

Carbon neutrality by 2050

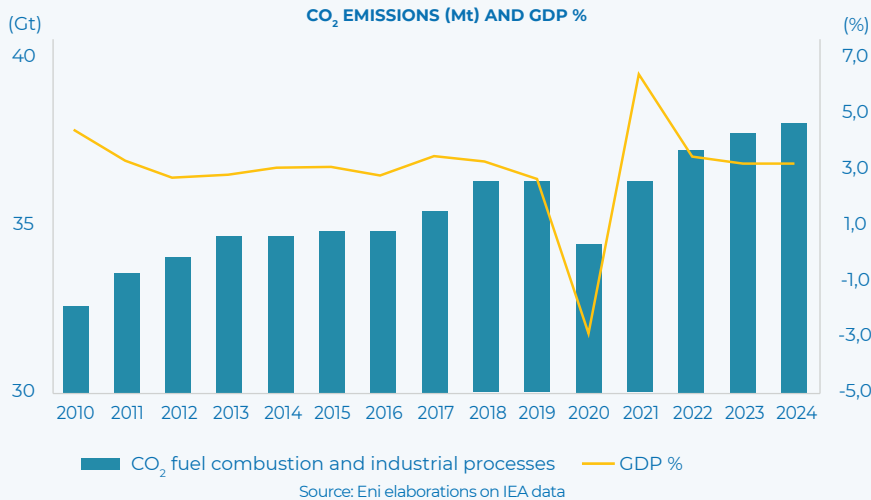
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REFERENCE CONTEXT

ECONOMIC GROWTH AND EMISSIONS

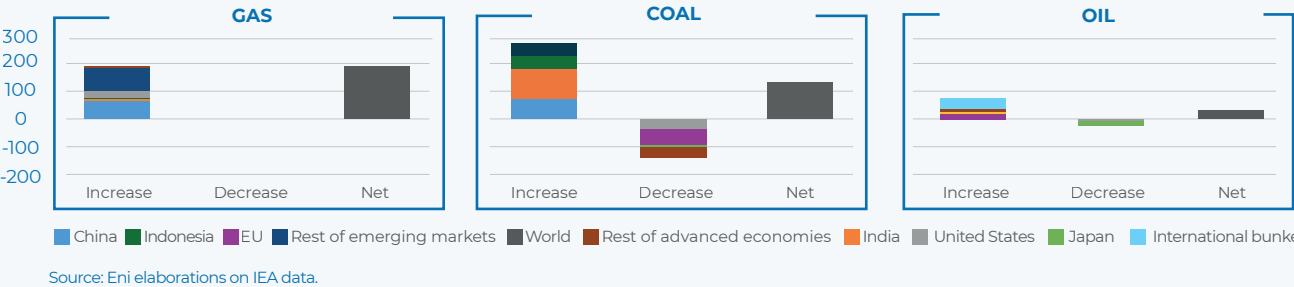
Global energy-related CO₂ emissions in 2024 increased by 0.8% (vs. 2023), reaching a new peak of ~38 Gt (of which more than 90% from fuel combustion). The linkage between economic growth and emissions, which has been weakening over the past three years, has benefited from both structural and temporary factors influencing this trend. Specifically, in 2024, emissions growth was close to +0.8% vs. worldwide GDP growth of about 3%.



