



METHANE
GUIDING
PRINCIPLES

Methane Guiding Principles Signatory Reporting

Eni S.p.A.

January 2022



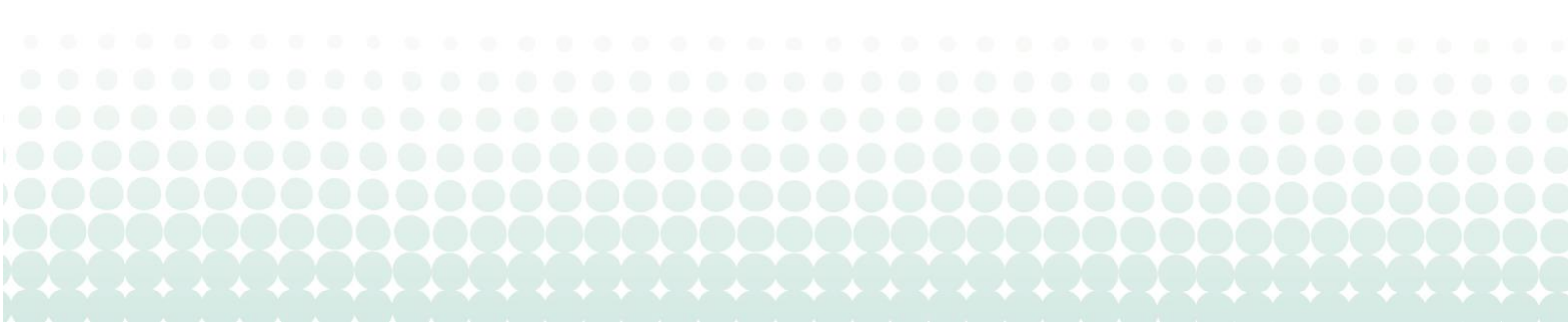


COMPANY: **Eni S.p.A.**

YEAR OF JOINING METHANE GUIDING PRINCIPLES: **2017**

SENIOR REPRESENTATIVE: **Rosanna Fusco, Head Climate Strategy and Positioning**

WORKING LEVEL REPRESENTATIVE: **Leonardo Gelpi, Climate Strategy and Positioning**



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.

2021 completed activity	2022 intended activity
<p>In 2020 the absolute Eni methane emissions decreased by 14,5% compared to 2019. The upstream methane emissions intensity (0,09% in 2020) decreased by 10% vs. 2019. Reduction have been achieved through the implementation of LDAR campaigns, covering more than 95% of assets (on a production basis).</p> <p>Our actions and commitment to achieve reductions in methane emissions, as well as performance achieved, are described and reported in the following public documentation:</p> <ul style="list-style-type: none"> • Eni For - Carbon Neutrality by 2050 Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf • CDP Climate Change Questionnaire Link: https://www.eni.com/assets/documents/eng/just-transition/2020/EniSpA-CDP-Climate-Change-Questionnaire-2020-submitted.pdf 	<p>In 2022 we will continue to improve our field monitoring surveys using an Optical Gas Imaging (OGI) camera implementing the requirement of yearly DI&M campaign in all our sites worldwide. This will lead to a further reduction of fugitive emissions.</p> <p>Methane emissions will be covered again by 3rd party reasonable assurance; we will continue the training program of local personnel for the Infrared Cameras in order to increase the frequency of Leak Detection And Repair (LDAR) campaigns.</p> <p>We are planning to further reduce process venting from the existing assets focusing on the most emitters sources with an approach based on best practices and available technologies (e.g. compressors, tanks).</p>

