METHANE GUIDING PRINCIPLES

Methane Guiding Principles Signatory Reporting

Exxon Mobil Corporation

January 2022

COMPANY: **Exxon Mobil Corporation**

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

SENIOR REPRESENTATIVE: **Neil A. Chapman, Senior Vice President**

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
ExxonMobil is on track to exceed its 2025 greenhouse gas emission-reduction plans announced in December 2020. The company anticipates year-end 2021 results to show a reduction of 15-20% in greenhouse gas intensity from Upstream operations compared to 2016 levels, four years ahead of schedule. This is supported by an anticipated reduction of 40-50% in methane intensity and 35-45% in flaring intensity compared to 2016. ExxonMobil implemented a program across its U.S. unconventional production to reduce methane emissions from new and existing sources by: • Enhancing leak detection and repair surveys • Phasing out high-bleed pneumatic devices • Monitoring liquid unloadings to avoid unplanned releases • Improving facility designs • Furthering training programs for operations management, superintendents, foremen, facilty engineering personnel and those involved in leak inspections In addition, the Company continued to mature and operationalize research and technology developments in these areas. For example,	ExxonMobil recently released its Advancing Climate Solutions – 2022 Progress Report, which expands on the company's 2030 greenhouse gas emission-reduction plans. These plans are consistent with Paris-aligned pathways, the U.S. and European Union's Global Methane Pledge and the U.S. Methane Emissions Reduction Action Plan. ExxonMobil also recently announced an ambition to achieve Net Zero Greenhouse Gas Emissions by 2050. Compared to emission levels in 2016, our 2030 plans include a: • 20-30% reduction in corporate-wide greenhouse gas intensity, • 40-50% reduction in upstream greenhouse gas intensity, • 70-80% reduction in corporate-wide methane intensity, and • 60-70% reduction in corporate-wide flaring intensity. These 2030 emission-reduction plans are expected to achieve World Bank Zero Routine Flaring by 2030 and reduce absolute greenhouse gas emissions by an estimated 30% for the company's upstream business and 20% for the entire corporation.

emerging aircraft leak detection is now part of routine monitoring campaigns. Continuous monitoring approaches are also under development. Since initiating its voluntary methane reduction program, the Company has conducted nearly 23,000 leak surveys on more than 5.2 million components at more than 9,500 production sites. High-bleed pneumatic devices have been eliminated across U.S. unconventional production as of 2020. As a result of these actions, U.S. unconventional methane emissions have been reduced by approximately 34 percent as of 2020, compared to 2016, which is equivalent to about 63,000 tonnes. ExxonMobil reports emissions on a net equity basis. In 2018 our total corporate methane emissions totaled 7 million CO2- equivalent tonnes; in 2019 methane emissions totaled 6 million tonnes CO2e; and in 2020 methane emissions totaled 5 million tonnes. [Note: the above figures will be updated when final 2021 data become available.]	Similarly, absolute flaring and methane emissions are expected to decrease by 60% and 70%, respectively by 2030. ExxonMobil's GHG emission-reduction plans cover Scope 1 and Scope 2 greenhouse gas emissions from assets operated by the company. ExxonMobil's emission reduction plans will leverage the continued application of operational efficiencies, ongoing development and deployment of lower-emission technologies, such as carbon capture, and through additional purchases of renewable electricity for its operations. ExxonMobil also recently announced plans to achieve net zero greenhouse gas emissions (Scope 1 and 2) from our unconventional oil and natural gas operated assets in the U.S. Permian Basin by 2030. These groundbreaking plans to reach net zero for Permian Basin operations further demonstrate our commitment and support of society's ambitions for a lower-emissions future. ExxonMobil anticipates the greenhouse gas emission-reduction efforts in the Permian will be supported by electrifying operations, continuing investments in methane mitigation and detection technology, eliminating routine flaring, upgrading equipment, and employing emissions offset technology, which may include nature-based solutions. ExxonMobil plans to expand its methane detection programs utilizing satellite surveillance and a network of ground-based sensors for continuous monitoring, and to continue aerial flyovers that identify leaks for rapid repairs.

