



**SETTING THE  
STANDARD**  
FOR METHANE  
EMISSIONS  
ABATEMENT

MiQ  
DECEMBER 2020

**#TimeToAbate**

# SETTING THE STANDARD FOR METHANE EMISSIONS ABATEMENT



INTRODUCING MIQ, DECEMBER 2020

**THE FUTURE MUST BE POWERED BY 100% CLEAN ENERGY. OUR MISSION IS TO REDUCE THE CLIMATE IMPACT OF METHANE EMISSIONS FROM THE OIL AND GAS SECTOR UNTIL WE GET THERE. #TIMETOABATE**

## Introduction

MiQ is an independent, not-for-profit partnership between **Rocky Mountain Institute** and **SYSTEMIQ** aiming to facilitate a rapid reduction in methane emissions from the oil and gas sector.

Many of the tools and methods needed to substantially reduce methane emissions in the oil and gas industry already exist. **We have designed a certification system** which, adopted at scale, will create a differentiated market for natural gas for buyers and sellers. This system will create the pricing signals for the sector to invest in abatement technology and practices enabling the significant methane reductions necessary to support global climate targets.

MiQ Certification will be assessed against the MiQ Standard. The Standard goes beyond simple emission factors, to bring rigour across three metrics for methane emissions management in an independent and third-party audited system. The Standard is compatible with existing voluntary schemes as well as regulatory frameworks, and will evolve as technologies and best practices improve.

## Why methane abatement?

The science is clear - we need to achieve net zero emissions by 2050 to limit global warming to 1.5 degrees celsius and avoid the worst impacts of climate change. This means that we have to fundamentally redesign and radically transition our energy systems to emit little to no carbon, and soon. This requires an all hands on deck strategy - scaling renewable energies and other critical technologies like never before, and phasing out fossil fuels as soon as we can in most, if not all, end uses. We've made some progress, thanks in large part to scientists, climate change activists, governments, and the energy industry, but we still have a long way to go.

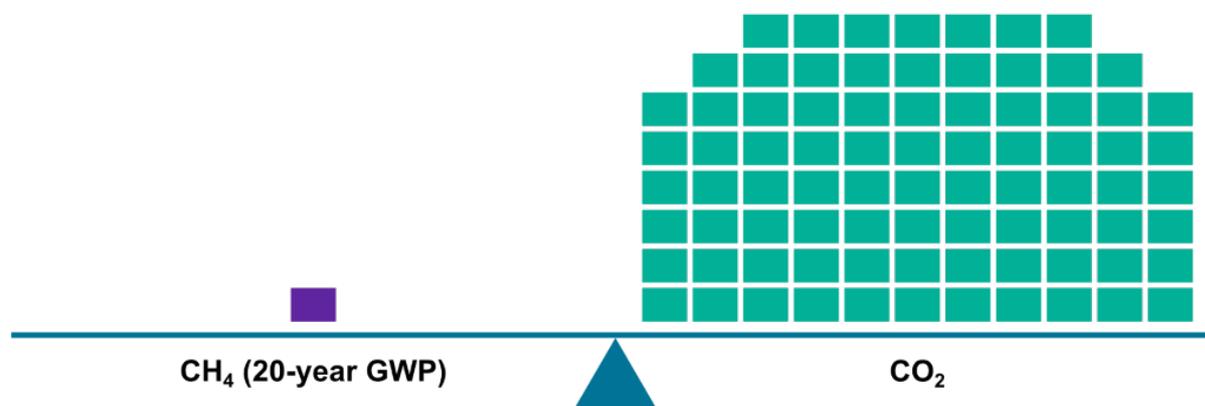
Until sustainable alternatives to natural gas are available at scale and our energy infrastructure is redesigned away from fossil fuels, we need to ensure that the gas we do use has a minimal climate impact, especially in terms of its methane emissions footprint. It is vital that we dramatically and urgently reduce methane emissions in the oil and gas sector to make the transition as clean as possible.

Methane, the primary component of natural gas, is a much more powerful climate pollutant than CO<sub>2</sub> when it is leaked into the atmosphere but only persists for about a decade.<sup>1</sup> This makes it a critical and opportune target for climate change mitigation in the short term.

Catalysing efforts to reduce methane emissions is necessary to help slow global temperature rise, buying time for climate change mitigation solutions to mature. Globally, human-made methane emissions increased by 1.3 percent every year for the last decade, and by 1.7 percent in 2018 alone.<sup>1</sup>

The oil and gas industry alone emits over 84 million tons of methane each year.<sup>2</sup> This equates to the emissions from the world's on-road transport fleet or more than the entire industrial sector's CO<sub>2</sub> emissions.<sup>3</sup>

### Methane: 84 times as potent as CO<sub>2</sub>



The impact of global methane emissions is often underestimated or overlooked due to the focus on net-zero CO<sub>2</sub> goals. However, methane's substantial effect on global temperature rise means we must act quickly to reduce methane emissions in addition to CO<sub>2</sub>.

