





Climate Change

The OMV Group clearly recognizes that climate change is one of the most important global challenges today and fully supports the goals set forth by the Paris Agreement. By 2050, OMV aims to transform into a net-zero business.⁷

OMV has set out a roadmap with concrete interim short-, medium-, and long-term targets. OMV's targets are set at an absolute and intensity level with the ultimate goal of achieving net zero greenhouse gas (GHG) emissions in Scopes 1, 2, and 3 by 2050. For Scopes 1 and 2, OMV is aiming for an absolute reduction of 30% by 2030 and of 60% by 2040. For Scope 3, OMV is striving for a reduction of at least 20% by 2030 and of 50% by 2040 from our product portfolio and other material Scope 3 emissions. These absolute GHG emission reductions and the increase of zero-carbon product energy sales are key in reducing the carbon intensity of our energy supply, pursuing a decline of 20% by 2030 and of 50% by 2040. These targets are approximated to IEA's Sustainable Development Scenario (SDS). However, our ambition is to achieve net-zero emissions already by 2050, thus being aligned with the IEA's Net Zero Emissions by 2050 Scenario (NZE).

To achieve these targets, OMV takes climate action in its operations, product and service portfolio, circular economy activities, innovations and R&D activities, working environment, and social investments. There is no silver bullet for tackling climate change. Reaching our targets for 2030 and beyond will require a considerable effort by all of our business units, but it will be done by building on existing strengths and know-how.

These are the key pillars that will enable us to meet our goals:

- A significant decrease in fossil fuels and natural gas sales: By 2030, we intend to reduce oil and gas production levels to around 350 kboe/d and cut crude distillation throughput by 2.6 mn t.
- An increase in zero-carbon product energy sales: There will be a significant increase in sustainable and biobased fuels, green gas sales, and a build-up of renewable electricity capacity for captive use, as well as geothermal heat.
- An increase in the recycling of polyolefins and sustainable feedstocks: We will deliver approximately 2 mn t/year of circular products, that is, polyolefins manufactured from recyclate or biogenic feedstock rather than fossil sources.
- Improved energy and operational efficiency, and zero routine flaring and venting, thereby reducing methane emissions.
- All energy purchases in the C&M segment will be 100% renewable. In 2023, electricity purchased by C&M accounted for 10 PJ approximately 73% of OMV's total electricity purchased.

In addition to these efforts, neutralization measures such as Carbon Capture and Storage (CCS) will be necessary. OMV anticipates that it will develop around 5 mn t per year of CCS capacity across all business units until 2030. OMV aims to support and accelerate the energy transition with this new strategy.

⁷ The commitment "net-zero business by 2050" covers the greenhouse gas (GHG) emissions of our operations (Scopes 1 and 2), and our product portfolio and other Scope 3 emissions along the value chain. For our interim GHG targets for 2030 and 2040, Scopes 1 and 2 and the following Scope 3 categories are included: Category 11: Use of Sold Products for energy supply, Category 1: Purchased Goods (feedstocks) from OMV's C&M business segment, and Category 12: End-of-Life of Sold Products for non-energy use.

CAPEX Allocated for Decarbonization Measures to Meet OMV's 2030 Climate Targets with the Ambition of Reaching Net Zero by 2050

Absolute net GHG Scope 1 and 2 emissions [mt CO₂e]



Absolute net GHG Scope 3 emissions [mt CO₂e]



Carbon intensity of energy supply, Scopes 1, 2, and 3 [g CO,e/MJ]



Contribution of GHG Scope 1, 2, and 3 emissions reduction measures 2019-2030

- Additional petrochemicals production and lower fossil sales \bigcirc
- \bigcirc Portfolio changes
- ۵ Neutralization measures, e.g., CCS
- đĥ Improve operational efficiency
- Increase in recycled and sustainable feedstock \bigcirc
- Increase in renewable energy purchases h
- Scope 1 and 2 target contribution Scope 3 target contribution

Contribution of reduction measures to g CO_e/MJ 2019-2030

- * 111 Increase in zero-carbon energy sales
- ۵ Neutralization measures, e.g., CCS
- đĥ Improve operational efficiency
- \bigcirc Additional petrochemicals production and lower fossil sales
- H Increase in renewable energy purchases
- Scope 1 and 2 target contribution Scope 3 target contribution

EUR 13 bn CAPEX planned until 2030 to achieve climate targets



- Overall EUR 13 bn CAPEX until 2030 is planned to achieve the 2030 climate targets, EUR 8.3 bn is already allocated to concrete projects until 2028.
- Until 2028, more than 2/3 of planned sustainability CAPEX will go to recycled and sustainable feedstock and zero-carbon products.





Carbon Emissions Reduction

Material Topic: Carbon Emissions Reduction

Supporting the goals of the Paris Agreement by reducing the carbon footprint of our operations, for example by improving energy efficiency and reducing the venting and routine flaring of gas.

Key GRIs

- GRI 302: Energy 2016
- GRI 305: Emissions 2016

NaDiVeG

Environmental concerns





The Carbon Emissions Reduction material topic focuses on reducing the GHG emissions of our operations (Scopes 1 and 2) through targeted efforts such as improving energy efficiency, increased use of renewable electricity, modernizing our equipment and processes, and reducing venting and flaring of gas. These efforts are integral to meeting our goal of becoming carbon neutral in our operations by 2050, which is also incorporated into our HSSE Policy. As part of our Strategy 2030, we have set specific interim targets for the short (2025), medium (2030), and long term (2040) on the path to meeting our 2050 goals.

The OMV Group uses 2019 as its base year for all three scopes of emissions and for our 2030, 2040, and 2050 targets because 2019 was the last full year before the COVID-19 pandemic and the majority of the OMV Group's assets were operating for the whole of 2019.

Targets 2025	 Reduce carbon intensity of operations⁸ (Scope 1) ≥30% vs. 2010
	 Achieve at least 1 mn t of CO₂ reductions in 2020–2025 from operated assets
Target 2030	▶ Reduce absolute Scope 1 and 2 emissions by \geq 30% vs. 2019
Target 2040	▶ Reduce absolute Scope 1 and 2 emissions by ≥60% vs. 2019

⁸ CO₂ equivalent emissions produced to generate a certain business output using the following business-specific metrics – in the E&P assets within OMV Energy: t CO₂ equivalent/toe produced; refineries: t CO₂ equivalent/t throughput (crude and semi-finished products without blended volumes); power: t CO₂ equivalent/MWh produced – consolidated into an OMV Group Carbon Intensity Index, based on weighted average of the business segments' carbon intensity





Status 2023 • Carbon intensity of operations reduced by 20% vs. 2010 • 0.70 mn t of CO2e reduced through concrete emissions reduction initiatives and divestments vs. 2020 • Scope 1 and 2 emissions reduced by 25% vs. 2019

SDG targets:

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.3 By 2030, double the global rate of improvement in energy efficiency

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Effective carbon and energy management helps reduce costs and liabilities. The OMV Group's comprehensive approach to managing GHG emissions encompasses GHG and energy accounting and reporting, inventory management, audits, assessment plans, and training for employees. The Group Sustainability team is also audited by OMV's internal auditing team on the completeness, correctness, reporting processes and methodologies, and quality assurance processes of our GHG accounting to confirm that the OMV Group reports Scope 1, 2, and 3 emissions in a complete and correct manner, that the accounting methodology complies with international standards, and that the reporting process is adequate. The last internal audit was conducted in 2020.

The Group Sustainability team continues to conduct on-site audits of GHG accounting to verify and improve transparency. For instance, in 2023 the team audited asset Valahia in OMV Petrom, which included a detailed assessment of the process of collecting data, the process of managing the data (measurement, estimations, assumptions, calculations, forecasts, consolidation, etc.), and the process of internal and external data communications. The audit confirmed the good practices already in place and highlighted some potential areas for improvement. For all findings and non-conformities, respective action plans are being defined and tracked for close-out in OMV's HSSE reporting tool.

Governance

Ultimate responsibility for reducing carbon emissions lies with OMV's Executive Board. The Chief Executive Officer (CEO) is responsible for the overall management and coordination and is therefore also responsible for overseeing climate-related issues. OMV Executive Board members meet regularly (at least quarterly) to discuss current and upcoming environmental, climate, and energy-related policies and regulations, related developments in the fuels and gas market, the financial implications of carbon emissions trading obligations, the status of innovation project implementation, and progress on achieving climate targets. The Executive Board's remuneration is linked to the achievement of our GHG emissions reduction targets (for more information, see <u>Sustain-</u> ability Governance).