REGIONAL DYNAMICS

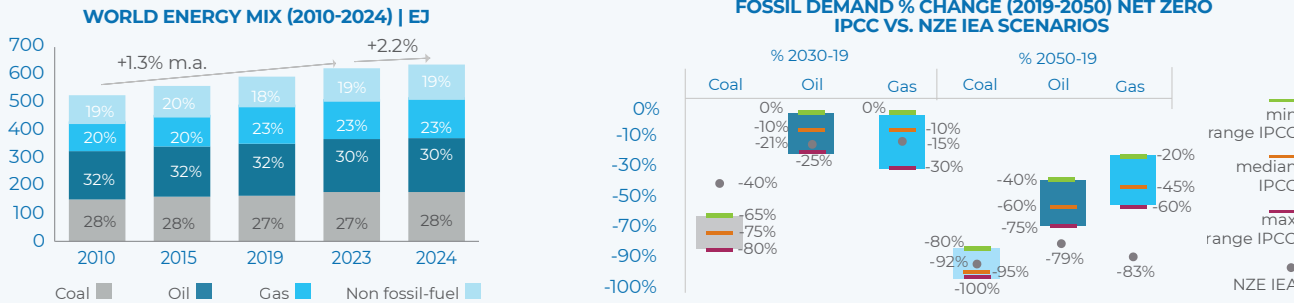
In 2024 different geographical trends determined the global dynamics of GDP and emissions changes. In advanced economies, GDP growth of 1.7% was matched by a contraction in emissions of 1.1%. In the rest of the world, emissions continued to grow, offsetting the decline in advanced economies. The EU accounted for more than 45% of the contraction in advanced economies (-55 Mt CO₂), driven by renewables additions but also by the weak economic environment, which limited the growth in energy consumption. Emissions in emerging and developing economies increased by 1.5% (+~375 MtCO₂) against GDP growth of 4%. India (~+140 MtCO₂) and China (~+120 MtCO₂) led this increase, due to more sustained growth in energy consumption and the strong reliance on higher emitting sources (such as coal), which limited the effects of growing renewable contributions.

CO₂ EMISSIONS CHANGE 2024 VS. 2023 BY FUEL AND REGION (MtCO₂)



EVOLUTION OF THE ENERGY MIX

The evolution of future emission paths will depend on the speed of change of energy systems on a global scale, taking into account geographical peculiarities, policies supporting the transition, technological evolution and consumer behaviour. Even if we assume the common goal, of limiting the temperature increase to 1.5° by the end of the current century, there are both many possible energy trajectories and many levers for the transition. In this regard, starting from the assumption that the demand for energy has continued to grow over the years and that fossil have so far played a key role – covering on average about 80% of total energy demand – the expected evolution of these sources by 2050 in the NZE IEA⁸ scenarios and other IPCC Net Zero⁹ paths is illustrated in the graph below. While there is a shared view on the need to substantially reduce coal use by 2030, greater uncertainty remains regarding oil and gas trends, both in medium and longer term.



Sources: International Energy Agency - Global Energy Review March 2025 e World Energy Outlook 2024 - IPCC Intergovernmental Panel on Climate Change - Working Group III contribution to the Sixth Assessment Report - Table TS.2 - IPCC C1 Net Zero Scenarios.

⁸ IEA International Energy Agency publishes in the World Energy Outlook 2024 the NZE - Net Zero Emission scenario, which requires Net zero emissions by 2050 consistent with limiting the temperature increase to 1.5°C with limited overshoot (50% probability).
⁹ IPCC Intergovernmental Panel on Climate Change - Working Group III contribution to the Sixth Assessment Report - in the comparison Net Zero scenarios included into category C1 (97 scenarios), which are consistent with limiting the temperature increase to 1.5°C with no or limited overshoot (50% probability).

The challenge of the energy transition



Why is it important for Eni?

In a complex global context, the energy transition continues to represent a crucial challenge. At Eni, we are tackling it with determination and pragmatism, providing the energy that the system requires today and keeping our eyes on the future to achieve carbon neutrality by 2050. Aware of the external variables that influence the pace of decarbonization, we are accompanying the energy transition with a gradual and orderly approach, leveraging energy efficiency measures and projects inspired by the principles of the circular economy, developing CO₂ capture and storage technologies and renewable energy sources, expanding our range of low-emission products and services, and prioritizing the use of gas as a key fuel in the energy transition.

CRISTIANA ARGENTINO HEAD OF SCENARIOS, STRATEGIC OPTIONS AND CLIMATE CHANGE AT ENI

For more information

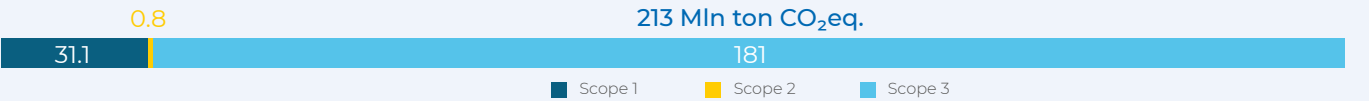
FOR MORE DETAILS ON:

- Impacts, risks and opportunities
- Resilience of the strategy to low-carbon scenarios
- Climate due diligence.

see the [Climate Change chapter of Sustainability Statement](#).

