



METHANE
GUIDING
PRINCIPLES

Methane Guiding Principles Signatory Reporting

SOCAR
2025



Company: SOCAR

Year of Joining Methane Guiding Principles: 2018

Senior Representative: Mr. Afgan Isayev

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.

2024 Completed Activity	2025 Intended Activity
<ul style="list-style-type: none"> • Since announcing its targets at COP28, SOCAR has launched its Decarbonization Program, which is based on a thorough study of emissions profiles, portfolio evolution, and realistically achievable abatement measures. The program outlines the following key targets: <ul style="list-style-type: none"> - Zero routine flaring in all operational assets by 2030. - Reduction of upstream carbon emission intensity on equity basis by 30% by 2030 compared to 2022. - Reduction of corporate carbon emission intensity by 30% and absolute emissions by 20% on equity basis by 2035 compared to the 2022 baseline. - Near zero methane emissions (less than 0.2% intensity) in upstream on equity basis by 2035. - Achieving net-zero emissions by 2050. • To achieve these targets, SOCAR is leveraging key enablers: <ul style="list-style-type: none"> - Decarbonization of the core Launched full-scale decarbonization program of our operations across all key geographies. - Organizational transformation and partnerships Commenced the change of the company's operational model and DNA to support the energy transition: new procedures, tools and organizational units aimed at decarbonization and growing low-carbon businesses. - Low-carbon Businesses Established a new low-carbon business line in partnerships with global leading companies. 	<ul style="list-style-type: none"> • SOCAR is actively engaged in the development and implementation of comprehensive mitigation strategies aimed at minimizing emissions associated with venting activities across its production and storage assets. This ensures that operational processes are optimized to reduce environmental impacts while maintaining the highest standards of safety and efficiency in its energy operations. • As part of the LDAR project, starting in January 2025, external verifiers began the validation process following the completion of repair and verification activities. Once the validation is finalized, SOCAR will proceed with the application for carbon credit certification. • SOCAR has developed a comprehensive Decarbonization Roadmap which includes reduction of methane emissions across its upstream, midstream, and downstream operations. The strategy includes implementing LDAR programs in multiple phases to systematically identify and address methane leaks, which is critical for mitigating fugitive emissions from oil and gas infrastructure. Another key focus of the roadmap is the electrification of compressors and heaters, particularly in both onshore and offshore facilities. This involves replacing methane-powered equipment with electrified alternatives to lower emissions from combustion processes. SOCAR also aims to adopt methane offsetting programs to compensate for residual emissions that cannot be eliminated through direct reduction measures. Furthermore, flare recovery systems are planned within downstream assets to capture and reuse methane that would otherwise be

<ul style="list-style-type: none"> • SOCAR aims to decarbonize the core of its operations via the program launched in January 2024 within all SOCAR assets covering following main levers (MACC – marginal abatement cost curve) <ul style="list-style-type: none"> - Carbon capture and utilization (CCU) units to convert CO2 into products at chemical assets - Energy efficiency program - Substitution of Scope 2 with renewable energy - Deflaring in Downstream - Biogas production to replace fossil fuels - Electrification of equipment - Carbon Capture Utilization and Storage (CCUS) - Offsetting <p>Methane abatement program / leak detection and repair (LDAR) is being “low-hanging fruit” and implemented as the first priority.</p> • As part of SOCAR’s second LDAR project in 2024, a comprehensive measurement was conducted by a third party. As a result, approximately 1000 leaks were detected, and around 60% of the leaks have been eliminated. Solutions for more complex and challenging sources are currently in development and being implemented. • In 2024, SOCAR established SOCAR Green LLC to accelerate its low-carbon initiatives. SOCAR Green LLC will concentrate on the development of renewable energy projects, exploration of carbon capture, utilization, and storage (CCUS) technologies, enhancement of energy efficiency and storage solutions, and the implementation of green hydrogen initiatives. In order to accelerate SOCAR’s energy transition we forge strategic partnerships with global players in the respective fields. 	<p>flared, reducing unnecessary emissions and improving overall efficiency.</p>
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<ul style="list-style-type: none">• Participation in RES Projects:<ul style="list-style-type: none">- In June 2024, SOCAR and Masdar took a significant step forward with the groundbreaking of three major renewable energy projects during Baku Energy Week. The three groundbreakings include the 445MW Bilasuvar Solar PV Project, 315MW Neftchala Solar PV Project and the 240MW Absheron-Garadagh Onshore Wind Project, totaling 1 GW. Building on this momentum, SOCAR achieved another major milestone during COP29 by reaching financial close for the 445MW Bilasuvar and 315MW Neftchala solar projects. This was made possible through a collaboration between SOCAR Green, the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB), and the Asian Infrastructure and Investment Bank (AIIB). The total financing for these two projects is expected to exceed USD 600 million, marking a significant step forward in Azerbaijan’s renewable energy expansion.- SOCAR Green, bp, and the Azerbaijan Investment Company (AIC) signed a Shareholders’ Agreement for the “Shafaq” project, which involves the construction of a 240 MW solar power plant in the Jabrayil district. Under the Virtual Power Transfer Arrangement (VPTA), the energy produced at this facility will be fed into the existing grid in Jabrayil, while an equivalent amount of energy will be supplied to the Sangachal Terminal.- SOCAR Green and China Energy International Group have signed a Cooperation Agreement that envisages development of renewable energy in Azerbaijan. This cooperation is expected to	
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<p>lead to the development of 160 MW solar power plant in Fizuli district of Azerbaijan.</p> <ul style="list-style-type: none">- SOCAR Green, Masdar and ACWA Power signed a MoU for the development of offshore wind projects with an initial capacity of 3.5 GW. Electricity generated by this project is intended for export via the Green Energy Corridor.	
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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.