OMV's Supervisory Board also oversees the carbon emissions reduction topic. The Sustainability & Transformation Committee was formed in 2021 to support the Company's Supervisory Board in reviewing and monitoring OMV's sustainability strategy, ESG-related standards, performance, and processes, and specifically, the Group's performance in HSSE (Health, Safety, Security, Environment) and climate change. For example, one of their responsibilities is to review and evaluate the progress we are making toward OMV's objectives in relation to our carbon footprint, climate change, and the energy transition.

At Group level, responsibility for GHG accounting and management, sustainability reporting, and ESG governance lies with the Group Sustainability team in Investor Relations & Sustainability, an area overseen by the CFO. OMV's Group Sustainability department is responsible for generating OMV's GHG inventory based on international standards and best practice. This ensures a consistent approach across the Group.

The main tasks of the team are:

 to define, implement, and manage OMV's GHG Management Framework, including the OMV Group's Climate Targets





- to monitor, calculate, and report OMV's GHG emissions (Scopes 1–3), and
- to define OMV's GHG accounting and reporting protocols and tools.

The team coordinates activities throughout the business, providing guidance to stakeholder groups such as subsidiaries, business units, and assets on GHG and energyrelated topics. To ensure consistency across the Group, there are also dedicated teams in OMV Petrom and Borealis. Tailored voluntary training on GHG accounting, monitoring and management, sustainability, and climate change is developed by the experts in the Group Sustainability team and offered to interested employees Groupwide.

In OMV's Capital Allocation Framework, a project category called "Sustainability Projects" allows certain projects to meet different economic return requirements. These projects are assessed and scored according to a strategic climate scoring methodology for Group-wide investment projects. This enables the impact of investments on OMV's decarbonization strategy to be considered. Alongside other strategic scoring aspects, this allows for holistic portfolio optimization across the OMV Group to support the achievement of our GHG reduction targets (for more information, see <u>Sustainability Governance</u>).

The Group-wide GHG Management Framework is an OMV Group regulation that defines how to measure, report, and manage GHG emissions and contains the definitions, boundaries, and rules for the OMV Group's strategic GHG reduction targets and "net zero by 2050" ambition. The regulation also includes requirements for Scope 1 E&P methane emissions accounting, which will align with the Oil & Gas Methane Partnership 2.0 (OGMP 2.0) Framework as a minimum and require sourcelevel measurement of methane emissions (OGMP 2.0 level 4) operated by the Energy division by 2026. According to OGMP 2.0, Level 4 refers to the source level quantification of methane emissions using specific emissions factors established through direct measurements, sampling, and/ or detailed engineering calculations.

Flaring, Venting, and Fugitive Methane Emissions

During oil production, associated gas is produced together with the oil. While much of this gas is utilized, some of it is routinely flared due to technical or economic constraints, resulting in the release of greenhouse gases such as CO_2 and methane. In 2017, to reinforce our clear commitment to responsible resource management and sustainable business, we endorsed the World Bank's "Zero routine flaring by 2030" initiative to end routine flaring of associated gas during oil production by 2030. Phasing out routine flaring is an essential step in combining resource efficiency with long-term economic success, as well as a way of supporting the decarbonization of our operations. We see financial opportunities in the monetization of hydrocarbon resources by utilizing the previously flared gas and/or selling it. Phasing out routine flaring improves the environmental and safety conditions at our respective assets, thereby enabling us to not only maintain our license to operate but also avoid any penalties.

Reducing methane emissions from the routine/non-routine venting of gas during oil and gas production and processing, as well as from gas leaks, also contributes to slowing down climate change and provides a valuable mitigation option for climate risk management. Methane is a powerful greenhouse gas. It is the most abundant anthropogenic GHG after CO₂ and second in its overall contribution to climate change. Its greenhouse effect is significantly stronger in the short term, making it more potent than CO₂. In our climate strategy, we therefore also introduced a target for reducing methane emissions for the first time.

Management and Due Diligence Processes

Phasing Out Routine Flaring and Venting

Around 1% of OMV's total direct GHG emissions and around 5% of OMV's Energy GHG direct emissions result from routine flaring. With stricter policies requiring zero routine flaring expected, OMV has taken initial steps toward compliance by voluntarily endorsing the World Bank's "Zero routine flaring by 2030" initiative. We report to the World Bank on our progress on this initiative annually. All OMV operations are required to minimize methane emissions from point sources, as well as fugitive emissions and technically avoidable emissions (such as well testing and well workover, among others). New production sites are developed with the appropriate gas utilization solutions in place and without routine flaring. Existing sites, where routine flaring of associated and free gas still occurs, are required to develop a phase-out plan to eliminate legacy routine flaring as soon as possible, but no later than 2030.

In our refineries, state-of-the-art plant design is implemented to avoid routine flaring, for example through the use of flare gas recovery and balancing the fuel gas systems. This type of advanced process control includes sufficient capacity for the flare gas recovery system, the use of high-integrity relief valves, and other economically viable organizational and control measures. All refineries use a flare gas recovery system to collect excess gas, which is desulphurized as required, pressurized, and added to the refinery fuel gas system as fuel for the process furnaces. As a result of such measures, we aim to use flaring as a safety system during unplanned operations, which include





start-up, shutdown, emergency, process upsets, and others. At the Petrobrazi refinery in particular, the capacity for flare gas recovery has been increased over the past few years. Emissions of volatile organic compounds (VOCs) are minimized by applying the best available techniques (BATs) in such areas as hydrocarbon storage and tank seals according to implementation plans.

Fugitive Emissions Monitoring and Leak Detection and Repair

Fugitive methane emissions and other non-methane volatile organic compounds (NMVOCs) are monitored or estimated and controlled systematically with leak detection and repair (LDAR) programs. Knowing the main potential sources of methane emissions also allows us to implement precautionary measures for preventing such emissions at new production assets. The minimum requirement for identifying leaks is conducting routine audio, visual, and olfactory inspections as part of daily operator rounds at all relevant OMV operating facilities. Leak detection also entails soap-bubble testing and optical gas imaging with defined scopes and intervals (annually or more frequently, as required in accordance with a corresponding risk assessment). At some facilities, infrared cameras are also used for leak detection. We also collaborate with third parties to further enhance state-of-the-art methane monitoring with technologies such as drones, satellite data, and acoustic leak imaging.

Leaks are repaired immediately or within defined time frames and, depending on prioritization, according to the site's maintenance processes. These are based on the risk assessment outcomes and other factors including feasibility of repair during operation. To prevent and mitigate fugitive emissions, we have taken important steps, including implementing a pipeline integrity program and modernizing facilities such as compressor stations.

2023 Actions

Decarbonization Initiatives

At OMV Petrom, several initiatives have been initiated to reduce methane emissions, routine venting, and flaring, including various modernization and upgrade projects for oil and gas processing, production, and transportation infrastructure. In 2023, the Production System Padina in Asset Moldova installed a combined heat and power unit (CHP) that recovers the gas that would otherwise be vented and/or flared. This will result in an emissions reduction of approximately 18,000 t CO₂e during the first full year after implementation.

- In August 2023, a performance test for the Bărbuncești Compressor Station in Asset Moldova was successfully carried out before it was put into operation. This project is partly a continuation of the project initiated in 2014 and aims to improve the performance of the compression system. As an integrating section for that project, the Merişani-Vâlcele and Brăgăreasa-Colelia compression stations were completed and the Brădești compression station is currently under construction. The new system architecture will reduce operational costs significantly, ensure flexible and safe natural gas collection and compression, and improve safety by introducing new equipment while dismantling old equipment that present some integrity problems and significant operational risks. The new system meets the Transgaz requirements for increasing system pressures up to 40 barg. Lower GHG emissions are expected by minimizing possible leaks and through more efficient energy consumption.
- 2023 was a milestone year for OMV New Zealand in terms of the completion of decarbonization projects. Two projects were implemented at the Raroa production system in Asset Maari. First, a reverse osmosis unit was installed in order to replace the steam-driven water maker. Reducing the steam demand resulted in lower consumption of the fuel oil, leading to an emissions reduction of approximately 6,000 t CO2e. The second project's scope was the replacement of fuel gas with nitrogen in the flare purge process. A nitrogen generator was already available on site, offering an opportunity for the project to minimize investment costs. The emissions reduction impact from this project is estimated at approximately 3,000 t CO₂e. Other projects with a decarbonization effect in New Zealand that have been trialed or implemented include changes to the turbine's operating concept, pressure optimization at the production separator, optimization of the compressor surge controller, and installation of solar panels on the roof of the warehouse. The combined emissions reduction impact from these projects is approximately 4,200 t CO₂e.
- As OMV and Borealis operate joint facilities in Schwechat and Burghausen, we strive to identify and increase joint synergies across both sites. For instance, at the Burghausen refinery from mid-2023, the quantity of flared gas was reduced, as the discontinuous nitrogen-rich gases produced by OMV were combusted in the Borealis regenerative thermal oxidation (RTO) plant, rather than being sent to the elevated flare.
- Borealis completed the cracker furnace upgrade in Stenungsund, Sweden, with the final furnace upgraded in 2023. This will generate a total annual reduction of up to 24,000 t CO₂e.