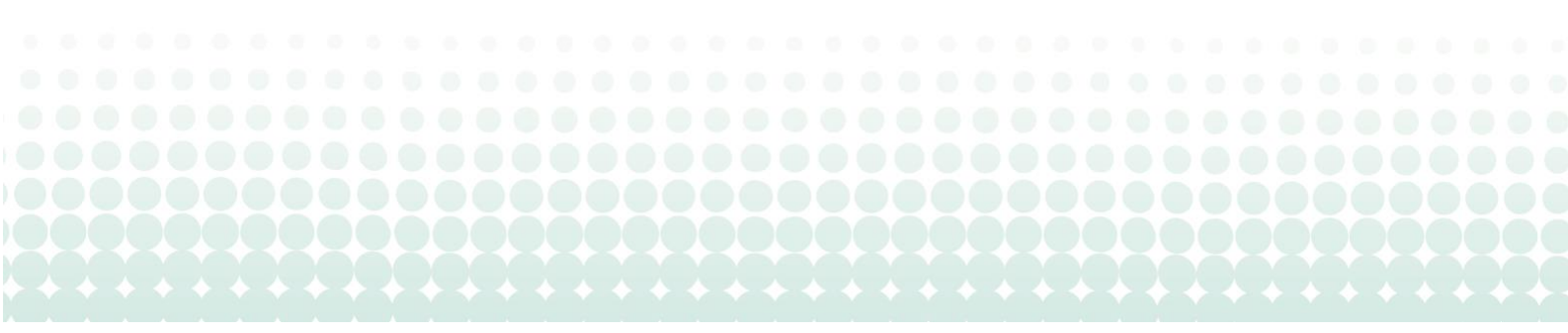


Principle Two:

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.



2021 completed activity	2022 intended activity
<p>In 2021 Eni confirmed its commitment to engage with industry players and stakeholders on methane emission management, mainly through active participation in several initiatives and organizations.</p> <p>Within the Methane Guiding Principles (MGP) - Policy working Group, Eni was one of the signatories of all the set of policy recommendations sent to the European commission in order to reduce methane emissions within the context of Europe's Green Deal.</p> <p>In addition, under MGP Non-Operated Joint Venture (NOJV) working Group, Eni participated to the development of the GHG clause guidance, included in the draft 2022 model JOA, ensuring the proper data sharing and commitment on improving reduction performance from its Partner in NOJV.</p> <p>Under the Oil & Gas Climate Initiative, Eni continued to support UNEP-led initiatives like the Global Methane Alliance and the International Methane Studies.</p>	<p>In 2022 Eni will continue to collaborate with industry players, and stakeholders in order to enable the improvement of the methane performance across the full gas value chain.</p> <p>The main vehicle will be the active participation within the international partnerships and associations.</p> <p>Within OGCI, Eni will support projects aimed at improving knowledge and technologies on methane detection and quantification, as well as methane reduction (e.g. Satellite data acquisition, collaboration with Payne Institute and GGFR to increase transparency on flaring).</p> <p>Under MGP Eni will continue to support MGP initiatives, and in particular the NOJV engagement activities to expand partner and collaboration campaign, continuing the follow up on GHG clause guidance application to future NOJV.</p> <p>In addition withing MGP - Policy WG, Eni will continue to collaborate for the most appropriate and constructive engagement with governments to follow the implementation of a methane regulation.</p> <p>Under OGMP 2.0, Eni will participate in technical working groups in synergy with downstream operators.</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.