Principle Two:
Advance strong performance across the gas supply chain

Please include answers to the following questions:

- Did you participate in any methane research or plan to do so?
- 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
Working together with our industry peers, regulators, researchers and NGOs, we also continued to undertake extensive research to understand methane emissions sources, and helped develop and test new detection and mitigation technologies. We helped identify the best performing and most efficient technologies – including satellite instruments – that can be adopted by producers to detect, repair and accurately measure methane. We believe these efforts show great promise and could improve fugitive emissions detection and mitigation in the near future. For example, we participated in in the Collaboratory to Advance Methane Science administered by GTI, and Project Astra which involves universities, environmental groups and other industry partners. Together, the Astra partners are working to develop an innovative sensor network in Texas that continuously monitors methane emissions across large areas to enable quick and efficient detection and repair of leaks. This high-frequency monitoring system will enable operators to more efficiently direct resources to a specific location and could provide a more affordable, efficient solution to reduce methane emissions.	Under the MGPs, ExxonMobil will continue to support the IEA Methane Tracker activities, and participate in the Non-Operated Joint Ventures work stream. ExxonMobil will also continue to participate in research programs and collaborations. ExxonMobil will continue to work within trade associations globally to promote industry consensus on the need and means to reduce methane emissions, as well as with the Environmental Partnership in the U.S.

In addition, ExxonMobil began testing novel analytical systems that can be deployed in helicopters, airplanes and drones to detect fugitive methane emissions. We continued exploring the use of satellite surveillance where data can be regularly updated each time satellites orbit the earth. These technology investments complement the Company's voluntary methane management program that includes structured leak detection and repair protocols, prioritized replacement of high-bleed pneumatic devices, and infrastructure enhancements. ExxonMobil was also a founding member of API's Environmental Partnership, whose mission is to continuously improve the industry's environmental performance with a current focus on methane and VOC emisisons, and flaring. The Partnership takes action, learns together about best practices and technologies, and fosters collaboration in order to responsibly develop oil and natural gas resources. The Partnership now has 93 members, representing 70% of U.S. onshore oil and natural gas production. In 2020, the Partnership's actions expanded to midstream operations. See: The Environmental Partnership's 2021 Annual Report. Within the MGPs, ExxonMobil participated in the Non-Operated Joint Ventures work stream, and helped sponsor the IEA's Methane Tracker initiative. The Methane Tracker provides emissions data by country and industry segment to assist in engagements on improved performance, as well as guidance for the adoption for new policies and regulations.	

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/technolgies has been adopted into your accounting process if at all.

2021 completed activity	2022 intended activity
In addition to the research activities discussed under Prinicple Two, ExxonMobil has undertaken other actions to advance the accuracy of methane emissions data. For example, ExxonMobil submitted to the U.S. EPA the first-ever application to use new, alternative technologies for emissions detection under EPA regulatory programs. We have been working with the EPA so that we can use airplanes equipped with detection technology to conduct flyover inspections over large areas. This would enable us to detect methane leaks across a broad geography and then send crews out to fix leaks more efficiently, ultimately enhancing compliance methods. We hope this process will pave the way for more flexibility for industry to deploy new technologies that can lead to a better results for everyone. Over time, technologies such as this can enable industry to reduce methane emissions further from operations on private, state and federal lands alike, while continuing to support thousands of jobs and drive billions of dollars in economic impact. ExxonMobil shares the long-term goal of having the entire industry find and fix emission leaks most effectively.	ExxonMobil will continue to collaborate on research and pilot new technologies in our own operations as discussed under Principles One and Two. Additionally, ExxonMobil will begin implementation of a newly announced collaboration with Scepter, Inc. to deploy advanced satellite technology and proprietary data processing platforms to detect methane emissions at a global scale. The agreement has the potential to redefine methane detection and satellite-based emission reduction efforts across a dozen industries, including energy, agriculture, manufacturing and transportation. ExxonMobil and Scepter are also pioneering a proprietary data fusion system that reconciles information collected from multiple detection methods, including ground-based, stationary and mobile monitoring devices. By consolidating the data, scientists could unlock valuable insights and opportunities to further quantify and validate programs that reduce methane emissions.

Additionally, in 2021 ExxonMobil signed an agreement with an independent validator, non-profit MiQ, to begin the certification process for natural gas produced at its Permian Basin facilities at Poker Lake, New Mexico. ExxonMobil is currently using a variety of technologies to enable methane management: • Aerial surveillance: In collaboration with Bridger photonics, this aerial Gas Mapping LiDARTM imaging can scan vast fields in the Permian Basin • Ultrasonic hearing sensors: These Goschy sensors use ultrasonic hearing and precise motion detection to monitor leaks as gas moves from areas of high pressure to those at lower pressure • On-the-ground interconnected sensors: Developed by Scientific Aviation, Systematic Observations of Facility Intermittent Observations (SOOFIE) is a fixed system that provides continuous and real-time monitoring of methane emissions at production sites.	