 Flaring was reduced in Porvoo, Finland, which resulted in savings of 500 t CO₂e annually.

Leak Detection and Repair

OMV consistently implements leak detection and repair (LDAR) programs to reduce our fugitive emissions. Important steps have been taken to prevent and mitigate fugitive emissions, such as the pipeline integrity program in OMV Energy and the LDAR program in both OMV Energy and Fuels & Feedstock (F&F). An LDAR program includes two fundamental steps: first, the identification of the leaking components and second, the repair of these leaks to minimize losses. This program serves as the basis for developing reduction projects in accordance with best practices in the industry and using the best available technologies. LDAR programs are routinely run both upstream (OMV Energy) and downstream (OMV F&F) to detect, prevent, and eliminate fugitive emissions. In OMV Energy, following the guidelines of the GHG Management Framework, methane emission programs have been established in line with the Oil and Gas Methane Partnership 2.0 (OGMP 2.0) Framework, which accepts LDAR as the most efficient method for detecting fugitive methane emissions from the operations and mitigating them. In OMV Austria, an internal LDAR team has been formed in order to perform regular screening of the production and processing sites by utilizing high-standard technologies (e.g., OGI, FLIR cameras, etc.). In addition, more than 300 facilities are included in the internal LDAR program led by Operations in OMV Petrom, which covers methane screening using FLIR cameras and mitigation of identified leakages. Furthermore, LDAR programs have become an integral part of operations, establishing strong partnerships with external service providers for compliance with our GHG Management Framework, as well as with other frameworks such as upcoming EU Regulations for methane emissions in the energy sector.

Methane Reporting

In line with the OMV Group's GHG Management Framework, which references the OGMP 2.0, OMV Energy-operated businesses shall reach source-level measurement of methane emissions (equivalent with Level 4) by the end of 2025.

Furthermore, the upcoming EU methane legislation will introduce additional stringent requirements for methane leak detection and repair programs, as well as for methane monitoring and reporting at source level and site level. In OMV Energy, OMV has already started taking important steps toward compliance with both the GHG Management Framework and the EU methane reporting requirements within the given deadlines for the ventures that are affected, i.e., OMV Austria and OMV Petrom. Global and local methane management programs (such as Ops CH4llenge at OMV Petrom) have been established within OMV Energy with the purpose of preparing the operations' organization for the new methane detection, measurement and reporting requirements. For that purpose, multiple pilot tests with various technologies, solutions, and service providers were executed by the end of 2023. An extensive pilot project has been completed at representative sites in three assets at OMV Petrom. The detection and quantification services were performed by third-party specialized contractors. This enabled us to achieve the following reporting levels:

- Source-level methane emissions for operated assets by direct measurements and sampling to establish the specific emission factors
- Source-level methane emissions for operated assets complemented by measurements of site-level methane emissions, thereby allowing assessment and verification of the source-level estimates aggregated by site

Based on the outcome of the pilot project, a rollout strategy has been developed and converted into a scope of work for outsourcing the services for methane measurement reporting and verification for affected assets at OMV Austria and Romania.

Outlook

In 2024, OMV will continue to pursue projects to further phase out routine flaring and venting, reduce Scope 1 emissions, and expand and intensify our LDAR campaigns. For example, an LDAR campaign has been planned in Tunisia, where pilot Optical Gas Imaging (OGI) camera screening will be conducted for the Gas Treatment Plant (GTP) to quantify the leaks and establish an appropriate action plan. In addition, other sustainability and decarbonization projects that specifically target flaring and venting reduction and are currently in the execution phase in multiple assets at OMV Petrom are expected to be completed by 2025 at the latest. At the Burghausen refinery, the current gasometer is scheduled to be replaced with a membrane gasometer, which has a greater gas storage volume. This is expected to reduce the intervals and quantity of gas flared, and result in an annual reduction of 1,800 t CO2e.

In general, we will focus on reducing fugitive methane emissions through process optimization, field modernization, and integrity improvement measures in OMV Energy. We continue to define and implement methane leakage, detection, and repair programs in all OMV Energy-operated assets, as well as establishing standard methane reporting with the required granularity (e.g., source level, site level).





Target 2025	• Achieve an E&P methane intensity ⁹ of 0.2% or lower
Targets 2030	 Achieve an E&P methane intensity of 0.1% or lower Zero routine flaring and venting of associated gas as soon as possible, but no later than 2030
Status 2023	 0.3% E&P methane intensity Volume of gas routinely flared and vented decreased from 240 mn m³ in 2022 to 53 mn m³ in 2023
Most relevant SDG	13 GENATE

SDG target:

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Energy Efficiency and Sourcing Renewable Energy

Energy Consumption



As an integrated oil, gas, and chemicals company, the OMV Group operates large facilities and is also a major energy consumer. The amount of energy we use creates a significant impact on the environment. Effective management of energy consumption reduces the environmental cost of our operations, increases financial savings owing to our energy efficiency measures, prevents non-compliance with regulatory requirements on energy use, and reduces GHG emissions. Energy efficiency measures therefore have a considerable effect on issues relating to energy consumption and are of particular interest to certain stakeholders:

- Government authorities: compliance with the EU Emissions Trading System (EU ETS) regulations relating to the submission of emission allowances within the EU ETS, compliance with the national transposition of the EU Energy Efficiency Directive, which requires greater energy efficiency in all stages of the energy value chain, and performing obligatory energy efficiency audits every four years
- Shareholders and other stakeholders with a direct financial interest in the OMV Group: financial savings resulting from reduced energy consumption, lower production costs, and lower GHG emissions
- NGOs/NPOs: reduced impact of our operations on the environment

Management and Due Diligence Processes

57% of sites are ISO 50001 certified

The OMV Group's Environmental Management Standard requires that all OMV businesses and activities use energy responsibly, conserve primary energy resources, and





implement energy management plans in accordance with ISO 50001.

Identification Measures

The potential for reducing energy use is identified in annual campaigns encouraging improved environmental performance, including energy consumption. For example, we have set targets for the refineries to reach certain energy intensity index ratings through annual monitoring campaigns. Based on their energy intensity, we identify and assess areas for improvement in terms of energy efficiency. Subsequently, we decide which measures to implement to reduce energy consumption as part of our environmental governance process.

Borealis is responsible for 24% of the energy consumption of the OMV Group. Furthermore, Borealis sees the energyefficiency-first principle as a cornerstone in achieving its climate strategy. The defined energy ambition is to implement 10% energy savings of the consumption of 2015 by 2030. As OMV and Borealis operate joint facilities in Schwechat and Burghausen, an initiative to identify and increase joint synergies across both sites was established.

Projects identified in 2022 were evaluated during 2023, with the potential for implementation from 2024 onward. For instance, the Schwechat refinery currently supplies boiler feed water to the Borealis facility. By adapting the supply lines, this boiler feed water can be replaced with cheaper, colder, and fully desalinated water, resulting in energy and CO₂ savings.

Technical Improvements

Energy efficiency measures in OMV operations are closely linked with technical improvements directed at reducing energy use while achieving the same operational output. Process optimization and increasing energy efficiency to reduce costs and CO_2 emissions are also a priority at our refineries. At the Schwechat refinery, measures have included the optimization of the blade rows in one of the steam turbines, which has resulted in an increase in the efficiency of the high-pressure section of the turbine, and a subsequent increase in the electrical output equal to the steam rate. Ultrasonic atomizer nozzles for power plant boilers were also installed to promote the atomization of liquid fuel to improve the quality of combustion. This resulted in a reduction in exhaust gas losses, fuel demand, combustion air demand, and CO_2 emissions.