2021 completed activity	2022 intended activity
<p>Since 2019, Eni methane direct emissions are covered by 3rd party reasonable assurance within the overall GHG assurance review.</p> <p>During 2021, with the application of OGI Camera, the subsidiaries are able now to perform LDAR campaigns more frequently in their sites. Due to the Covid 19 situation, our “infield training” for the LDAR campaign continued with a complete online training program developed internally and provided to different sites to allow these teams to perform field surveys this year with the new OGI Cameras.</p> <p>During 2021 a first tests with GHGSat and Kairos were carried out to monitor with satellite and aircrafts the emissions from one subsidiary, in order to assess the detection capacity of these technologies.</p> <p>In collaboration with the other Business Units of Eni, we have developed a new tool for the accounting and monitoring of fugitive emissions in our facilities. This tool is a new online database that allows the accounting of all the possible sources of fugitive emissions from site and the monitoring results of the field survey (including leaks); the tool will provide an automatic quantification of emissions, and in collaboration with maintenance tools, will send automatically to the team an alert email to communicate the need for repair. After the repair, the data is updated in the database, where it is also possible to store picture and video of the field monitoring and maintenance activities.</p>	<p>Methane emissions will be covered again by 3rd party reasonable assurance; we will continue the training program of local personnel for the Infrared Cameras in order to increase the frequency of LDAR campaigns.</p> <p>Evaluation of modelling/simulations for flare combustion efficiency quantification are planned for 2022, in order to improve monitoring accuracy and reduce flaring emission. Feasibility study on brownfields for closed flare by 2022, with an evaluation of possible Eni site for implementation.</p> <p>For 2022 Eni is planning additional surveys and pilot test to evaluate other technologies to improve the monitoring of methane emissions.</p>



Principle Four:

Advocate sound policy and regulations on methane emissions

2021 completed activity	2022 intended activity
<p>Eni is partner of several initiatives which envisage the implementation of voluntary actions for the reduction of methane emissions along the entire oil & gas production process and which promote the implementation of regulations and objectives on the reduction of methane emissions along the supply chain of the natural gas; for more information see section on Partnerships in <i>Eni For - Carbon Neutrality by 2050</i> (p. 38).</p> <p>Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf</p> <p>Within OGCI, Eni was also supportive of the Global Methane Pledge, launched at COP26, reaffirming its commitment to contribute to the reduction of methane emissions.</p> <p>During 2021 Eni continued to support to OGCI and UNEP for governments engagement on methane in specific Countries.</p> <p>Within the Methane Guiding Principles (MGP) - Policy working Group, Eni was one of the signatories of all the set of policy recommendations sent to the European commission in order to reduce methane emissions within the context of Europe’s Green Deal.</p> <p>Eni also supports actions for the introduction of mechanisms that favour the use of fuels with lower emission intensities and lower consumption of natural gas. The progressive mitigation of its carbon impact makes gas a fundamental energy source for accompanying the transition towards a low carbon content energy mix together with substitution of the more polluting fossil fuels in electricity generation and in energy-intensive industries. It will also contribute to guaranteeing the balancing of the electric system by integrating the intermittance of renewable sources.</p>	<p>In 2022 we will continue to collaborate with our partners for the most appropriate and constructive engagement with governments to support the implementation of a methane regulation, both in the European context and in oil & gas producing countries (e.g. supporting UNEP initiatives).</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.

2021 completed activity	2022 intended activity
<p>Eni reports relevant information on methane emissions management through several frameworks. In particular, information on data and methodologies are available at the following links:</p> <ul style="list-style-type: none"> • Eni For - Carbon Neutrality by 2050 Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf • CDP Climate Change Questionnaire Link: https://www.eni.com/assets/documents/eng/just-transition/2020/EniSpA-CDP-Climate-Change-Questionnaire-2020-submitted.pdf <p>Through its participation to OGMP 2.0, Eni makes a relevant step forward in terms of commitment on methane reduction, improvement of quality of data reported and transparency on disclosure. In the first IMEO Report “An eye on methane” Eni has achieved the Gold standard.</p>	<p>In 2022, Eni will continue to report information on methane management practices, methane data and other challenges across the public reports and through voluntary disclosure frameworks (e.g. CDP). In addition, Eni will continue to report within OGMP 2.0 framework, as well as continuing to collaborate with partners and other companies within the international partnerships to enable a better transparency and harmonization in oil and gas methane disclosure.</p>