ENI GHG EMISSIONS 2024

In 2024, Eni has faced the first year of application of the CSRD Directive, which, with the aim of harmonizing sustainability reporting among European companies, introduced a GHG emissions reporting scope based on a combination of financial and operational perspectives. According to the scope defined by the CSRD, Eni's reported gross GHG emissions in 2024 amounted to 213 Mton CO₂eq. (Scope 1, 2 and 3) – for more details, see the [Sustainability Statement](#).



Scope 1: GHG emissions associated with the generation of electricity necessary for operations, gas treatment and compression, and processing of petroleum products.
Scope 2: GHG emissions from the generation of electricity, steam, heating and cooling purchased from third parties and consumed by Eni.
Scope 3: CAT. 11 (the only category considered significant for Eni, with a weight of ~93% of total Scope 3 emissions) use of sold energy products. Estimated on the basis of Eni's share of upstream production sold according with IPIECA methodologies.
Scope 1 - Scope 2 - Scope 3 emissions calculated on the basis of the CSRD boundary as defined by ESRS standards.

Operating within a new and evolving regulatory context, Eni has chosen to represent its path towards Carbon Neutrality by confirming its GHG emissions reduction targets on an equity basis, through a Lifecycle approach in continuity with the commitments already declared in 2020.

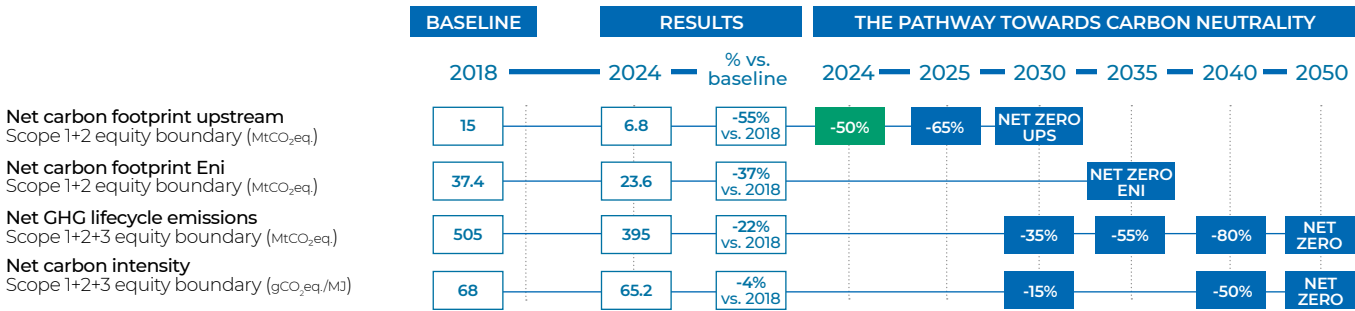
ENI'S DECARBONIZATION PLAN AND TARGETS

Eni is facing the challenges posed by an increasingly complex and rapidly evolving energy context with a strategy aimed at progressively reducing both the direct and indirect emission impacts associated with its business activities, while providing the energy products required by its customers. This strategy combines the global needs of (i) environmental sustainability; (ii) security of supply, ensuring the uninterrupted availability of sufficient energy resources to power human activities and guarantee basic human rights; (iii) energy equity, understood as the possibility for citizens to have fair and non-discriminatory access to adequate, reliable and affordable energy. In response to these challenges, Eni has been committed to reducing its direct GHG emissions and was among the first in the sector to establish a series of objectives, starting in 2016. These objectives aim to improve the GHG emissions performance of its operated assets. Since 2020, Eni has defined a pathway towards Carbon Neutrality, expressed through a series of objectives with intermediate stages that will progressively lead to Net Zero Scope 1, 2 and 3 GHG emissions by 2050, related to the lifecycle of energy products sold, both in absolute and intensity terms. The stages of this pathway have been identified through a prioritization of the different actions, based on both internal analyses and the proposed actions from major international scenarios aimed at achieving Carbon Neutrality by 2050 to help keep the global temperature rise within 1.5°C by 2100. For more details, see the [Scenarios of the main international organizations](#) section of the Sustainability Statement.