The implementation of planned energy efficiency measures was interrupted by the unplanned shutdown of the RD4 crude oil distillation plant at the Schwechat refinery in 2022, resulting in severe delays. Some of the measures were implemented in 2023, and those remaining are expected to be finalized in 2024.

Sourcing Renewable Energy for Operations

We are increasingly turning to renewable sources of electricity to power our operations. One way of doing this is by purchasing renewable energy, which subsequently reduces our Scope 2 emissions. For instance, in our refineries in Schwechat and Burghausen, electricity contracts stipulate that 50% of purchased electricity must be from renewable sources. As such, in 2023, 50% of the purchased electricity at the Schwechat refinery and the Adria Wien Pipeline (AWP), 51.8% at the Burghausen refinery, including tank farms and pumping stations, came from renewable sources. 100% of the electricity purchased by OMV's Austrian filling stations and the head office are obtained from renewable sources. For OMV's refineries and the AWP, the electricity contracts are generally spot-indexed and contracted on a one- to threeyear basis. Commodity pricing risk is managed using financial risk instruments.

To reduce our Scope 2 emissions and to achieve the target Borealis has set of sourcing 100% of the electricity it uses from renewable sources by 2030, the OMV Group continued to establish Power Purchase Agreements (PPAs) to source renewable electricity on a longer-term basis, and sourced the electricity and utilities needed for its production processes. Several PPAs with renewable energy providers are already in place. These include:

- PPA between OMV and WEB Windenergie AG. With an output of 5.6 MW and annual electricity production of 13.7 GWh, the anticipated clean wind energy supplied to the OMV Group will be used to generate green hydrogen using an electrolyzer at the Schwechat refinery in 2023.
- Borealis and Finnish energy company Fortum have signed a long-term PPA to source renewable energy from two onshore wind parks. Starting mid-2024, 800 GWh of renewable power will be supplied to the Borealis production operations in Porvoo, Finland, over the course of eight years.
- Borealis and Axpo Nordic, a subsidiary of Switzerland's largest renewable energy provider, have a PPA for wind energy, which includes the annual supply of more than 130,000 MWh of wind power to the Borealis production location in Stenungsund, Sweden, over the next ten years. The electricity will be generated by a new onshore wind farm (Hultema) located in central Sweden, with delivery expected to start in January 2024.
- In Belgium, Borealis has a PPA with Eneco, a Dutch energy supplier. The energy will be generated by an existing offshore wind park (Mermaid) located in the North Sea.



To help reduce our Scope 1 emissions, the OMV Group also produces renewable energy and uses it to power our operations. Some of these initiatives include:

- In Austria, OMV and VERBUND built a ground-mounted photovoltaic (PV) plant at Schönkirchen with a total capacity of 15.32 MWp. The generated electricity is used for ongoing operations in OMV Energy Austria. Since mid-2022, the photovoltaic plant installed during both Phases I and II has been operational simultaneously. In 2023, approx. 13.6 GWh of renewable energy was produced and used for ongoing operations at our Austrian E&P assets within our OMV Energy business segment.
- The commercial operation of OMV's PV installation in Lobau began in early 2022, where a PV tracker system with an output of 5.6 MWp was installed. In comparison to a fixed installation, the tracker system, which follows the path of the sun, enables an increase in the generation of sustainable electricity of approximately 10%. Production efficiency was increased by another 5% by installing solar panels with bifacial (double-sided) modules. In 2023, the PV plant at the Lobau tank farm produced around 7.0 GWh of renewable energy covering approximately 45% of the annual electricity demand of the tank farm and resulting in savings of around 2,100 t CO₂ per year.
- In Norway, our joint venture partner Equinor reached full output of renewable power produced from the largest floating offshore wind farm called Hywind Tampen. The Hywind Tampen wind farm consists of eleven floating wind turbines with a total capacity of 88 MW, offsetting 200,000 t of CO₂ emissions and 1,000 t of NO_x emissions per year. The capacity covers the annual power demand of five platforms at the Snorre and Gullfaks oil and gas fields in the North Sea. In 2023, 48.3 MW of renewable energy was delivered to the Snorre and Gullfaks fields and 50,000 t CO₂ emissions were saved.
- The Cosmeşti solar park comprises 6,500 photovoltaic panels installed over an area of approximately 30,000 m². The green energy produced (approximately 2,500 MWh/year) will be used to supply electricity for ongoing operations in the E&P segment. This will result in a reduction of about 550 t CO₂.
- The Brădești solar park comprises 3,350 photovoltaic panels installed over an area of approximately 18,500 m². The green energy produced (approximately 1,200 MWh/year) will be used to supply electricity for ongoing operations in the E&P segment. This will result in a reduction of about 250 t CO₂.

- In Tunisia, utility air compressors with photovoltaic panels were installed at the Waha wells, while the Nawara well sites and pipeline valve stations were also equipped with PV panels for autonomous electricity generation.
- By the end of the fourth quarter of 2023, PV panels were installed at approximately 1,700 OMV and OMV Petrom filling stations The electricity produced from these installations annually is estimated at 8,900 MWh and presents savings of approximately 2,400 t CO₂e.
- The installation of solar panels on the roof of the warehouse in Māui, New Zealand, was completed in 2023. 196 panels were installed with approximately 78 kW capacity; of that, approximately 20 kW is used for internal purposes and the excess is exported.

Borealis is working to reduce its energy consumption and greenhouse gas emissions and increased the share of renewable energy consumed from 28% in 2022 to approximately 38% in 2023, as well as signing PPAs to lock in renewable energy supply for years to come.

2023 Actions

Energy Efficiency

Energy efficiency measures implemented at our three refineries in 2023 have made it possible to achieve an annual reduction of more than 27.5 kt CO_2e and energy savings of 654 TJ. These include:

- The HDS2 project was implemented at the Burghausen refinery in June 2023. It has an annual savings potential of about 37 TJ and CO₂ savings potential of about 2.1 kt. Thanks to the two new and improved reactor effluent heat exchangers, the fired heat in the HDS2 furnace can be reduced.
- Due to commissioning and the refinery shutdown, the District Heating Hub at the Schwechat refinery was not in full operation in 2023. When it was operational, around 100 TJ and 6 kt of CO₂ was saved.
- At OMV Petrom, an upgrade of the aromatic complex was initiated at the Petrobrazi refinery, and once finalized in 2025, it will achieve an annual saving of approximately 49 TJ and a CO₂ savings potential of about 3.2 kt. These savings will be achieved thanks to the extractive distillation technology, which reduces the amount of steam consumed.

In C&M, examples of energy efficiency measures taken include the following:

 Borealis successfully completed a major upgrade to its steam cracker operations in Stenungsund, Sweden. The overhaul is expected to realize yearly CO₂ emissions reductions of up to 24,000 t.



A new regenerative thermal oxidizer was successfully installed at Porvoo and is expected to significantly lower the site's CO₂ emissions, reduce flaring, and save around 60 gigawatt hours (GWh) of energy annually.

In OMV's Energy segment, the key energy efficiency projects included the following:

- In Norway, OMV and Wintershall signed a five-year rig contract for the use of the Transocean Norge platform. OMV will drill a minimum of seven wells with this rig, including four exploration wells and one development well. Energy efficiency is part of a contract incentive to reduce fuel consumption and further reduce CO₂ and NO_x emissions. The rig was used in a drilling campaign in August and September 2023 that resulted in an emissions reduction of 27% and 76% reduction of NO_x. In the Velocette drilling campaign, energy optimization software and a closed bus system for dynamic positioning were employed to reduce fuel consumption by approximately 27%.
- In the Māui field in New Zealand, the Māui A gas turbine generators were optimized by shifting the load between two units, thus allowing them to operate more efficiently. At the Māui Production Station, the surge controllers on the refrigerator compressors were also optimized, reducing the gas recycle as a result. Between the two projects, a saving of approximately 4,250 t CO₂e will be achieved annually.
- A legally required energy audit was conducted for Waha CPF, Nawara CPF, and GTP to assess the energy performance of the plants and implement appropriate improvement actions.

Outlook

We will continue to identify measures to improve energy efficiency and operational renewable energy initiatives. Examples of actions to be taken in the coming years are as follows:

- ➤ At the Schwechat refinery, a new preheating system will be installed for steam boiler 5, which is expected to result in an estimated saving of 2,000 t CO₂e.
- In Burghausen, the waste steam condensate stream from the Metathesis plant will be used to heat the cooler steam condensate from the crack-gas compressor increasing the energy efficiency of the process and resulting in an annual reduction of approximately 2,300 t CO₂e. By 2025, OMV Petrom aims to install PVs at half of its network of OMV Petrom filling stations. PV panels at additional OMV filling stations in Austria, Hungary, and Slovakia are also scheduled to be installed in 2024.
- In Austria, additional PV plants will become operational, including in Arbesthal and Würmlach, which will have a power output of approximately 1.1 MWp and 3 MWp respectively.

