



The Methane Guiding Principles

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The case for managing methane emissions



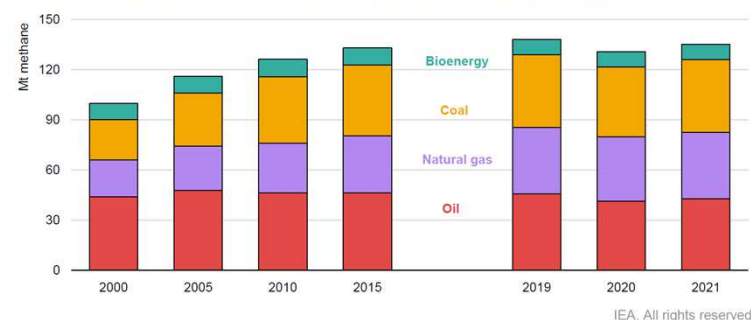
- Natural gas has an important role to play in the transition to a low-carbon economy
- The environmental case relies on management of methane losses across the value chain
- Methane is a powerful greenhouse gas, with around 84 times the GWP of CO₂ over a 20 year period

Emissions from oil and gas represent the largest source of industrial methane

Abatement technologies exist and can be implemented now. In some cases costs are recouped by the gas saved.



Global methane emissions from the energy sector over time, 2000-2021



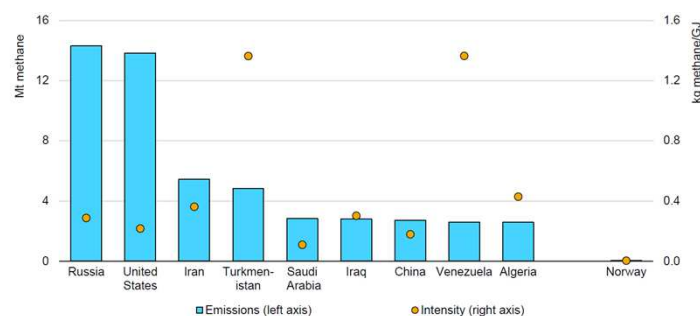
The case for managing methane emissions



- Growing scrutiny from the public, environmental groups and policymakers
- If all countries were to perform as well as Norway, global methane emissions from oil and gas operations would fall by more than 90% (IEA Global Methane Tracker, 2022)



Total methane emissions and methane intensity of production in selected oil and gas producers, 2021



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The case for managing methane emissions



- PARIS AGREEMENT – International consensus that business must incorporate a fundamental pivot toward a lower-carbon world. COP26 saw the launch of the Global Methane Pledge.
- Oil and gas industry has the capital and governance to tackle methane emissions and is clearly in the sights of governments looking to meet their commitments.
- Demand from investors and from customers for action, and growing regulation.

In 2020 a major French utility, under pressure from the French government, backed out of a \$7 billion LNG import deal over concerns on methane emissions.



EDF Energy Program @EDFEner... +5d ...
Investors representing \$5.35 trillion in assets are calling for federal **methane regulation**.

Recent @ilissaacko research finds quick action on **methane** can slow rate of warming by 30%, and @UNEP study shows we can #CutMethane by 45% this decade.



Major investors demand ambitious methane regulations in the U.S. | Ceres ceres.org



Methane Guiding Principles



Overview

MGP Mission Statement

- A voluntary, international multi-stakeholder partnership between industry and non-industry organisations. It has a focus on priority areas for action along the natural gas supply chain, from production to the final consumer.

The 5 Guiding Principles – At-a-Glance

- Continually reduce methane emissions
- Advance strong performance across gas value chains
- Improve accuracy of methane emissions data
- Advocate sound policy/regulations on methane emissions
- Increase transparency