Methane Emissions

<p>Do you report absolute methane emissions within your sustainability report? <i>If so provide link.</i></p>	<p>Yes, Eni reports absolute methane emission</p> <ul style="list-style-type: none"> • Eni For - Carbon Neutrality by 2050 (p.53) <p>Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf</p>
<p>Do you report a methane intensity within your sustainability report? <i>If so provide link.</i></p>	<p>Eni reports Upstream methane emission intensity</p> <ul style="list-style-type: none"> • Eni For - Carbon Neutrality by 2050 (p.44) <p>Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf</p>
<p>What are your organisation's total absolute methane emissions? Provide a figure in tonnes. Provide latest data publicly available.</p>	<p>Eni absolute methane emission was equal to 55,862 CH₄ t in 2020.</p> <ul style="list-style-type: none"> • Eni For - Carbon Neutrality by 2050 (p.53) <p>Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf</p>
<p>State your methodology.</p>	<p>Methane emissions are estimated from measured Activity data, taken mostly from fuel gauge meters' records or direct measurement (e.g. LDAR). Emission Factors used are mostly calculated using fuel gas composition or taken by literature.</p> <p>Methane emissions data are third party verified within the overall GHG assurance review. Eni conduct a dedicated assurance process for GHG figures, additional to the one related to Sustainability KPIs. Since 2019, GHG Scope 1 and Scope 2 emissions (including methane) are subjected to a reasonable assurance by an auditing firm (PWC).</p> <p>More information on methodologies applied and verification process are available in the following documentation:</p> <p>Eni For - Carbon Neutrality by 2050</p> <p>Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf</p>
<p>State your reporting boundary.</p>	<p>100% operated - according to this approach, Eni reports 100% of GHG emissions from assets over which it has operational</p>

	<p>control, even when it holds less than 100% of the value (for example in a joint venture).</p> <p>Eni For - Carbon Neutrality by 2050 (p.50).</p> <p>Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf</p>
<p>What are your organisation’s methane intensity?</p> <p>Provide latest data publicly available.</p>	<p>Eni Upstream methane emission intensity was equal to 0,09% in 2020.</p> <p>Eni For - Carbon Neutrality by 2050 (p.44), Link: https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf</p>
<p>State your methodology.</p>	<p>Eni reports Methane Intensity according with methodology defined within the Oil & Gas Climate Initiative Reporting Framework, available at the following link: http://www.ogci.com/wp-content/uploads/2020/10/OGCI-Reporting-Framework-3.3-October-2020.pdf</p> <p>The numerator includes all operated methane emissions associated with upstream activities; denominator include the gas production sold (marketed gas).</p>
<p>State your reporting boundary.</p>	<p>100% operated - according to this approach, Eni reports 100% of GHG emissions from assets over which it has operational control, that is where Eni is able to enforce its own policies and procedures, even when it holds less than 100% of the value (for example in a joint venture).</p>
<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?</p> <p>Please state your intended timeline.</p>	<p>Eni has in place two methane specific targets:</p> <p>Reduction of upstream fugitive methane emissions of 80% by 2025 against 2014: due to Leak Detection and Repair (LDAR) campaigns and improved accounting approach the reduction achieved has made it possible to reach the 2025 target in 2019. Boundary: upstream 100% operated.</p> <p>Oil and Gas Climate Initiative (OGCI) collective methane intensity target of reducing the upstream methane intensity from 0.32% in 2017 to well below 0.20% in 2025. The Eni’s upstream methane emissions intensity (0,09% in 2019) decreased by 10% vs. 2019. Boundary: upstream 100% operated.</p> <p>In addition, other Eni’s targets like the upstream GHG emissions intensity (-43% by 2025 vs 2014) and the Carbon</p>

Efficiency Index (-2% Year-on-Year 2014-2021) also include the contribution from methane emissions.

More detailed information on Eni's target are available at the following links:

- Eni For - Carbon Neutrality by 2050

Link:

<https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Carbon-neutrality-by-2050.pdf>

- CDP Climate Change Questionnaire

Link:

<https://www.eni.com/assets/documents/eng/just-transition/2020/EniSpA-CDP-Climate-Change-Questionnaire-2020-submitted.pdf>