We will continue to increase our sourcing of renewable energy to power our operations. For the OMV Group, will aim to source an additional 580–780 GWh per annum of renewable electricity through additional PPAs and solar power investments. In C&M, the segment purchasing the greatest amount of energy, our aim is to ensure that all energy purchased is renewable by 2030. In the future, where local regulations permit, we also plan to produce renewable energy and feed it into the electricity grid for use by third parties. The potential for doing this in the countries where we have business operations is currently being evaluated.

Energy Transition

Material Topic: Energy Transition

Supporting the goals of the Paris Agreement by reducing the carbon footprint of our energy supply, specifically by increasing sales of zero-carbon energy products such as renewable mobility fuels and renewable power

Key GRI

GRI 305: Emissions 2016

NaDiVeG

Environmental concerns

Most relevant SDGs







The Energy Transition material topic focuses on reducing the carbon footprint of our energy supply, specifically through increasing sales of zero-carbon energy products such as renewable mobility fuels and renewable power. This is the centerpiece of OMV's commitment to supporting and accelerating the energy transition, and becoming a net-zero business by 2050 or sooner in alignment with the IEA's Net Zero Emissions (NZE) scenario, which foresees limiting the global temperature rise to 1.5°C. To concretize our 2050 goals, we have set mid- and long-term targets to reduce our absolute Scope 3 emissions by at least 20% by 2030 and by at least 50% by 2040, both against the baseline year 2019. In addition, we intend to reduce the carbon intensity of our energy supply by at least 20% by 2030 and by at least 50% by 2040, both against the baseline year 2019. These intermediate targets on our pathway to net zero by 2050 are approximated to the IEA's Sustainable Development Scenario (SDS), which foresees limiting the global temperature rise to well below 2°C and is thus aligned with the goals of the Paris Agreement.

Carbon Intensity of Energy Supply¹¹



Our absolute emissions targets cover all parts of the OMV Group, i.e., the upstream, downstream, and chemicals segments and their respective value chains. These divisions are expected to decarbonize at different rates, with a higher rate of decarbonization forecast in our energy segments (Energy and Fuels & Feedstock). This is attributable to the immediate reductions that will be achieved by our plans to minimize fossil fuel production and sales: We aim to decrease oil and gas production levels to around 350 kboe/d and reduce crude distillation throughput by 2.6 mn t, both by 2030. Growth in these segments will instead come from zerocarbon products, such as geothermal energy, photovoltaic, wind, hydrogen, and sustainable fuels. In our Energy segment, we will build up around 10 TWh of renewable energy production (including geothermal, PV, and wind). In our Fuels & Feedstock (F&F) segment, we are primarily focusing on finding solutions for hard-to-electrify market segments, such as heavy road transportation and air travel, as well as providing feedstock for greener chemical production. Overall, we plan to grow production of renewable mobility fuels and sustainable chemical feedstocks to approximately 1.5 mn t and produce and market at least 700 kta of sustainable aviation fuels by 2030. This scale-up of zero-carbon energy product sales while decreasing fossil fuel sales is central to OMV's climate strategy.

Meanwhile, our chemicals segment is projected to grow by 35% in monomer production volumes and 30% in polyolefins production volumes by 2030. In this non-energy segment, we will also reduce our Scope 3 emissions by pursuing circular economy technologies, but not at the same rate as our energy segments.

In this material topic, we focus on reducing the carbon footprint of our energy supply, as encapsulated in the key metric "carbon intensity of energy supply," for which we have also set 2030 and 2040 targets. However, our circular economy solutions also play a central role in our climate and carbon footprint reduction strategy. Read more about our efforts on this topic in <u>Circular Economy</u>.

¹⁰ Includes Scope 3, Category 10: Processing of sold products, and Scope 3, Category 11: Use of sold products

¹¹ The carbon intensity of the energy supply is measured by assessing the intensity of the Scope 1 and 2 emissions plus Scope 3 emissions (in g CO₂) from the use of sold energy products, against the total energy value of all externally sold energy products (in MJ) (excluding purely traded volumes). GHG data that is part of OMV's 2030 and 2040 targets is subject to baseline recalculation; therefore, historical data has been recalculated. See Environmental Data for more details.





Target 2025	 Reduce carbon intensity of product portfolio (Scope 3) by >6% vs. 2010
Targets 2030	 Reduce absolute Scope 3 emissions¹² by ≥20% vs. 2019 Reduce carbon intensity of energy supply by ≥20% vs. 2019
Targets 2040	 Reduce absolute Scope 3 emissions by ≥50% vs. 2019 Reduce carbon intensity of energy supply by ≥50% vs. 2019
Status 2023	 Carbon intensity of product portfolio reduced by 1% vs. 2010 Absolute Scope 3 emissions reduced by 10% vs. 2019 Carbon intensity of energy supply reduced by 1.0% vs. 2019
Most relevant SDGs	7 AFFORANCE AND REALEMENTO

SDG targets:

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

- 7.3 By 2030, double the global rate of improvement in energy efficiency
- 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Governance

OMV's energy transition is the cornerstone of our Group's business strategy. Our sustainability framework and "net zero by 2050" target were the basis for developing the business strategy 2030 approved by the Executive and Supervisory Boards in December 2021. The Group's decarbonization strategy is overseen by Group Sustainability and Strategic Planning & Projects.

Our climate ambitions are at the heart of our strategy, and responsibility for meeting these ambitions is embedded at the highest levels. Our Executive Board is responsible for setting our climate targets and ensuring that our Group's business strategy is aligned with meeting these targets. Correspondingly, meeting our climate change targets is a part of executive remuneration, with GHG reduction targets included in the Long-Term Incentive Plan (LTIP) and in the annual bonus paid to the Executive Board. Read more in <u>Sustainability Governance</u>.

The responsibility for our role in the energy transition is also entrenched at Supervisory Board level. In 2021, a Sustainability & Transformation Committee was established. Their purpose is to support the Company's Supervisory Board in reviewing and monitoring OMV's sustainability strategy, ESG-related standards, performance, and processes, and specifically our performance in HSSE and impact on climate change. Furthermore, the committee serves to support and oversee the transformation process toward a more sustainable business model, including the cultural integration of strategically significant acquisitions. For example, one of their responsibilities is to review and evaluate the progress we are making toward OMV's objectives in relation to our carbon footprint, climate change, and the energy transition.

At Group level, responsibility for GHG accounting and management, sustainability reporting, and ESG governance lies with the Group Sustainability team in Investor Relations & Sustainability, an area overseen by the CFO. OMV's Group Sustainability department is responsible for generating OMV's GHG inventory based on international standards and best practice. This team coordinates activities throughout the business, providing guidance to stakeholder groups such as subsidiaries, business units, and assets on GHG and energy-related topics. Low- and zerocarbon products enabling the energy transition are developed in the business units. Support for carbon impact assessments for new products is provided at Group level by the Group Sustainability department. To ensure





consistency across the Group, there are also dedicated teams in OMV Petrom and Borealis.

The Group Sustainability team developed a Group-wide GHG Management Framework in 2022. This OMV Group regulation defines how to measure, report, and manage greenhouse gas emissions and contains the definitions, boundaries, and rules for the OMV Group's strategic GHG reduction targets and "net zero by 2050" ambition. It also defines the requirements for purchasing voluntary carbon offsets and their contribution to achieving the Group's GHG target.

The OMV Group's Capital Allocation Framework includes a strategic scoring methodology for investment projects based on four pillars: business strategic targets, financial metrics, risk profile, and climate targets impact. This new methodology was tested in 2022 in a pilot phase. The scoring helps to objectively define and review OMV's most important strategic projects and allows for holistic portfolio optimization across the OMV Group to support our strategy delivery, including our GHG reduction path. Climate scoring is an integral part of this overall scoring and covers the investment's impact on the OMV Group's Scope 1, 2, and 3 climate targets for 2030, as well as EU taxonomy relevance.