As part of the reduction of Scope 1 and 2 GHG emissions, Eni has decided to focus primarily on the Upstream sector, where technologically consolidated and economically viable solutions are already available. Emissions that are not currently reducible are voluntarily offset through high-quality carbon credits¹⁰. Eni has set a goal of net zero Scope 1 and 2 GHG emissions for the Upstream sector by 2030 (Net Zero Carbon Footprint Upstream), and for the entire Eni group by 2035 (Net Zero Carbon Footprint Eni). Additionally, Eni has a goal of net zero Scope 1, 2, and 3 GHG emissions, related to the lifecycle of energy products sold by 2050, both in absolute terms (Net Zero GHG Lifecycle Emissions) and in terms of intensity (Net Zero Carbon Intensity). Eni's decarbonization strategy, which includes the commitments to reduce emissions mainly related to the use of sold products, also contributes to promoting the decarbonization of the value chain (reducing Scope 3 emissions). Eni seeks to develop new, high-potential businesses related to the energy transition by creating independent companies able to access the capital market with autonomy, allowing them to finance their growth by attracting specialized investors.

¹⁰ Certified according to internationally recognised voluntary market standards and accompanied by additional certifications to also attest to the socio-environmental benefits of project activities. See the section [Offset and removals of GHG emissions in the Sustainability Statement](#).

MAIN GHG EMISSIONS REDUCTION TARGETS



NET CARBON FOOTPRINT UPSTREAM, Scope 1+2 (equity): in 2024, the indicator decreased by about 25% compared to 2023, driven mainly by optimization actions in operational management and project activities to generate carbon credits. Additionally, in 2024, the target of achieving -50% compared to 2018 was exceeded, with an overall reduction of about 55%. The pathway is in line with the achievement of Eni's Net Zero Carbon Footprint goal by 2030.

NET CARBON FOOTPRINT ENI, Scope 1+2 (equity): in 2024, the indicator decreased by about 10% compared to 2023, driven mainly by optimization actions in operational management and project activities to generate carbon credits. Compared to 2018, the indicator decreased by about 37% in line with the achievement of Eni's Net Zero Carbon Footprint target by 2035.

NET GHG LIFECYCLE EMISSIONS, Scope 1+2+3 (equity): in 2024, the indicator is slightly down (-0.8%) compared to 2023, mainly driven by the refining sector. Compared to the baseline value, emissions were reduced by about 22%.

NET CARBON INTENSITY, Scope 1+2+3 (equity): in 2024, the indicator has slightly decreased (approx. 0.5%) thanks to the lower emission impact of the portfolio mix. Compared to the baseline value, the index has reduced by about 4%.

Focus on

Eni's emissions reporting: comparison between CSRD boundary and the Lifecycle approach (equity)

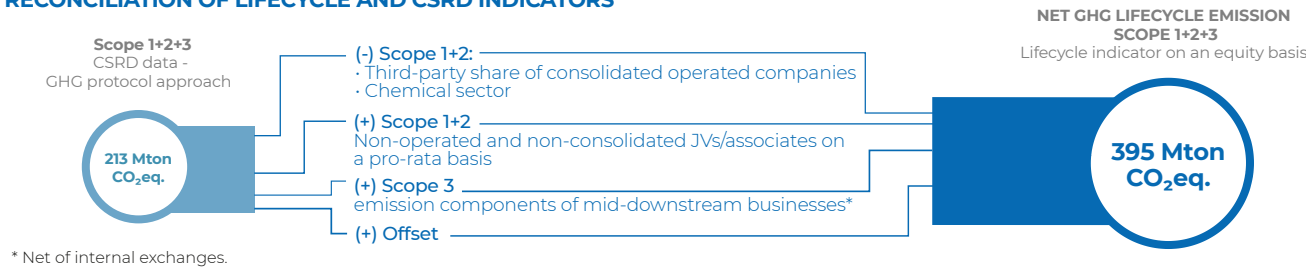
In 2024, gross GHG emissions reported according to the boundary defined by the CSRD amounted to 213 million tonnes of CO₂eq. (Scope 1, 2 and 3). Given the new reporting boundary required by the CSRD, Eni maintains its GHG emissions reduction trajectory on an equity basis, in line with the targets set in 2020. Equity-based indicators have a different scope compared to that defined by the reporting requirements of the ESRS standard under the CSRD. In particular, the Net GHG Lifecycle Emissions (Scope 1+2+3) indicator is built on an equity-based view, unlike the CSRD metrics, and considering a broader boundary for Scope 3 emissions that also includes energy products purchased by third parties (e.g. natural gas produced by third parties and sold by Eni).

