced with low GHG emissions but may then be processed, transported, stored and distributed with high GHG emissions. This is also relevant for LNG liquefaction and shipping, [which account for a large proportion of the full emissions intensity of LNG supply](#).

Additionally, certification programmes and corporate reporting initiatives have so far mostly focused on scope 1 methane emissions. Methane accounts for most of the natural gas sector's total scope 1 GHG emissions. However, accurately assessing the GHG footprint of delivered natural gas requires a holistic approach that incorporates all GHG emissions. Options are available to include other GHG

emissions within the scope of a certificate; MiQ, for example, has published a

[Carbon Intensity Standard](#) to enable calculation of CO₂ emissions from certified facilities and EO has published a [Greenhouse Gas Intensity Quantification Methodology](#).

Uneven adoption across countries and companies

Although natural gas certification is a relatively new phenomenon, the limited rate of adoption of certification outside North America and across companies suggests a lack of clear incentives for certification. In some countries, this may be due to prevailing regulations on GHG emissions from gas operations. For example, Norway banned non-emergency flaring in 1971 and imposed a tax on natural gas venting and flaring in 2015. In this context, natural gas buyers might consider certification less critical, instead finding it sufficient to obtain Norwegian proof-of-origin.

Nevertheless, in many places, regulations are missing and there are a number of avenues to catalyse better performance through the use of natural gas certification. For example, LNG importers and utilities could embed certification criteria into their procurement strategies. Utilities, including those that are state-owned or subject to regulatory sustainability and emissions reduction mandates, can consider certified natural gas when contracting new supply. They can also be encouraged to offer the option of certified gas to interested downstream buyers (which may command an additional premium). Policy makers can further support market development by promoting certified gas in public tenders.

Private financiers, insurers and other market participants can complement public policy by aligning capital flows, underwriting standards and commercial incentives with certified low-emissions gas production. Financial institutions can embed certification status into their investment screening, lending decisions and insurance underwriting. This may include setting minimum methane intensity thresholds, requiring independent verification, or prioritising certified assets in ESG-oriented portfolios. Instruments such as transition-linked loans can also link interest rates to certification milestones or methane performance targets, while transition bonds can support capital upgrades to reach the standards required by certification schemes and enhance performance relative to industry benchmarks.

Other purchasers of natural gas could also opt for certified gas. For example, many technology firms and data centre operators have committed to reducing their environmental footprint and they could help establish a market premium for certified natural gas. Even buyers who do not foresee a long-term role for natural

gas in their energy mix could be interested in sourcing certified gas with lower scope 1 and 2 emissions to obtain climate benefits in the interim.

For industrial users, certified natural gas may be an effective tool to reduce the GHG intensity of their operations and products. This is particularly relevant for sectors that use natural gas as a feedstock, such as the methanol, ammonia and fertiliser industries, where emissions from the natural gas supply chain can represent a substantial share of their overall GHG emissions footprint.

4. Policy recommendations

To address the issues identified in the previous chapter, the IEA has identified four broad policy actions that governments can pursue to drive progress in natural gas certification.

Collaborate internationally to harmonise voluntary initiatives along the full supply chain

The landscape of voluntary natural gas initiatives is currently fragmented, with inconsistent methodologies, scopes and criteria. This fragmentation not only reduces comparability and reliability but also risks weakening credibility. In parallel to this, certification programmes have been applied mostly to methane emissions and upstream facilities, with limited coverage of other GHG emissions and other parts of the natural gas value chain.

Countries can collaborate to harmonise voluntary initiatives and set common minimum standards for measuring and reporting GHG emissions along the entire natural gas value chain. Key areas of harmonisation include emissions measurement and quantification methodologies; data quality assessment; facility boundaries; GHG intensity calculation methodologies; co-product allocation methodology; global warming potential timeframe (20-year vs. 100-year); criteria for accredited independent third-party verification; and reporting standards. This can be achieved by leveraging existing frameworks, such as MiQ and EO. One key attempt to do this is the [International Working Group to Establish a Greenhouse Gas Supply Chain Emissions Measurement, Monitoring, Reporting, and Verification \(MMRV\) Framework](#).

Maintaining momentum on the creation of a common measurement and reporting framework, including in G7 and G20 discussions, can help gas market participants trade gas based on its GHG intensity. A globally-accepted MMRV framework – with a common governance structure and interoperable digital infrastructure – can improve tracking of GHG emissions, reduce buyer confusion, facilitate comparability of gas supplies and enhance confidence in reported emissions – potentially paving the way toward price premiums for low-intensity natural gas. A global framework developed and endorsed by governments can also send a strong signal to market participants and increase the likelihood that suppliers and buyers will incorporate the framework's standards into commercial transactions. The G7, which includes both major gas producers (Canada, the United States)

and important gas consumers (France, Germany, Italy, Japan, the United Kingdom), can serve as an effective forum to continue discussions on a unified MMRV framework.

The International Measurement, Monitoring, Reporting and Verification (MMRV) Working Group

Currently still under development, the MMRV Working Group seeks to develop a global MMRV framework for GHG emissions across the international natural gas supply chain. [Launched in November 2023](#), this global framework is intended to provide gas market participants with comparable and reliable information on GHG emissions and GHG intensity from pre-production through delivery, allowing differentiation of natural gas supply chains according to GHG emissions. Key elements of the proposed global MMRV framework include:

- Building upon existing initiatives – such as OGMP 2.0 – to establish consistent technical criteria for reporting emissions and assessing GHG intensity, with measured data preferred over modelled data.
- Developing consistent and transparent data tools for calculating and reporting GHG emissions, including data quality indicators.
- Establishing an accreditation process to confirm that verification bodies are verifying information in accordance with the MMRV framework, are independent from reporting entities and are qualified to conduct verifications.