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.

2021 completed activity	2022 intended activity
ExxonMobil continued to advocate for policies that promote cost-effective solutions to address the risks of climate change including methane emissions. In this regard, ExxonMobil expressed support for the direct regulation of methane emissions from new and existing oil and gas sources by the new U.S. Administration, participated in an EPA technical workshop, and shared our knowledge and perspectives with the EPA in support of the new rulemaking currently being developed. ExxonMobil similarly supported state level actions in the U.S., for example in New Mexico, as well as the development of the European Commission's Methane Strategy for the European Union. ExxonMobil also announced support for the Global Methane Pledge to reduce methane emissions by 30% below 2020 levels by 2030 that was announced by the U.S. and European Union at COP26. We are committed to working with the U.S. government, the European Commission and other governments to help achieve the objectives of the Pledge. Within the MGPs, ExxonMobil supported the IEA's Methane Tracker which expanded in 2021 to also provide an assessment of existing policies and regulations, as well as a roadmap to assist countries interested in pursuing methane emissions reduction policies.	Within the MGPs, ExxonMobil will continue to sponsor the IEA Methane Tracker, and participate in discussions surrounding emissions data reporting and regulatory activities. ExxonMobil intends to remain highly active in support of effective methane policies and regulations across the globe. We will remain engaged with the U.S. Administration, with U.S. states that pursue regulation indvidually, with the European Union, and other interested countries. ExxonMobil will also continue to publish the results of its technology programs that can support more efficient and cost-effective regulatory programs. ExxonMobil is committed to working with governments to help achieve the objectives of the Global Methane Pledge. We also see the value of collaborating with other methane-emitting sectors – such as agriculture, livestock, and landfills — and will share our experience, technologies and mitigation strategies to help find solutions that work for them.

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
ExxonMobil published information on its methane emissions performance and programs in its Advancing Climate Solutions – 2022 Progress Report and Corporate Sustainability Report. ExxonMobil supports strong measurement, reporting and verification standards as part of a broad suite of regulations to address oil and natural gas related methane emissions. To that end, the Company actively engaged with organizations such as the Oil and Gas Climate Initiative, the Collaboratory for Advancing Methane Science, and the Environmental Partnership to continue to improve the accuracy and transparency of how industry approaches methane emissions measurement, reporting and verification. ExxonMobil also participated in the International Association of Oil & Gas Producers (IOGP)/IPIECA/OGCI Task Force for Recommended Practices for Methane Emission Detection & Quantification Technologies. Throughout the year, ExxonMobil also released information through press releases and website article postings. Examples of such releases include: • Energy Factor: ExxonMobil urges action on methane regulations (01/28/21)	ExxonMobil will continue to release additional information on its corporate website, participate in relevant conferences and symposia, and publish study results in scientific journals. ExxonMobil also plans to continue working with OGCI, IOGP, IPEICA, API, AXPC, NGSA, IAGP and other trade assocations in the U.S. and globally.

- Major Energy Companies Join Forces to Battle Methane Emissions, (Falcon) Scientific Aviation (03/01/21)
- Social Media: We are testing a number of technologies to reduce methane emissions. Find out what technology is being tested! (03/11/21)
- Energy Factor: The innovators who are reducing methane emissions (03/30/21)
- Energy Factor: Methane: Developing new technologies for regulatory compliance (04/08/21)
  - Bridger Photonics' LiDAR Technology Selected by ExxonMobil for EPA Methane Detection | Bridger Photonics
  - Why is it Important that ExxonMobil Submitted Gas Mapping LiDAR™ for EPA Approval? | Bridger Photonics
- Energy Factor: LiDAR Aerial Methane Leak Detection (07/29/21)
- Energy Factor: Natural Gas & Methane With Sam Aminfard (08/12/21)
- Press release: ExxonMobil to certify natural gas, help customers meet environmental goals (09/07/21)
- Energy Factor: The Global Methane Pledge - Energy Factor (exxonmobil.com) (10/26/21)
- Energy Factor: Why we're investing $15 billion in a lower-carbon future (11/09/21)
  - Support for U.S. Methane Emissions Reduction Action Plan
- Press release: ExxonMobil announces corporate plans to 2027 (12/01/21)
  - 70-80% reduction in corporate-wide methane intensity; 60-70% reduction in corporate-wide flaring intensity
- 2021 Corporate Plan Update
- Press release: ExxonMobil plans for net zero emissions in Permian Basin operations by 2030 (12/06/21)
  - Infographic: Pathway to net zero in the Permian by 2030
  - Energy Factor: Why ExxonMobil's Permian Net Zero Plan by 2030 Matters