As part of the updated Capital Allocation Framework, OMV also introduced a new definition for "sustainability CAPEX," which encompasses investments that meet one of two criteria: either they are aligned with the EU taxonomy or they are investments that support the implementation of OMV's 2030 Sustainability Framework. The goal of the new Capital Allocation Framework is to promote and facilitate investments in projects aligned with our climate targets, including our long-term net-zero target, rather than traditional fossil fuel-related investments. For more information, see <u>Sustainability Governance</u>.

Collaboration with Start-ups and Research Institutions

Emissions reduction and sustainable energy solutions play a major role in our transformational path to meet society's energy needs. The OMV Group is leveraging its existing expertise and collaborating with start-ups and research institutions to find innovative technological solutions that will drive the energy transition and pave the way to becoming a net-zero company by 2050. Innovation is a key element in OMV's implementation of its Strategy 2030 and critical to the transformation of the value chain from a linear to a circular model. OMV is always looking for innovative solutions to optimize operations, evaluate business opportunities, and develop new business models to make OMV a sustainable company.

The complexities of the competing demand between climate action and the continued demand for energy highlights the importance of investment in innovation and technological advancement. Investments in unlimited, lowcarbon geothermal energy, Carbon Capture and Storage (CCS), and renewable power solutions play a key role in OMV's Strategy 2030. In 2023, the OMV Group entered into several partnerships, which include the following:

- OMV acquired a 6.5% stake in the privately owned Canadian company Eavor Technologies Inc. Eavor is the world's leading developer of closed-loop geothermal energy solutions. In addition, OMV and Eavor entered into a commercial agreement to pursue large-scale deployments of the Eavor-Loop[™] technology in Europe and beyond. Read more in Low- and Zero-Carbon Products.
- OMV partnered with Plug and Play, which serves as a hub for innovation and entrepreneurship, connecting start-ups with corporate partners, investors, and resources. As a core element of the collaboration, OMV is actively engaged in Plug and Play's innovation program, which offers a structured and efficient pathway to discover, evaluate, and invest in a selected group of promising start-ups.
- For the past four years, OMV has been part of the "VERBUND X Accelerator." In 2023, OMV was a community partner, which gave the Company access to a vast network of idea generators and thought pioneers. This collaboration offered the opportunity to engage with start-ups and benefit from the innovative potential of the community. As part of the VERBUND X Accelerator program, OMV entered a strategic collaboration with the American start-up Compact Membrane Systems (CMS) in 2022. As a technology leader in separation solutions for low-carbon intensity processes, CMS has developed a potentially groundbreaking technology for carbon capture. Following an intensive research and testing phase, OMV will implement the technology and test it on an industrial scale.
- OMV announced research funding of approximately USD 6 mn to research teams at Stanford University for the next five years. The funding builds on ten years of existing cooperation with the institute, marking a significant step forward for OMV in spearheading the creation of Al-driven tools aimed at ideating sustainable solutions. Among the notable achievements of this support is the development of a smart Al-based decision-making tool to optimize developments in the low-carbon business areas. It is capable of not only strategically positioning CO₂ injectors, but also selecting the most effective monitoring techniques. This innovation is key in ensuring the highest level of safety in long-term CO₂ storage.



- OMV started a collaboration with Hycamite, a Finnish start-up and a leader in emission-free pyrolysis technology. Through this collaboration, OMV will have access to a technology that will significantly aid the transition from our traditional business approach to a lower-carbon business model. The Hycamite technology breaks methane down into its component elements, hydrogen and carbon, without releasing any greenhouse gas emissions.
- OMV developed and tested innovative technologies for Carbon Capture (CC), which will be tested in a pilot project in 2024. Together with Brusche Process Technology, a Dutch specialist in the design and construction of innovative sustainable process plants, a mobile carbon capture pilot plant is being built with the aim of testing these promising technologies for future application on a large scale at various OMV sites.

Low- and Zero-Carbon Products

The scale-up of zero-carbon and renewable energy product sales while reducing fossil fuel sales is central to reducing the carbon footprint of our energy supply. Zero-carbon and renewable energy products include biofuels, electricity, waste heat, and new energy products such as geothermal heat.

In our Energy division, the Low Carbon Business (LCB) team has been working on expanding our photovoltaic asset base. Based on our subsurface knowledge, capabilities, and asset base, we have also been exploring carbon capture and storage solutions. We collaborate with industry and research partners on these activities in line with applicable regulatory and legal requirements. We are also investigating solutions for subsurface energy storage, e.g., with hydrogen, and looking at options to explore and commercially develop geothermal energy potential in the countries where we operate. These projects are mainly in the R&D or initial investment phase.

In F&F, we are contributing to the creation of a sustainable energy system by identifying and maturing solutions, with a strong focus on markets that are hard to electrify using batteries and customer segments such as heavy road transport or air travel. What these markets have in common is that they need an energy-dense yet climatefriendly fuel with the lowest possible downtime. Our portfolio focuses on waste-based and advanced biofuels, hydrogen, and e-fuels, as these offer the potential to utilize synergies with existing refinery assets and competences for a feasible scale-up and roll-out of green technologies.

The successful implementation of all these projects will reduce our absolute emissions, create green, innovative products and services for society, and provide a key differentiator for OMV.

Management and Due Diligence Processes

OMV has defined sustainability criteria that influence which projects and technologies are selected for investment. For all investments and M&A activities, it should be ensured that all climate-related risks are identified, assessed, and evaluated. This will include the assessment of the actual and forecast carbon footprint of the respective investment and M&A. Projects that contribute positively to the achievement of OMV's climate targets are preferred for investment (for more details, see <u>Sustainability Governance</u>). All project ideas selected for maturing need to demonstrate a feasible trajectory from pilot and demo stage to full industrial scale in the medium term.

Responsible Biofuels Sourcing

All biofuels purchased by OMV in 2023 and used for blending meet the requirements of the EU's Renewable Energy Directive (EU) 2018/2001. Since 2013, the ISCC EU certificate issued for OMV Downstream GmbH has been renewed on an annual basis. OMV Petrom, OMV Hungary, OMV Czech Republic, OMV Germany, and OMV Slovakia are also certified according to the ISCC EU standard.

Biofuel Volumes¹³



OMV purchases biofuels mainly from European producers and excludes palm oil as a feedstock. International Sustainability & Carbon Certification (ISCC) standards require that no deforestation took place from January 2008 onward for any feedstock that is used for biodiesel generation. Since July 2021, OMV has also complied with the Austrian legal requirement not to use palm-oil-based biofuels for target fulfillment. In 2023, of all biofuels placed on the market by OMV, only around 0.3% were based on palm oil. The main feedstocks used are used cooking oil (30%), rapeseed oil (29%), and corn (13%).

OMV plans to use vegetable oils and used cooking oil as well as other potential waste and advanced feedstock to produce biofuels using our Co-Processing technology. Co-Processing involves introducing biogenic feedstock during the fuel refining process instead of the conventional method of blending biogenic components into fuel after production.

¹³ 2023 figure estimated as both Austria and Germany data are based on year-to-date actuals plus a forecast for the remaining months each year, given that the annual deadline for closing all biofuel balances of a given year is not before the publication of the Sustainability Report.



This concept allows OMV's existing refineries to produce transportation fuels from various types of biogenic feedstock.

In 2016 and 2017, OMV successfully conducted the first field trials of Co-Processing at the Schwechat refinery using rapeseed oil, and obtained certification in accordance with the REDcert standard, an EU-recognized system for the certification of sustainable biomass. In 2020, another field trial was successfully completed at the Petrobrazi refinery. OMV continues to implement the Co-Processing technology and in 2024, the Company aims to start the co-processing of sustainable feedstock in Schwechat. It is important to note that no palm oil will be co-processed. The project will start with a mix of vegetable oils (rapeseed oil and sunflower oil). It may include some other waste and residue or advanced streams like used cooking oil or cashew nutshell liquid in future (2024-2025). In December 2020, OMV committed to investing EUR 200 mn in the construction of the Co-Processing unit at the Schwechat refinery. Utilizing this process will lead to an annual reduction of OMV's carbon footprint of up to 360 kt CO₂, which is equivalent to the annual emissions of around 200,000 cars driving an average of 12,000 km per year.