Countries that participate in the MMRV Working Group do not commit to introduce regulatory standards in line with the framework. Instead, the MMRV framework is intended to be a consensus-based standard that buyers and sellers will be able to use on a voluntary basis. The framework is being developed by a Working Group comprised of government officials, supported by a Technical Group of technical government staff. In October 2024, the US Department of Energy [announced](#) that the Working Group had reached consensus on a design architecture for the future MMRV system.

Establish minimum standards for certification to ensure credibility and robustness

To boost confidence in certified natural gas, certification should be subject to certain minimum requirements. These could include:

- A clear and transparent set of criteria that are based on a methodology that is publicly accessible.

- Publicly disclosing ratings on the environmental performance of assessed gas supplies.
- Ensuring that the assessment is carried out by an accredited independent third-party verifier with proven expertise in GHG emissions management. To reduce potential conflicts of interest, the verifier should be independent from the operator, the entity issuing the certificate and the technology provider. Verifiers can also be subject to a maximum duration over which they can verify any single operator, reducing the risk of capture by assessed operators.
- Basing assessments on robust MMRV that is grounded on direct measurements to ensure that actual GHG emission levels are aligned with reported emission levels. Standards should also support active mitigation, such as detecting and fixing leaks.
- Where possible, assessments should cover all interconnected natural gas operation sites within a single operating basin, preventing gas operators from certifying only “best-in-class” assets and disregarding higher-emitting assets.

Governments have several tools at their disposal to ensure that certification programmes comply with such minimum requirements. Most countries have legislation in place that penalises fraudulent and misleading claims. In many countries – including [Australia](#), [France](#), the [United Kingdom](#) and the [United States](#) – regulatory authorities have released guidelines on environmental claims. Some jurisdictions – for example [Canada](#) – have also enacted specific legislation to regulate environmental claims and prevent misleading information.

Governments can build upon these existing rules to set minimum requirements regarding natural gas certification. Claims such as “certified natural gas” or “low-intensity gas” could be made conditional on demonstrating compliance with the minimum criteria set out above. In establishing such minimum requirements, lessons can be learned from other fuels (such as liquid and gaseous biofuels), which already operate under several regulatory and voluntary frameworks around the world. To maximise effectiveness and ensure consistency across jurisdictions, countries can collaborate with each other in setting global minimum requirements for natural gas certification.

Integrate certification into market-based and buyer-driven incentive frameworks

Governments can foster greater adoption of certification through public procurement and targeted measures to unlock private sector demand and financing. In many countries, gas and electric utilities are publicly owned and governments can require or at least encourage these utilities to purchase certified natural gas. For example, in California, [legislation was proposed](#) in February 2025 that would encourage state agencies to prioritise strategies to reduce methane

emissions associated with natural gas imported into the state. The bill would also require California's Air Resources Board to promote the purchase of certified natural gas.

Governments can also encourage privately-owned utilities to prioritise procurement of certified natural gas. For example, in the United States, the [Tennessee Natural Gas Innovation Act](#) allows utilities to seek authorisation from the Tennessee Public Utilities Commission to recover costs related to procuring certified natural gas. In 2024, the New York Public Service Commission [approved a pilot programme to allow Con Edison \(New York's main gas utility\) to recover costs associated with purchasing certified natural gas](#).

Governments can foster the purchase of certified natural gas by large energy buyers, particularly LNG importers and public utilities, by including requirements in procurement strategies and contracts. They can also enable financial institutions and insurers to integrate certification into investment and underwriting decisions through the development of common methane intensity benchmarks, accreditation and independent third-party verification and sustainable finance instruments.

A high-level collective pledge on procurement of low-GHG intensity natural gas, with quantitative and time-bound commitments for action – [as is being developed for steel and cement procurement](#) – can provide greater visibility for market players and set the foundations of a market for certified natural gas.

Clarify the role of certification in supporting compliance with emerging methane regulations

Some natural gas-importing countries are implementing measures to address methane emissions associated with imported fossil fuels. Regulators can help companies looking to comply with existing requirements by providing guidance on how certification standards can be used to meet these requirements. In developing and implementing regulations, policy makers can also consider how certification might play a complementary role and help accelerate action toward policy goals.

General annex

Abbreviations and acronyms

CO ₂	carbon dioxide
CO ₂ -eq	carbon dioxide equivalent
CLEAN	Coalition for LNG Emissions Abatement toward Net Zero
EFs	emission factors
ESG	environmental, social and governance
GHG	greenhouse gas
GWP	global warming potential
JOGMEC	Japan Organisation for Metals and Energy Security
LNG	liquefied natural gas
MRV	monitoring, reporting and verification
MMRV	measurement, monitoring, reporting and verification
OGMP 2.0	Oil and Gas Methane Partnership 2.0
UNEP	United Nations Environment Program

Glossary

bcm	billion cubic metres
Gt	billion tonnes
MJ	megajoule
Mt	million tonnes

See the [IEA glossary](#) for a further explanation of many of the terms used in this report.

International Energy Agency (IEA)

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