From CSRD data to the Lifecycle indicator on an equity basis, the following changes are taken into account:

- for Scope 1-2 emissions: the contribution of non-operated and non-consolidated JVs/associates is included, calculated on a pro-rata basis; the third-party share of consolidated operated companies and the contribution of the chemical sector are deducted;
- for Scope 3, the emission components of mid-downstream businesses (net of internal exchanges) are added.

The Lifecycle view also considers the use carbon credits to offset emissions.

RECONCILIATION OF LIFECYCLE AND CSRD INDICATORS



DECARBONIZATION LEVERS

The decarbonization levers and technologies identified by Eni in its Decarbonization Plan affect all areas of its business. These strategies are adopted and modulated in a targeted manner, with time horizons considering each solution's technological and commercial maturity. Between 2018 and 2024, Eni implemented actions that, on the one hand, led to a reduction in Scope 1+2 emissions from its operations, primarily focusing on flaring, methane emissions, and energy efficiency interventions to reduce fossil fuels consumption. On the other hand, these actions also contributed to a reduction in emissions along the value chain (Scope 3), particularly by leveraging synergies between traditional activities and transition-related businesses, along with portfolio actions that reduce the volume of gas procured via pipeline.

In addition to continuing the actions implemented thus far, the initiatives planned by Eni to reduce Net GHG Lifecycle Emissions Scope 1+2+3 in the pathway to Carbon Neutrality are:

In **Upstream**, improved performance in terms of efficiency and the progressive growth of the gas component, including condensates, contain the increase in emissions from upstream production; furthermore, the goal of reaching near-zero methane emissions by 2030 is confirmed.

In **Downstream**, the development of biofuels offers an opportunity for Eni to convert and downsize its current traditional refining capacity, contributing significantly to the decarbonization of hard-to-abate transportation, i.e., aviation, maritime transport and heavy transport.

The growth of **Plenitude's** activities in power generation from renewable sources, coupled with Enilive's development of biofuels, broaden the offering of lower carbon solutions. The integration of these energy options, together with the progressive reduction of absolute emissions, favours the decrease of the emission intensity of Eni's portfolio.

CCS projects, which involve the capture and permanent storage of CO₂ within depleted natural gas fields operated by Eni, represents an opportunity for Eni to reduce emissions from its own operations and support the decarbonization of third-party industrial activities.

Offsetting residual emissions is realised through **offsets** mainly from Natural Climate Solutions focused on the protection, conservation and more sustainable management of forests.

The speed of this transformation and the relative contribution of each lever will depend on a series of variables, including market trends, the scientific-technological scenario and applicable legislation. At the same time, Eni recognizes the need to ensure an orderly transition in the energy system by gradually replacing fossil fuels with lower carbon energy sources. This evolution towards a lower carbon product portfolio will be supported by a progressive growth in the share of investments intended to develop new energy solutions and services to support the transition. For 2024 the expenditure on lower carbon projects for 2024 was €2.6 billion (over 20% of expenditures) and, over the next four-year period from 2025-2028, Eni plans to allocate more than 30% of its total spending, approximately €13 billion, to lower carbon projects. For more details on the resources planned for the different actions towards decarbonization, see the [Capital Allocation](#) section of the Sustainability Statement.