Reducing methane emissions can be relatively simple. There are well-established technologies, policies, and procedures that can enable huge emissions reductions with little to no added net cost. According to the IEA, 75% of methane emissions from oil and gas production can be technically abated today and 40% can be done at no net cost to companies.<sup>4</sup> This is equivalent to the reductions in CO<sub>2</sub> emissions that would be achieved if we immediately shut down 60% of the world's coal-fired power plants and replaced them with zero-emissions generation.<sup>5</sup>

The evidence from other industries, such as the European Guarantee of Origin (GoO) scheme for tracking electricity generation from renewable sources, shows that better incentives and accountability frameworks can drive positive change.<sup>6</sup> In the oil and gas sector, improved systems for accountability can play a significant role in reducing global GHG emissions.

### The need for market-based certification

Regulation is crucial to reduce methane emissions in the energy sector, but regulators in the major oil and gas import and production regions have yet to implement a comprehensive legislative solution to this urgent problem.

The European Commission's initial Methane Strategy demonstrates that the EU is taking steps in the right direction, and we welcome proposals to improve the transparency of emissions reporting through OGMP 2.0.<sup>7</sup> However, it falls short of introducing a legislative framework that can stimulate the necessary methane reductions.

History demonstrates that the process of regulation is complex and often prolonged, and with the global temperatures continuing to rise at alarming levels, there is no time to waste.

Crucially, even supranational regulators such as the EU face geographical limitations in reach. Conversely, a market-based certification system is global and can be quickly adopted by oil and gas producers around the world and therefore has the potential to be more effective than regulation on its own.

One key advantage of a globally applicable certification system is that it enables all oil and gas producers to be assessed according to the same universal standard. This means there is an international level playing field, in which operators' gas production is awarded a grade based on the efficacy of their methane abatement mechanisms according to the same rules regardless of geographical location.

A market-based certification can differentiate the gas market based on methane emissions performance and, therefore, generate different price levels which create an economic incentive for companies that are lagging behind to invest in upgrades to reduce methane emissions.

An independent standard will also enable climate-conscious producers, regulators, and end users to credibly demonstrate methane abatement to consumers and investors.



We have developed the first version of the MiQ Standard with input from oil and gas operators, natural gas buyers, and environmental stakeholders. The MiQ Standard has been designed to deliver across five key principles:

- **Credibly characterise the methane emissions performance of gas** - Emissions factors alone cannot credibly differentiate gas. In order to claim methane emissions performance, operators must demonstrate that their emissions are managed not only on average and in theory, but also consistently and in practice. Therefore, the standard grading system equally weights methane intensity, monitoring technology deployment, and policies and procedures for methane management. It is critical that this standard evaluates operators on an apples-to-apples basis, while continuously pushing the bar toward measured and quantified emissions to minimise uncertainty in reported figures.
- **Be compatible with both a voluntary system and future regulatory frameworks** – In a voluntary market, gas certified in accordance with the MiQ Standard will attract climate conscious gas buyers. In a regulatory framework, a certain minimum certification grade could serve as the lowest acceptable bar for performance of production, or alternatively a certification could be the bar for entry into a market. Certification can serve both cases, and is compatible with existing and future regulatory frameworks, as well as international best practices.
- **Apply universally** - Oil and gas production occurs around the world, and oil and gas markets are fundamentally global, especially considering LNG. We need a system that can be applied everywhere to track emissions performance. Certification is not bound by jurisdictions and the Standard can be applied anywhere. This is particularly valuable in regions like the EU, which imports approximately three-quarters of its natural gas and is the largest net importer of natural gas. A universal certification will be more effective than conventional national or even EU-wide regulation in ensuring that gas exporters to the EU—including the US, Russia, Algeria and Qatar—also mitigate and reduce their emissions. In any framework, voluntary or regulated, the tiered structure of the Standard serves to improve the accountability and transparency of the gas industry as a whole, while also incentivising the highest performers to outperform the status quo.

- **Guarantee credibility, transparency and flexibility** - The credibility of a standard requires a combination of independence from, but pragmatic compatibility with, industry. We are working with the industry to develop a framework that will work today, but that doesn't mean companies will assess their own performance. Each certification will be independently audited and verified by an established and trusted auditor with in-depth expertise in methane emissions management, calculation, and monitoring. Fundamentally, it's critical that both the supplier and buyer understand and trust the process. The Standard will be fully transparent, with publicly available requirements, assessment process, and end grade. It will evolve to incorporate developments in methane abatement technology and best practice.
- **Generate differentiation** – The certificates issued with each batch of gas need to grade a facility's methane emissions performance. The spectrum of grades from A to F incentivises continuous improvement – both in emissions reductions and in methods that bring more and more transparency around the industry - and creates an opportunity for operators to differentiate themselves in the market relative to their peers.



