



METHANE
GUIDING
PRINCIPLES

Methane Guiding Principles Signatory Reporting

QatarEnergy

January 2023



COMPANY: **QatarEnergy**

YEAR OF JOINING METHANE GUIDING PRINCIPLES: **March 2018**

SENIOR REPRESENTATIVE: **Ahmad Saeed Al-Amoodi**

Principle One:

Continually reduce methane emissions

- Please state what specific activities or projects your company has undertaken to reduce methane emissions. Please refer to the previous year's annual MGP reporting where applicable to refer to intended activity. Link to sustainability report where relevant to provide further detail.
- Describe how the reduction was achieved including description of the asset type, technology type, timeframe. What was the end result?
- Provide data to support your description e.g. the actual amount of emissions reduction achieved, or the reduction in methane intensity.

| 2022 completed activity | 2023 intended activity |
|--|---|
| <p>QatarEnergy is committed to tackle and reduce methane emissions throughout all stages of the natural gas value chain and all facilities, with a particular focus on the implementation of methane Leak Detection And Repair (LDAR) programs across QatarEnergy and its affiliates.</p> <p>In 2022, QatarEnergy operated assets started a program to build an inventory and execute LDAR surveys across all four (4) operated assets (Dukhan, Offshore, NGL Complex and QatarEnergy Refinery) to quantify and reduce fugitive methane emissions. Additionally, guidance documentation was developed and implemented to identify and repair leaking equipment and calculate and report accurate fugitive methane emissions.</p> <p>Our operated and non-operated assets are currently using Optical infrared Gas Imaging (OGI) cameras for leak detection and TVA monitoring instrument for leak quantification.</p> <p>QatarEnergy's GHG emissions management approach over the years has consisted of developing a sound understanding of its GHG emissions inventory and its potential impact, preparation of comprehensive GHG emissions inventories, development of proactive GHG management procedures and plans, and corporate GHG KPIs that supports our climate resilience strategies.</p> <p>QatarEnergy maintains a GHG management program which involves GHG emissions quantification (including methane), verification and implementing plans to reduce GHG emissions.</p> | <p>QatarEnergy will continue to test and deploy new and existing technologies for methane emissions detection and quantification including the use of UAV aerial surveys such as drones to detect methane emissions.</p> <p>QatarEnergy plans to increase frequency of monitoring with FLIR camera and TVA instrumentation with focus on higher risk areas.</p> |

Principle Two:

Advance strong performance across the gas supply chain

Please include answers to the following questions:

1. Did you participate in any methane research or plan to do so?
 2. Did you conduct any outreach on methane management?
- Describe what action you have taken to engage industry players across the value chain to better understand how to achieve robust methane emissions management. Outreach activity could include training sessions, participation in webinars, influencing of NOJV partners, or publication of guidance. Activity could also include commercial incentives or engagement with investors to drive better performance by others.
 - Provide details of any outcomes that resulted from your action.

| 2022 completed activity | 2023 intended activity |
|--|--|
| To help in our goals to reduce methane emissions across the value chain, QatarEnergy has provided webinars to our Operated Assets on methane emissions management in the Oil & Gas industry. | <p>QatarEnergy plans to continue the collaboration with all Operators in Qatar to leverage our existing collective experience and use best international practices for methane emissions monitoring and reduction.</p> <p>QatarEnergy will participate in the 'Midstream Initiative' along with other MGP members. Midstream and downstream operators will jointly pursue methane reduction across global natural gas value chains. The aim is to create an agenda of tangible action in service of the Global Methane Pledge and support reducing methane emissions by 30% by 2030.</p> |

Principle Three:

Improve accuracy of methane emissions data

- Describe action taken to improve methane emissions data collection methodologies. This could be application of new technology at an operated site(s), investment and participation in R&D initiatives, development of monitoring/modelling software, or support to research that improves the accuracy of the quantification of methane emissions.
- Where new technology /software has been piloted or adopted, it is helpful to describe how it works, the reasons it was selected, and how it was deployed. Any data that can be shared to demonstrate improvements is useful.
- How these new methods/technologies has been adopted into your accounting process if at all.