GAS COMPONENT OVER 60% BY 2030 AND >90% BEYOND 2040 ON TOTAL PRODUCTION
METHANE EMISSIONS CLOSE TO ZERO BY 2030

>5 MILLION TONNES OF BIOFUEL PRODUCTION CAPACITY BY 2030

15 GW IN 2030 AND 60 GW IN 2050 OF INSTALLED CAPACITY FROM RENEWABLE SOURCES,
40K ELECTRIC VEHICLE CHARGING POINTS BY 2030 AND ~160K BY 2050

>15 MTON CO₂ TRANSPORT & STORAGE CAPACITY IN 2030 TO REACH ~60 MTON CO₂/Y BY 2050

~15 MTON CO₂/YEAR FROM CARBON OFFSETS IN 2030
<25 MTON CO₂/Y BY 2050

The evolution of Business

gas component over
60%
by 2030 and
>90%
beyond 2040 on total
production

DECARBONIZING THE ENERGY OF TODAY

Upstream portfolio (gas)

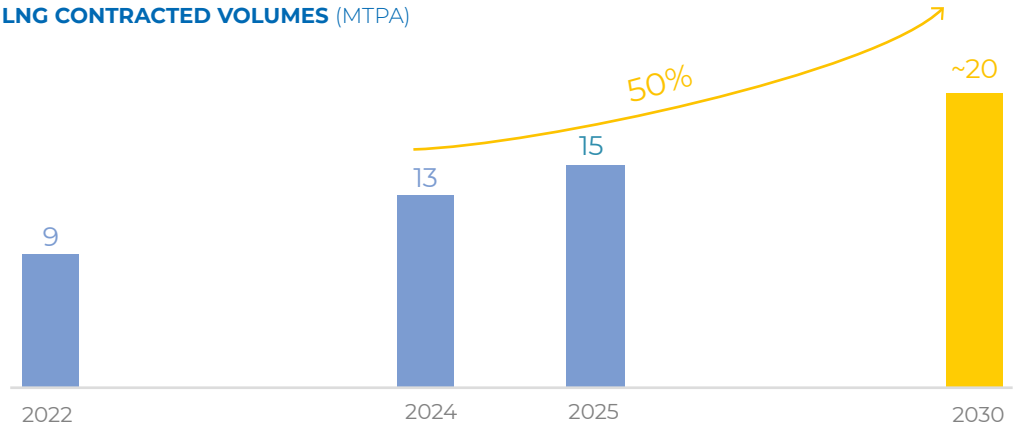
Eni believes that natural gas has a role to play in the energy transition, due to its accessibility, reliability, versatility and lower carbon content compared to other fossil fuels, as well as its complementarity with other technological and energy solutions that will gradually become increasingly relevant in meeting energy demand. In particular, as electricity generation from renewable sources expands — source characterized by intermittent and seasonal production — natural gas will help ensure stability and continuity in energy supply, compensating for both the unpredictability of weather conditions affecting renewables and fluctuations in demand. In addition, natural gas contributes to emission reductions in the power sector by offering an alternative to coal with a significantly lower carbon footprint.

In this context, Eni has chosen to increase its share of natural gas production, acquiring a portfolio of low-emission and cost-competitive assets to support the Group's growth strategy. Among the main activities of the year are operations in Indonesia, where there was a significant increase in gas exploration resources, and in the offshore of Cyprus, with the appraisal of the Cronos gas discovery in Block 6¹¹.

In terms of production developments, Eni achieved important results during the year. In Congo, just one year after the FID, the Congo FLNG project commenced its deliveries of LNG to international markets, making the Republic of Congo a new exporter in the global landscape of this fuel.

The project is progressing towards its target completion by the end of 2025 with the launch of the Nguya floating vessel, which will increase the liquefaction capacity of the project from the current 0.6 to 3 mmt/tonnes/y. In Italy, gas production started at the Argo Cassiopea field, the most important gas development project in the Country.

LNG CONTRACTED VOLUMES (MTPA)



The LNG business represents one of the levers for energy security and diversification of Eni's portfolio. In 2024, in order to ensure greater flexibility and further diversify its LNG supplies, Eni entered into a number of significant agreements, such as the charter agreement with Avenir LNG Limited for the LNG bunker vessel Avenir Aspiration in order to expand Eni's activities in the LNG bunkering market in the Mediterranean Sea, in line with the Group's strategy to market its growing LNG portfolio.