2024 Completed Activity	2025 Intended Activity
<ul style="list-style-type: none"> • SOCAR together with bp supported implementation of Advancing Global Methane Reduction (AGMR) aimed at reducing methane emissions in the oil and gas sector by focusing on best practices, knowledge sharing, monitoring, reporting, and technology exchange. Several events focusing on methane abatement were held in Baku in 2024. <p>Field visits:</p> <ul style="list-style-type: none"> • On April 17, a visit to Oil Rocks was organized for representatives of local oil and gas operators to exchange best practices for reducing methane emissions, as part of a global initiative to mitigate these emissions. Participants were provided with a comprehensive overview of SOCAR's advanced methods for monitoring, measuring, and reducing emissions in oil and gas operations, with a particular emphasis on the Leak Detection and Repair (LDAR) Project. • On April 18, a visit to the bp-operated Sangachal Terminal was organized, where bp representatives delivered presentations providing in-depth insights into the company's emission reduction efforts in oil and gas operations. The visit aimed to foster the exchange of best practices in emissions reduction across the industry. <p>Workshops:</p> <ul style="list-style-type: none"> • On April 23, an international conference on the Advancing Global Methane Reduction Initiative (AGMR) was held at the Eco-Park, co-organized by SOCAR and bp. The conference highlighted the critical role of methane emissions in climate change acceleration. Experts explored the latest technological advancements in methane detection, including drones, satellites, and aircraft. Discussions covered the implementation of the Paris Agreement, methane monitoring across the oil and gas 	<ul style="list-style-type: none"> • Ongoing efforts to organize and host online seminars and webinars focused on methane emissions reduction and management. These sessions aim to foster knowledge sharing, promote best practices, and facilitate collaboration among industry stakeholders. The initiative includes co-hosted webinar with key partners such as bp and OGDC, providing a platform for experts to discuss innovative solutions, regulatory developments, and advancements in methane mitigation technologies.

value chain, and cutting-edge solutions for emission reduction, such as drone and satellite-based systems.

- On June 25, 2024, an online seminar was conducted as part of the Advancing Global Methane Reduction Initiative (AGMR). The event focused on exploring innovative solutions for methane emissions reduction, showcasing international best practices, and discussing advanced measurement technologies. Experts from various sectors shared insights on regulatory frameworks, and technological advancements aimed at enhancing methane monitoring and mitigation efforts globally.

Baku Climate Action Week 2024 (BCAW):

- On October 3, The Advancing Global Methane Reduction (AGMR) - Impact Conference focused on global efforts to reduce methane emissions. Discussions covered the science behind methane emissions, challenges in measurement, and progress made by SOCAR and bp in Azerbaijan. Experts highlighted the role of emerging technologies in monitoring and mitigation, as well as the contributions of international bodies in supporting methane reduction initiatives. The conference underscored the importance of global partnerships and innovative solutions in tackling methane emissions effectively.

COP29

- **International Article 6 Climate Finance for Methane Reduction** - On November 14, the SOCAR & Article Six Group event demonstrated how Article 6 carbon markets can finance methane abatement. SOCAR presented case studies that highlighted key issues for investors and energy companies, emphasizing financing strategies for additional emissions reductions beyond current pledges. The event's long-term aim was to ensure that all methane finance is Paris Agreement-aligned, supporting a path to fossil-fuel phaseout.