| 2022 completed activity | 2023 intended activity |
|--|---|
| <p>QatarEnergy has implemented programs dedicated to improve knowledge on measurement, detection and quantification of methane emissions, and to accelerate the implementation of new technologies for methane monitoring (e.g., remote detection, satellite, etc.). For instance, in 2021 QatarEnergy conducted remote satellite-based methane detection trials at one of our facilities with different vendors. Based on the tests done at our sites, a preferred vendor was selected. The technology used in these trials provided assurance that the site did not have any point emission larger than 100 - 250kg/h.</p> | <p>Continue implementation of the OGMP 2.0 principles as part of our commitment.</p> <p>QatarEnergy has a multi-year plan to deliver improvements in methane measurement. This includes the potential deployment of the source level measurement technologies as well as the site level measurement technologies to help reconcile/validate bottom-up data.</p> <p>QatarEnergy has plans to deploy new technologies to help us improve the accuracy of our methane emissions data.</p> <p>QatarEnergy will include 3rd party verification of its fugitive methane emissions added to the existing verification program that covers the other sources of emissions; combustion sources, flaring, venting and process emissions.</p> |

Principle Four:

Advocate sound policy and regulations on methane emissions

Advocacy consists of active participation in legal consultation processes, external policy statements, and direct engagement with government

- Consider providing details on the region or regulation involved, how you undertook your advocacy, others involved, and the outcome.

| 2022 completed activity | 2023 intended activity |
|---|--|
| <p>QatarEnergy was part of the working group that supported the development of the Oil and Gas Sector Toolkit for the Global Methane Pledge. The toolkit supports countries in the development and implementation of national action plans to drive down oil and gas methane emissions. The Toolkit gathers all of the key resources in one place to help orient regulators to the landscape of materials and resources that are available.</p> | <p>QatarEnergy will continue advocating for methane policies and regulations that incentive early actions, drive improvement in company's methane performance, and support innovation.</p> |

Principle Five: Increase transparency

Please include answers to the following question:

1. Are you participating in OGMP 2.0 or do you intend to do so? If you are participating in OGMP 2.0 you may provide a link to the website.
 - Describe what activity you have carried out e.g. providing information in relevant external reports on methane emissions data, methodologies, and progress and challenges in methane emissions management.
 - If you have contributed towards the standardisation of comparable external methane reporting describe the activity you have taken.

| 2022 completed activity | 2023 intended activity |
|--|---|
| <p>QatarEnergy is a member of the the Oil & Gas Methane Partnership (OGMP 2.0) of the United Nations Environment Programme, which brings together industrial companies, governments and NGOs to better monitor and report methane emissions in order to reduce them.</p> <p>QatarEnergy supported the International Methane Emissions Observatory (IMEO) by providing data, as relevant to our OGMP 2.0 submissions and validation processes. For further info, a link to the IMEO 2022 Report is as follows: An Eye on Methane: International Methane Emissions Observatory 2022 Report UNEP - UN Environment Programme</p> <p>Our methane intensity data can be found in our 2021 sustainability report.</p> | <p>QatarEnergy will continue the implementation of programs to increase reporting accuracy and transparency of our methane emissions.</p> <p>QatarEnergy will continue reporting on its methane reduction initiatives and publish our methane emissions data and progress in our annual sustainability reports.</p> |

Methane Emissions

| | |
|---|--|
| <p>Do you report absolute methane emissions within your sustainability report?</p> <p><i>If so provide link.</i></p> | No |
| <p>Do you report a methane intensity within your sustainability report?</p> <p><i>If so provide link.</i></p> | <p>Yes. Please refer to our 2021 Sustainability Report.</p> <p>https://www.qatarenergy.qa/en/MediaCenter/Publications/QatarEnergy2021SustainabilityReport.pdf</p> |
| <p>What are your organisation's total absolute methane emissions?</p> <p>Provide a figure in tonnes.</p> <p>Provide latest data publicly available.</p> | Not applicable |
| State your methodology. | Not applicable |
| State your reporting boundary. | Not applicable |
| <p>What are your organisation's methane intensity?</p> <p>Provide latest data publicly available.</p> | <p>Please refer to our 2021 Sustainability Report.</p> <p>https://www.qatarenergy.qa/en/MediaCenter/Publications/QatarEnergy2021SustainabilityReport.pdf</p> |
| State your methodology. | Bottom-up (source specific) methodology; using meters, online Gas Chromatographs (GCs), Optical Gas Imaging (OGI) cameras and Toxic Vapor Analyzers (TVAs). |
| State your reporting boundary. | Operated and non-operated assets, 100% and equity share, respectively. |
| <p>Do you have a methane emission target?</p> <p>If yes, please state what it is, including the boundaries and methodology.</p> <p>If no, are you developing such a target? Please state your intended timeline.</p> | <p>QatarEnergy's methane emissions intensity target is 0.2 wt.% by 2025, including operated and non-operated assets (onshore and offshore).</p> |