Signatories and Supporting Organisations



Expectations of Members



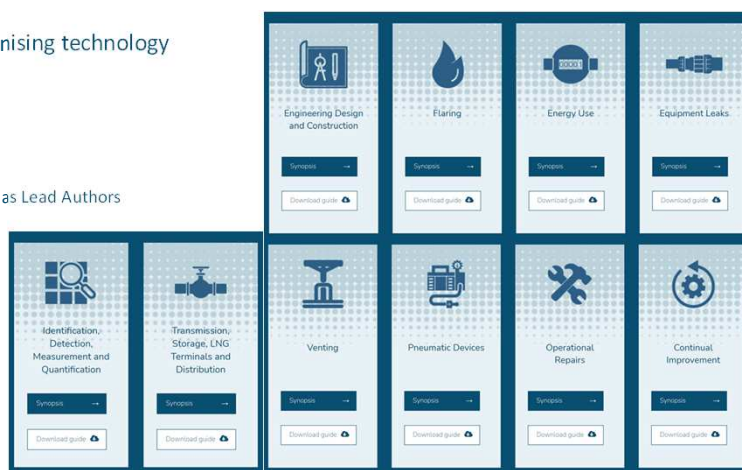
- Signatories commit to progressing the five Methane Guiding Principles.
- Signatories will publicly report on how they are meeting the intent of the Methane Guiding Principles.
- Each Signatory and Supporting Organisation will support at least one project annually, in-kind and/or financially, that will be publicly reported.
- Any relevant outputs from completed projects will be made public, where appropriate and via relevant channels.



Best Practice Guides



- Designed to support methane emissions management across the natural gas supply chain
- Provide consistent, accurate guidance recognising technology developments
- Developed by experts:
 - Matt Harrison from SLR International Corporation and
 - Professor Dave Allen from University of Texas (Austin) as Lead Authors
- Reviewed, supported by members



MGP Resources



- The **Gap Assessment Tool** enables organisations to carry out a self-assessment of the completeness and maturity of their existing methane management arrangements based on a simple scoring system. Gaps in current arrangements can be identified, so that improvement measures can be developed.
- A **Policy Framework** sets out the key elements that would form an effective policy framework focused on ensuring ambitious methane reduction outcomes are met. It is intended to provide a foundation upon which jurisdiction-specific regulatory recommendations could be based.
- The **Methane Cost Model** provides the user with a screening tool to identify and evaluate potential methane reduction projects across the natural gas supply chain. The model can be used for the early design phase of a project as well modifications to existing operations.

For all yellow cells, please select the appropriate information from the drop-down menu

Natural Gas Segments to Include in Assessment	
☐ Onshore Production	☐ Gathering and Boosting
☐ Offshore Production	☐ Processing
	☐ Transmission
	☐ Storage (Underground and LNG)
Go	
Inputs	
General Inputs	
Currency Units	\$ (Dollar, Peso)
Exchange Rate (1 USD equals)	
Units	US
Cost of Carbon (\$/Ton CO ₂ e)	
Natural Gas Price (\$/MMBtu)	
Offshore Production	
LDAR Program in place?	
Number Offshore Platforms	
Transmission	
LDAR Program in place?	
Number of Compressor Stations	



MGP Resources



- The **MGP Global Outreach Programme** comprises of two courses: An Executive Course and a Masterclass designed to improve awareness and know-how on managing methane emissions. Available through F2F and virtual delivery mechanisms, with an e-learning under development.
- A **Methane from Flaring Tool** will launch in May 2022. By asking questions about the user circumstances, the tool points users towards technologies and techniques to measure flare volumes and compositions, identify when a flare has a problem, and determine combustion efficiency.



Methane from flares the largest methane source in many assets

DESTRUCTION EFFICIENCY

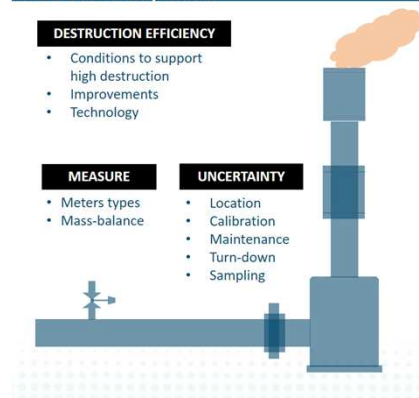
- Conditions to support high destruction
- Improvements
- Technology

MEASURE

- Meters types
- Mass-balance

UNCERTAINTY

- Location
- Calibration
- Maintenance
- Turn-down
- Sampling



Secretariat



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METHANE
GUIDING
PRINCIPLES