- **Decarbonizing the Oil and Gas Industry at Pace**
 - On November 15, SOCAR and OGDC organized an event titled "Decarbonizing the Oil and Gas Industry at Pace", which focused on the progress and challenges of reducing emissions in the oil and gas sector. The session included a keynote on the OGDC's inception and achievements, an update on progress, and a panel discussion with CEOs and experts. The event highlighted collaborations and individual progress in meeting the Charter's objectives and called for further climate action to accelerate decarbonization efforts in the industry.
- **SOCAR's Decarbonization Progress: Challenges and Achievements** – On November 15, SOCAR organized an event titled "SOCAR's Decarbonization Progress: Challenges and Achievements," where it presented its strategic roadmap toward a sustainable, low-carbon future. The event highlighted key projects that had significantly reduced carbon emissions. SOCAR also showcased its advancements in green initiatives through ongoing projects and strategic international collaborations, further demonstrating its commitment to sustainable energy practices.
- **Oil and Gas Methane Partnership 2.0 (OGMP 2.0) CEOs Forum** – On November 15, OGMP 2.0 CEO Forum, organized jointly by SOCAR, the European Commission, and UNEP's International Methane Emissions Observatory (IMEO) brought together industry leaders to discuss progress in addressing methane emissions and the importance of data transparency. The forum recognized the significant advancements made by companies committed to OGMP 2.0 in improving methane measurement and reduction efforts. A key focus of the discussion was the need for greater industry participation and the role of OGMP 2.0 in mobilizing the sector toward credible and effective emission reductions. CEOs and senior leaders reaffirmed their commitment to the

framework, emphasizing its value in accelerating global methane abatement.

- **Beyond generation: Building infrastructure to achieve energy transition goals** – On November 15, SOCAR and the Atlantic Council organized the event "Beyond Generation: Building Infrastructure to Achieve Energy Transition Goals." The event emphasized the urgent need for modernized transmission infrastructure to support the global energy transition. Experts highlighted outdated grids as a major bottleneck, stressing the importance of updated policies to enhance coordination between governments, utilities, and private investors. The discussion concluded with a strong call for public-private collaboration to reform regulatory frameworks and enable large-scale renewable integration.

Principle Three:

Improve accuracy of methane emissions data.

Please include answers to the following questions:

- 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.

2024 Completed Activity	2025 Intended Activity
<ul style="list-style-type: none"> • In 2024, SOCAR joined the Oil and Gas Methane Partnership (OGMP 2.0) to strengthen its efforts in reducing methane emissions. • SOCAR made significant progress by adopting cutting-edge technologies and digital solutions to enhance data accuracy and transparency. <ul style="list-style-type: none"> - Establishment of Caspian AI Institute for Energy Transition with BCGX The Caspian AI Institute for Energy Transition, established by SOCAR in collaboration with BCGX, drives energy transition by developing and deploying advanced AI-driven solutions across SOCAR’s operations. In addition to energy transition solutions, other initiatives include an AI powered system for emissions monitoring, offering precise, real-time tracking of GHG emissions. Caspian AI use-cases include automated data collection and validation, real-time emissions calculations, enterprise-wide visualization, and precise methane reporting. - Methane AI Platform: SOCAR together with BCGX developed Methane AI platform – one stop solution for all methane-related activities to track methane emissions, report according to global standards and enable abatement activities. - Satellites: Through its partnership with OGCI, SOCAR has utilized GHGSAT satellites to capture detailed snapshots of methane emissions over its key assets, helping refine its mitigation strategies. 	<ul style="list-style-type: none"> • Caspian AI Institute will continue to further develop innovation by advancing AI-powered solutions. A key focus will be on enhancing the Institute’s AI infrastructure, including the expansion of dedicated compute centers and digital platforms across various energy and industrial processes. • Building on the progress made with the Methane AI Platform, SOCAR will continue to expand and enhance its capabilities in 2025. The focus will be on developing a comprehensive inventory of emission sources, utilizing detailed infrastructure mapping to identify and address potential leaks with greater precision. As the platform evolves, SOCAR aims to integrate additional functionalities, including mitigation activities, preventive maintenance, forecasts and CAPEX planning activities. • SOCAR will continue advancing the implementation of Picarro’s intelligent methane detection technology. Building on the success of the pilot project, SOCAR plans to expand the deployment of advanced detection vehicles across a broader network to enhance leak identification and response efficiency. • In 2025, the first OGMP 2.0 report is scheduled for submission, highlighting ongoing efforts to accurately measure and reduce emissions. Additionally, a roadmap for enhancing methane accounting, aligned with the OGMP Golden Standard Pathway, will also be submitted. • SOCAR is enhancing its MRV software to optimize emissions data collection. This includes: • Automated Data Collection & Analysis: Minimizes human error and administrative overhead while accurately tracking key performance indicators (KPIs).