2023 Actions

The following key activities were carried out across the Group in 2023:

Geothermal Energy

OMV and Wien Energie are joining forces to deliver the heating transition. In a joint venture called "deeep," the two companies are working closely to make deep geothermal energy a reality in the greater Vienna area. The aim is to develop deep geothermal plants with an output of up to 200 MW, thereby generating climate-neutral district heating for the equivalent of up to 200,000 Viennese households. The partners are also planning to implement up to seven deep geothermal plants in Vienna as part of drilling programs. The first deep geothermal plant is to be realized together by the partners in the joint venture. The plant will generate up to 20 MW of climate-neutral district heating - in combination with heat pumps from Wien Energie. The aim is to supply up to 20,000 Viennese households with district heating from this plant. Approval procedures are currently underway and drilling is due to start toward the end of 2024. The plant is scheduled to go into operation in 2027. Making the project part of the joint venture allows the partners to glean valuable insights and data for follow-up projects, enabling Wien Energie and OMV to realize the further expansion of geothermal energy in Vienna more quickly and efficiently.

OMV acquired a 6.5% stake in Canadian privately owned Eavor Technologies Inc. for the amount of EUR 34 mn. Eavor is the leading closed-loop geothermal energy solution developer worldwide. In addition, OMV and Eavor have entered into a commercial agreement to pursue large-scale deployments of Eavor-Loop[™] technology in Europe and beyond. The commercial agreement establishes OMV as a key partner with preferred licensing terms, access to services, and development support. OMV's initial focus will be on the deployment of Eavor-Loop™ in Austria and Germany. Eavor's technology is based on a closed-loop system, installed in deep subsurface rock, whereby a working fluid is circulated between surface and deep subsurface rock in a closed loop and therefore heated up. The technology reduces the geological and hence operational risk significantly compared to normal hydrothermal systems with similar energy output. As Eavor-Loop[™] is truly scalable and applicable in various types of geological structures, it will enable OMV to offer heat solutions for district heating networks outside of the normal hydrothermal areas and therefore complement its existing portfolio of hydrothermal projects.

OMV is constantly evaluating and maturing further opportunities and projects with regards to open- and closed-loop geothermal.

Renewable Energy

OMV Petrom and Complexul Energetic (CE) Oltenia will begin the construction of four solar parks, which will provide a combined capacity of approximately 450 MW. The total investment required for the establishment of these four photovoltaic parks exceeds EUR 400 mn, with 70% of the funding coming from the Modernization Fund. The PV parks will be built in Işalnita, Tismana, Roşia and Rovinari, on the sites of the former mining operations managed by CE Oltenia. Based on current estimates, the PV parks should supply electricity to the national energy system from 2024 onward. In addition, OMV Petrom has signed an agreement to acquire a number of projects for the construction of solar parks in Teleorman county. The projects will go into the execution phase by the second quarter of 2024 and, with a total power output of 710 MW, will supply enough power for 280,000 Romanian households annually.

Glycerin2Propanol

After seven years of successful development within OMV, the implementation of the Glycerin2Propanol pilot plant at the Schwechat refinery site marks a significant step toward advancing the technology maturity (barrel/hour scale; TRL 6–7). In October 2023, important milestones were reached with the delivery of the last modules and placement on the foundation. The final assembly of the Glycerin2Propanol plant is now underway, with only a few stages left before mechanical completion. The OMV-patented technology will produce propanol from low-value material crude glycerin by the end of Q1 2024. The plant will use a catalyst, or reaction accelerator, developed in-house by OMV to transform the biogenic waste-based crude glycerin into a so-





called advanced bioalcohol (propanol). In doing so, the plant will generate what are known as advanced biofuels, which are not in competition with foodstuffs and which, when added to gasoline, reduce its carbon footprint.

While glycerin is a waste/by-product of the production of biodiesel and the manufacture of detergents and soaps, it is also considered an advanced biobased feedstock under the European Union's RED III Renewable Energy Directive. This means that the feedstock is not part of the food chain and does not compete for land use for food. The propanol produced in this way will then be used as an advanced bioadditive for gasoline. It can also be used as a sustainable feedstock for the chemicals market to replace fossilfuel-based propanol. OMV is set to invest around EUR 30 mn in the scale-up of this project, of which around EUR 8 mn will be funded through the Austrian Research Promotion Agency (Forschungsförderungsgesellschaft; FFG) and the COVID-19 premium. The capacity of the pilot plant will be 1.25 mn I of propanol per year. This will lead to a CO₂ reduction of around 1,800 t annually. A total of 1.2 I of crude glycerin is needed to produce 1 I of propanol. Under moderate temperature and pressure, 1 barrel (159 liters) of propanol will be produced per hour in an energy-efficient process. The long-term plan is to commercialize the technology to produce around 125 mn l of propanol per year and reduce CO₂ emissions by around 180 kt. The Glycerin2Propanol pilot plant will be located at the Schwechat refinery alongside the ReOil[®] plant so that both units can take advantage of a combined operator station, exploiting the synergy of a shared operator concept. In addition to this unique in-house development, we also partner with technology providers to develop viable business projects for transforming biomass from agriculture, municipalities, the paper industry, or wood processing into bioliquids to be used for greener fuels and chemicals.

Project commissioning is scheduled for March 2024 after finalizing integration with IT systems and preparing operation manuals.

Hydrogen

Together with our partner Kommunalkredit Austria AG, in February 2021, we announced a joint investment in the construction of Austria's largest electrolysis plant at our Schwechat refinery. Construction work started on this project in August 2022. Total investment will be around EUR 25 mn, with OMV and Kommunalkredit each bearing half the cost. The plant is expected to go live in the first half of 2024. The 10 MW polymer electrolyte membrane (PEM) electrolysis system will produce up to 1,500 t of green hydrogen per year. The green hydrogen will be used to hydrogenate biobased and fossil fuels, substituting gray hydrogen in the refinery. This would reduce OMV's carbon footprint by up to 15 kta of fossil CO₂. On global wind day on June 15, 2023, a new milestone was accomplished where the first wind turbine assigned to OMV in Dürnkrut, Weinviertel was inaugurated. This wind turbine was built and is operated by our partner, the W.E.B. energy company. The wind turbine has a capacity of 5.6 MW and generates 13.7 GWh of electricity per year, which is equivalent to the annual consumption of 4,000 households. It will cover about 20% of the renewable energy needed for the 10 MW electrolysis plant in Schwechat.

Sustainable Aviation Fuels

With the innovative aviation fuel known as Sustainable Aviation Fuel (SAF), we're driving the transition to a climate-friendly future. Because by also processing waste food oil from around the region, CO₂ emissions can be cut by more than 80% compared with conventional kerosene products. SAF is thus a viable alternative and already in use today.

OMV has initiated a broad investment portfolio to produce sustainable fuels such as Sustainable Aviation Fuels (SAF) and Hydrotreated Vegetable Oil (HVO). Mandated blending targets for both road fuels (HVO) and the aviation sector (SAF) are planned, with financial penalties for noncompliance. OMV is aiming to produce both SAF and HVO in a flexible product yield range, depending on market needs. Investments in new units and unit revamps are under development for the refineries in Austria, Romania, and Germany, as well as in new assets beyond the current refineries.

Another focus topic is the hard to electrify area of e-fuels, another core building block of OMV's SAF portfolio, which shows great potential for enabling climate-friendly air travel. While in theory the concept is simple, i.e., hydrogen produced with renewable electricity is combined with CO₂, the production technology is still in the demonstration phase and requires further research and development for the required industrial scaling.

OMV is leading a project consortium together with industrial partners like BASF and thyssenkrupp Uhde, and academia (e.g., the German Aerospace Centre DLR and ASG Analytik-Service Gesellschaft) to develop a process to produce SAF based on methanol (M2SAF project). In addition to catalyst development, process development, plant integration, and the design of a demo plant, the project also includes techno-economic and -ecological analysis, as well as accompanying support for the certification and analysis of the new aviation fuels. The project is also targeting the production of a 100% drop-in capable SAF and enabling a process route with high selectivity and minimal additional CO2 emissions, and with a high degree of integrability into existing brownfield or greenfield installations. The starting point of the process is sustainably produced methanol, either from CO₂ and hydrogen or from biogenic feedstock. The development project started in August 2022 for an initial period of 2.5 years





and is being funded by the German Federal Ministry for Digital and Transport (BMDV).

OMV was already delivering SAFs to Air France-KLM, Ryanair, and Associated Energy Group, LLC (AEG Fuels) at Vienna airport in 2023. Additional Memorandums of Understanding (MoUs) for the intended offtake of SAFs were signed with Air France-KLM and Ryanair in 2023. Volumes covered by MoUs between 2023 and 2030 are: up to 160,000 t for Ryanair, up to 155,000 t for Wizz Air, up to 200,000 t for Air France-KLM, and more than 800,000 t for the Lufthansa Group.