• Press release: ExxonMobil and Scepter, Inc. to deploy satellite technology for real-time methane emissions detection (12/13/21) The Company also worked to advance the scientific understanding of satellite-based methane emissions detection, and has partnered with Scepter Air to develop technology to greatly improve global methane detection and quantification. Through other collaborations with Stanford University and the Collaboratory for Advancing Methane Science, ExxonMobil is progressing field and desktop studies to better understand capabilities of current deployed satellite technology. Through OGCI, the Company began working with GHGSat to finance monitoring of industry methane plumes in Iraq, one of the world's largest methane emitters. If successful, this initiative could be extended to other methane hotspots. ExxonMobil also worked with trade associations to encourage consensus on the need to develop policy positions and/or best practices on methane emissions inventory and management, as well as technology and innovation, most recently for example, with the American Exploration & Production Council (AXPC), the Natural Gas Supply Association (NGSA) and the Argentinean Institute for Oil and Gas (Instituto Argentino del Petróleo y del Gas, IAPG). Under the Methane Guiding Principles, ExxonMobil was a primary sponsor of the IEA's Methane Tracker, a web-based information portal that provides data on global emissions, on a country-by-country basis and by industry segment, to aid in engagement and performance improvements.	

Methane Emissions

Do you report absolute methane emissions within your sustainability report? *If so provide link.*	Yes. ExxonMobil published information on its methane emissions performance and programs in its Advancing Climate Solutions – 2022 Progress Report and Corporate Sustainability Report.
Do you report a methane intensity within your sustainability report? *If so provide link.*	Yes. Advancing Climate Solutions – 2022 Progress Report (page 47).
What are your organisation's total absolute methane emissions? Provide a figure in tonnes. Provide latest data publicly available.	On an equity basis, in 2018 ExxonMobil's methane emissions totaled 8 million CO2- equivalent tonnes; in 2019 methane emissions totaled 6 million tonnes CO2e; and in 2020 methane emissions totaled 5 million tonnes. On an operated basis, in 2018 ExxonMobil's methane emissions totaled 8 million CO2- equivalent tonnes; in 2019 methane emissions totaled 6 million tonnes CO2e; and in 2020 methane emissions totaled 4 million tonnes. [Note: entry will be updated when final 2021 data become available.]
State your methodology.	Emissions are caculated based on a combination of measured and estimated data using reasonable efforts and collection methods. Calculations are based on industry standards and best practices, including guidance from the American Petroleum Institute (API) and IPIECA.
State your reporting boundary.	ExxonMobil reports emissions on both a net equity and operated basis.
What are your organisation's methane intensity? Provide latest data publicly available.	In 2018, normalized methane (intensity) emissions were 0.07, in 2019 they were 0.05, and in 2018 they were 0.04. [Note: entry will be updated when final 2021 data become available.]
State your methodology.	Metric tons CH_4 per 100 metric tons of throughput/production.
State your reporting boundary.	Intenstiy is reported on an operated basis.
Do you have a methane emission target? If yes, please state what it is, including the boundaries and methodology. If no, are you developing such a target? Please state your intended timeline.	ExxonMobil's methane emissions reduction plans were discussed under Principle One.

Statements and data provided by herein by ExxonMobil is for information purposes only. This document includes estimates of previously disclosed or potential future emissions and events based on data available at the time of this submission. Numbers and metrics for future years are hypothetical based on certain cost and technical assumptions and are subject to

change, including as a result of changes in development or production plans; the outcome of research and the development of new technologies; the ability to scale new technologies on a cost effective basis; changes in law or government policy; unforeseen technical difficulties or developments; and other factors. Nothing contained herein is intended to override the corporate separateness of affiliated ExxonMobil companies.