<ul style="list-style-type: none"> - Drones: In collaboration with TotalEnergies and seekOps, SOCAR launched two pilot drone-based methane detection campaigns at Oil Rocks, identifying previously undetected leaks that are now being addressed. These ultralight drones provide highly precise emissions readings, even in hard-to-reach locations. - Picarro Intelligent Technology SOCAR in partnership with Italgas launched Picarro technology an advanced methane detection and monitoring pilot project for Azerigas – a country wide utility gas distributor. By harnessing Picarro's intelligent technology, SOCAR team deploys advanced detection vehicles to patrol the assets. This technology swiftly identifies and confirms methane emissions from fugitive leaks, enabling prompt corrective actions. 	<ul style="list-style-type: none"> • Support for Environmental Goals: Provides clear data on emissions and resource usage to ensure compliance with standards. • Customizable Dashboards: Enables risk management, enhanced accountability, and improved operational efficiency.
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Principle Four:

Advocate sound policy and regulations on methane emissions.

Please include answers to the following questions:

- 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.

2024 Completed Activity	2025 Intended Activity
<ul style="list-style-type: none"> • SOCAR remains dedicated to advancing Azerbaijan’s climate commitments under the Paris Agreement’s Nationally Determined Contribution (NDC) by implementing effective mitigation and adaptation strategies. • As Azerbaijan advances its Global Methane Pledge (GMP) commitment, SOCAR continues its methane reduction efforts. Over the past year, SOCAR has enhanced monitoring with satellite and AI-driven technologies, expanded leak detection and repair (LDAR), and achieved notable emission reductions. • In alignment with the Presidential Decree designating 2024 as the "Green World Solidarity Year", SOCAR has formulated and adopted an action plan to systematically report on its sustainability initiatives and green activities. 	<ul style="list-style-type: none"> • SOCAR will continue to support Azerbaijan’s Nationally Determined Contribution (NDC). • SOCAR will support the country’s efforts to meet the goals of the Global Methane Pledge (GMP) by advancing methane reduction initiatives.

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 standardization of comparable external methane reporting describe the activity, you have taken.

2024 Completed Activity	2025 Intended Activity
<ul style="list-style-type: none"> • In 2024, SOCAR, in collaboration with its partners, conducted a comprehensive analysis to assess the potential impact of reporting under the OGMP framework and subsequently decided to proceed with the initiative. • In 2024, SOCAR submitted both its annual activity report and a separate emissions report to OGDC. The annual report highlights key initiatives and progress in advancing decarbonization efforts, while the emissions report provides a detailed analysis of SOCAR’s emissions data. • Since 2018, SOCAR has been an active member of the International Association of Oil & Gas Producers (IOGP). As part of this engagement, SOCAR submits annual reports on Environmental Performance Indicators, providing key data on its exploration and production activities. 	<ul style="list-style-type: none"> • In 2025, SOCAR will submit its first OGMP 2.0 report. • SOCAR will continue its decarbonization journey by actively participating in OGDC’s initiatives in 2025. A key focus will be responding to the 2025 OGDC Gap Assessment, which aims to evaluate signatories' progress and provide tailored technical support for further improvements.

Methane Emissions

Do you report absolute methane emissions within your sustainability report?

If so, provide link.

Yes

<https://socar.az/en/page/sustainable-development-reports>

Do you report a methane intensity within your sustainability report?

If so, provide link.

Refer to Sustainability report

What is your organization's total absolute methane emissions?

Provide a figure in tons.

Provide latest data publicly available...

Refer to Sustainability report

State your methodology.

This methodology is based on IPCC methodology and recommendations, EMEP/EEA national emission inventory technical guidance documents.

State your reporting boundary.

Scope 1 and 2

What are your organization's methane intensity?

Provide latest data publicly available.

Refer to Sustainability report

State your methodology.

This methodology is based on IPCC methodology and recommendations, EMEP/EEA national emission inventory technical guidance documents.

State your reporting boundary.

Scope 1 and 2

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.

SOCAR is aiming to reduce Methane intensity to 0.2% or less on equity basis by 2035.

SOCAR will re-assess its methane footprint using the OGMP 2.0 framework.