Retail 2023

Mobility is changing fast – countries in the EU have released climate and energy strategies, aiming for a carbon-free

Retail 2023

energy sector by 2050. The vision addresses all energy sectors; mobility is being presented as a flagship sector to showcase sustainable development. To adapt to these trends, OMV is developing an EV fast-charging network.

OMV is investing over EUR 400 mn in delivering superior EV charging services for drivers and businesses. Our objective is to offer at least 2,000 e-charging points at highway and transit route filling stations, plus around 17,000 office wall-box charging points by 2030. The implementation includes the installation of charging points in Austria, Romania, Slovakia, and Hungary to offer highpower chargers, with the majority featuring a charging capacity between 150 kW and 300 kW. In 2023, an additional 272 charging points were installed.



Outlook

- In the coming years, we will focus on implementing the investment projects mentioned (e.g., Glycerin2Propanol). In Q3 2024 and subsequently to commissioning and start-up, vigorous test runs will be conducted according to a dedicated parameter matrix to further optimize the operating window of the Glycerin2Propanol process, and data will be gathered in parallel for subsequent industrial scale commercialization. Moreover, ISCC EU certification is planned for the Glycerin2Propanol pilot plant.
- In addition, we will mature project ideas in the areas of advanced biofuels and e-fuels. By 2030, we aim to produce and market at least 700 kta of sustainable aviation fuels. OMV will also expand its capabilities to take advantage of the growth in electric vehicle charging. By investing more than EUR 400 mn by 2030, OMV will offer more than 2,000 electric charging points at highway and transit route filling stations, plus around 17,000 office wall-box charging points. In addition, following the MoU signed by the OMV Group and Austrian Post in 2021 for the use of green hydrogen in heavy goods vehicles (HGVs), the first use of green hydrogen is expected in 2023 at the latest. By 2030, 2,000 HGVs will be powered by green hydrogen fuel cells.



- For the Glycerin2Propanol project, the factory acceptance test was completed in Q2 2023 and the pilot plant modules have been transported to the Schwechat refinery for reassembly, loop checks, and final commissioning by the end of 2024's first quarter. In parallel and as a precondition for the bulk chemical market, the propanol from OMV's biobased process has been registered at the European Chemicals Agency (ECHA) – OMV being the first company to register propanol produced from a renewable basis. Looking to the future, collaborative R&D efforts have begun to transform the propanol into sustainable aviation fuel.
- Investments of approximately EUR 5 bn have been planned between now and 2030 to build the Low Carbon Business (LCB) in our Energy division, with a focus on geothermal energy, CCS, and renewable power. The investments are expected to ramp up after 2024. The LCB team has been working on expanding our renewables asset base with a focus on captive use within the OMV Group. Furthermore, we are looking at opportunities and projects to explore and commercially develop the geothermal energy potential via open- and closed-loop systems. For CCS, we are working on further license applications and opportunities.

Neutralization Measures

We aim to reduce our carbon footprint to net zero by 2050 at the latest. While the biggest drivers on this journey will be decreasing our fossil fuel sales and increasing our zerocarbon product sales, we also recognize that neutralization measures will be necessary. Neutralization measures include, but are not limited to, Carbon Capture and Storage (CCS), Carbon Capture and Utilization (CCU), and Bioenergy with Carbon Capture and Storage (BECCS). By 2030, we aim to establish CCS capacities of around 5 mn t per year as our main neutralization measure toward achieving our targets.

Management and Due Diligence Processes

Offsetting Emissions

OMV offers voluntary carbon offsetting to customers and works closely with ClimatePartner, an internationally trusted service partner based in Munich. ClimatePartner selects certified carbon offset projects and ensures that OMV customers who use this option are able to contribute a dedicated amount to these projects. The criteria for these carbon offset credits to be used for voluntary offsetting are clearly defined in OMV's GHG Management Framework. In 2023, the biggest contributors in terms of CO₂ offsets in OMV's portfolio were wind and solar energy projects in India and China, and forest protection in Brazil. In 2023, the climate protection projects (14.38%) in Bulgaria, Turkey, India, and China; solar projects (9.13%) in China and India; wind energy projects (46.26%) in Bulgaria, Turkey, China, and India; nature-based projects

(18.35%) in Rumania and Brazil; gas/heat recovery and biogas projects (11.9%) in Turkey, Bulgaria, and Pakistan. These carbon offsets are verified according to one or more of the following internationally recognized standards: Gold Standard (GS), Verified Carbon Standard (VCS), Certified Emission Reductions (CER), and Climate, Community & Biodiversity Standard (CCBS).

None of these voluntary carbon offsets have been accounted to contribute toward achieving OMV's GHG reduction target.

Carbon Capture and Storage (CCS) and Utilization (CCU)

In line with the aim of becoming a net-zero company, OMV will invest in carbon capture and storage (CCS), leveraging existing assets and capabilities, and contribute to a more sustainable society.

In order to reduce greenhouse gas emissions, OMV Energy will invest around EUR 5 bn in the development of lowcarbon businesses, i.e., geothermal energy, renewables and carbon capture and storage (CCS). For CCS, we intend to offset absolute emissions both from captive use and third parties. The target for 2030 is to grow to 5 mn metric t a year. We will explore CCS solutions based on our subsurface knowledge, capabilities, and asset base. In addition to the license that we hold together with Aker BP, we are working on further license applications and opportunities in this area. We collaborate on these activities in line with applicable regulatory and legal requirements in conjunction with industry and research partners.

OMV aims to capture CO_2 and ideally use it as a resource. Carbon capture and utilization technologies, such as capturing biogenic CO_2 emissions, hydrating the CO_2 , and then reusing it as a chemical or aviation fuel, are crucial to reducing overall atmospheric emissions and fostering circularity. However, achieving the goals of the Paris Agreement does not just require reducing our own emissions but also helping reduce atmospheric emissions from other sources. Thus, our CCS and CCU projects include, but are not limited to, capturing our own emissions.

2023 Actions

327 kt CO₂e of customer-related GHG emissions voluntarily offset by verified carbon credits



- Currently, OMV's customers can voluntarily offset the carbon footprint resulting from using all products they purchase from us, such as diesel, gasoline, bitumen, heating oil, and natural gas. OMV GAS offers this service in all markets. We recognize the high and ever-increasing customer demand for this option. OMV Fuels Sales customers can voluntarily offset their carbon footprint based on the use of gasoline or diesel, as well as extra-light heating oil and bitumen, in all countries where we operate. Customers of OMV Retail Mobility & Convenience (our filling stations) are able to offset 20% of the carbon footprint when opting for MaxxMotion Performance Fuels in Austria, Romania, Slovakia, and Hungary, without any surcharge. Our OMV Card customers can use their OMV Card with the Routex function to offset the carbon footprint of the diesel and gasoline they purchase.
- Aker BP and OMV (Norge) AS have entered into a collab-۲ oration agreement for carbon capture and storage (CCS) and been awarded a license for CO2 storage in accordance with the CO2 Storage Regulations on the Norwegian Continental Shelf (NCS). The license awarded to Aker BP and OMV is located in the Norwegian North Sea and is named Poseidon. Aker BP (50%) and OMV (Norge) AS (50%) have interest in the license, which will be operated by Aker BP. The license comes with a work program that includes a 3D seismic acquisition and a drill or drop decision by 2025. The Poseidon license could potentially provide storage of more than 5 mn t of CO₂ per year. The intention is to inject CO₂ captured from multiple identified industrial emitters in northwest Europe, including from Borealis' various industrial sites in Europe.

Borealis entered into a collaboration with the University of Helsinki, Finland, as well as several other academic and industry partners, on a joint research project focusing on direct carbon dioxide (CO₂) capture from the air. This project is part of the Business Finland-funded SPIRIT Program (Sustainable Plastics Industry Transformation). Co-founded by Borealis, the program seeks to bring about a circular and net zero transformation of the plastics value chain.

Outlook

As part of our strategy, we foresee developing CCS storage capacity of around 5 mn t per year CO_2 net at OMV by 2030. In addition, OMV Petrom will test an innovative technology for CCU at the Petrobrazi refinery. OMV Petrom is a partner in an ambitious European project to address the problem of CO_2 emissions through carbon capture and conversion technologies. Over a five-month period in 2024, they will capture the CO_2 from flue gasses released by the cogeneration unit, further converting them electrochemically into a marketable product.