LNG sales (9.8 bcm, included in the worldwide gas sales) increased by 2.1% from 2023. In 2024, the main sources of LNG supply were Qatar, Nigeria and Indonesia. LNG volumes were mainly sold in the European and Asian markets.

Reducing methane emissions and gas flaring

Actions to reduce methane emissions and flaring are a fundamental part of Eni's decarbonization strategy and contribute significantly to the reduction of direct Scope 1 emissions.

Eni has been committed to reducing methane emissions in its operations for more than a decade. With an approach primarily focused on the Upstream sector, Eni has set a target to maintain methane emission intensity within the threshold of 0.2% by 2025. This threshold is recognized by the sector as indicative of effective operational management while aiming for methane emissions to be close to

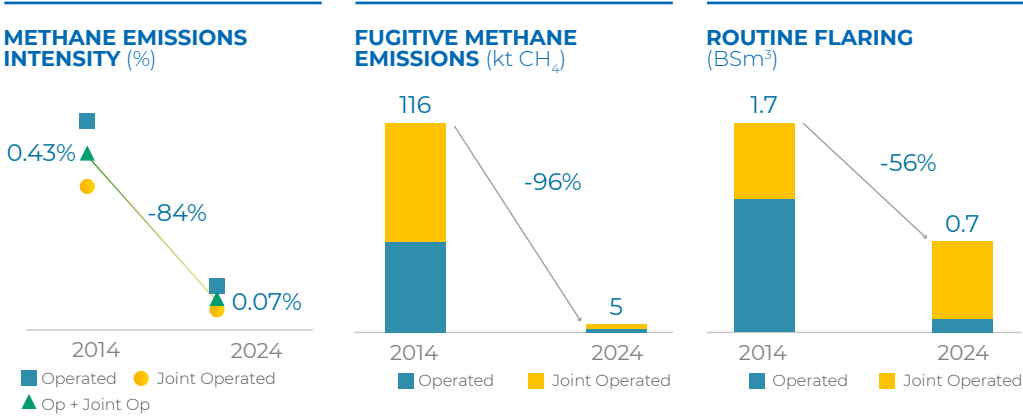
11 Operated by Eni holding a 50% interest.

zero¹². Eni has also joined the Aiming For Zero initiative, launched by OGCI, which seeks to eliminate methane emissions from its members' assets by 2030.

Eni has set a target of reducing fugitive methane emissions by 80% by 2025 (compared to 2014 - the base year). This goal was already achieved in 2019 through the implementation of LDAR (Leak Detection and Repair) campaigns carried out annually on the assets managed by Eni. LDAR campaigns involve the use of optical technologies such as OGI (Optical Gas Imaging) thermal cameras to detect methane leaks and to promptly implement repair actions. Along with LDAR campaigns, Eni adopts various methodologies and technological solutions to identify and quantify methane emissions, in line with international OGMP guidelines, with the aim to reducing them.

In recent years, Eni has dedicated an increasing effort to identifying and implementing initiatives to **mitigate gas flaring**. Notable projects are underway in Congo, Libya, and Egypt, where significant logistical, operational, and market barriers have previously limited the valorization of associated gas. In this context, Eni is advancing towards the goal of zero routine flaring expected in 2025 for its operated assets. For its joint-operated assets, the achievement of the target is contingent upon the completion of the projects in Libya, which are currently expected by 2026. Finally, a key component of Eni's methane strategy is a collaboration with other industry players and international organizations (see section **Partnership for Decarbonization** in this chapter).

methane emissions
close to
zero by **2030**



Eni receives UNEP's Gold Standard reporting¹³ for its commitment to methane emissions reporting

Case Study

In 2024, Eni has been awarded with the 'Gold Standard Reporting' recognition under the Oil & Gas Methane Partnership (OGMP 2.0) programme for its commitment to emissions reporting with the highest data quality standards. OGMP 2.0 is an initiative of the International Methane Emissions Observatory (IMEO) of the United Nations Environment Programme (UNEP), which sets the global standard for reliable and transparent reporting of methane emissions in the oil and gas sector, as a necessary step to effectively track and guide mitigation actions based on real data. Eni joined OGMP 2.0 in 2020 and is committed to setting emission reduction targets and progressively improving the transparency and accuracy of its reporting, prerequisites for measuring the effectiveness of the mitigation actions taken. Back in 2023, Eni's commitment was recognised with the 'Gold Standard Pathway' for significantly improving its methane emissions reporting implementation plans, in line with OGMP 2.0 recommendations. This year, the achievement of the highest levels of data quality was officially confirmed by the awarding of the 'Gold Standard reporting'.