MiQ is engaged with key stakeholders from the oil and gas industry, academia, regulators, and NGOs to develop a standard that can incentivise significant emissions reductions today, but that will also continually improve as ambition, best practices, and technologies evolve in order to enable the largest possible emissions reductions going forward.

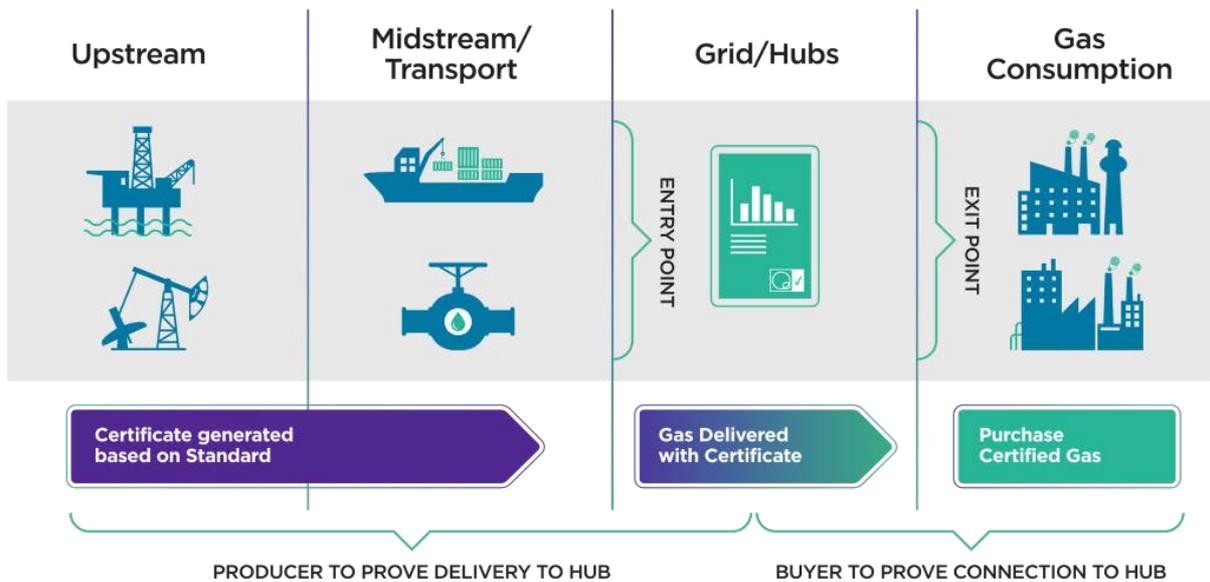
MiQ Certification is voluntary, but is also compatible with developing regulation. It is aligning with the United Nations Climate and Clean Air Coalition's OGMP 2.0 methane emission reporting framework.<sup>8</sup>

**The MiQ Certification is designed to bring critically additional transparency and accountability to methane emissions management by requiring oil and gas producers to:**

1. disclose their methane emissions intensity at a facility level;<sup>ii</sup>
2. deploy methane monitoring technology; and
3. implement company practices that prioritise emissions abatement.

The MiQ Standard ensures that methane emissions performance is verified by independent expert third-party auditors and is indicated on certificates that travel along with the supply of gas, assuring buyers that it is differentiated based on its upstream methane emissions footprint.

## The MiQ Standard: Deployment



The MiQ Standard leverages, and will continue to leverage, the critical work of many other organisations. This includes the voluntary emissions reporting framework created by the United Nations Environment Programme's Oil and Gas Methane Partnership (OGMP), the best practices outlined by the Methane Guiding Principles (MGP) partnership and The United Nations Economic Commission for Europe (UNECE), and methane science studies conducted by the Environmental Defense Fund (EDF) and the broader academic community.

MiQ is a practical standard for demonstrating effective methane emissions management, today. But it won't remain static - the MiQ Standard will be continually updated to remain ambitiously compatible with methane monitoring and quantification technologies, digital data validation, industry best practices, and the future of our energy system.

### #TimeToAbate

#### INTRODUCING MIQ FOR MORE INFORMATION VISIT: [MIQ.ORG](https://miq.org)

<sup>1</sup>Methane is 84 times more potent than carbon dioxide in a 20 year timeframe (IPCC AR5).

<sup>2</sup>An onshore facility is the sum of a company's operations in a basin, and an offshore facility is a single platform or platform complex.

<sup>3</sup>[UNEP Emissions Gap Report 2019.](#)

<sup>4</sup>[IEA Methane Tracker 2020.](#)

<sup>5</sup>[IEA Data and statistics.](#)

<sup>6</sup>[IEA Methane Tracker 2020.](#)

<sup>7</sup>[IEA Methane Tracker 2020.](#)

<sup>8</sup>[Directive \(EU\) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources, 55-59.](#)

<sup>9</sup>[European Commission, EU strategy to reduce methane emissions, COM\(2020\) 663 final \(2020\).](#)

<sup>10</sup>[UNCCAC and UNEP, The CCAC Oil & Gas Methane Partnership \(OGMP\).](#)