In 2024, Eni published its first **Methane Report**, a document outlining the company's commitment to transparency and reducing global methane emissions. The report describes Eni's actions to reduce methane emissions in all its activities and how the company shares its expertise with others in the industry.

12 The OGDC (O&G Decarbonization Charter - COP 28 UAE) 'Near-Zero Methane' commitment is defined as methane emissions intensity below 0.2%.

13 United Nations Environment Programme.

Case Study

Methane measurement campaigns in operated and joint-operated assets.
Success stories from Libya, Italy and Egypt

ACTIVITY	RESULTS
<div>Libya</div>  <p>In 2024 Eni successfully completed its comprehensive methane measurement campaigns in Libya at four key facilities operated by the joint-operated company Mellitah Oil & Gas BV.</p>	The measurement campaign and drone surveys significantly improved the quality of emission reporting. Despite logistical challenges, the surveys were successfully implemented through the collaborative efforts of the local partner National Oil Corporation (NOC), and Mellitah Oil & Gas BV and Eni North Africa B.V., leveraging on the local content and maximizing the utilization of local providers. The campaign revealed several key aspects, including high flaring combustion efficiency of approximately 99% and a low leakage rate of less than 0.1% for fugitive emissions. The campaign's execution, spanning three weeks of intensive on-site measurements after four months of meticulous preparation, proves Eni's commitment to improving the reporting quality related to Libyan assets in line with OGMP 2.0 requirements.
<div>Italy</div>  <p>The 2024 OGMP campaign in Italy covered both onshore gas plants and offshore platforms, with focus on fugitive emissions, venting and unburned emissions from stationary combustion as well as drone surveys.</p>	The 2024 campaign confirmed the benefit of implementing annual LDAR campaigns for fugitive sources, and the use of drone surveys provided a site level view of the methane emissions, which consequently allowed to identify the areas of attention that are currently being addressed with proactive actions by the operational personnel and maintenance teams at the different facilities. The success of the 2024 campaign in Italy marked a crucial step forward in complying with the new EU Methane Regulation, which entered into force in August 2024.
<div>Egypt</div>  <p>Following the 2023 campaigns that covered five sites in Egypt, the 2024 campaigns involved the implementation of drone surveys, coupled with measurements at source level.</p>	Since 2017 in Egypt, Eni has been promoting a cultural shift in methane emissions management. The journey began with a gradual transition from a fugitive emissions estimation approach based on literature emission factors to component level quantification and combined field monitoring, with the support and collaboration of EniProgetti. The 2023 OGMP campaigns allowed for the direct measurements and quantification of methane emissions from all emission sources. In 2024, along with the measurement campaign mainly carried out with drones, specific mitigation actions were identified and their implementation started immediately (e.g. chemical injection pumps).
<div>Technologies used for OGMP Campaign</div>	LDAR, Leak Detection And Repair of methane emissions is a systematic approach used by industries to identify, monitor and reduce methane leaks from industrial facilities using specific equipment such as OGI (Optical Gas Imaging) camera; flare monitoring devices for measuring the combustion efficiency of flare stacks; high-flow samplers for measuring methane emission flow rates; drones.

Energy efficiency programmes

The energy efficiency measures carried out during the year allow for effective primary energy savings compared to baseline consumption of over 308 ktoe/year deriving mainly from upstream projects (over 82%), with a benefit in terms of emissions reduction of approximately 778 thousand tonnes of CO₂eq. If Scope 2 emissions, i.e. emissions from purchased electricity and thermal energy, are also considered, the net CO₂ savings deriving from energy saving projects rise to about 816 thousand tonnes of CO₂eq. The most relevant measures involved structural process adjustments, such as the revamping of compression units for gas export or reinjection, equipment upgrades to new operating conditions, and thermal integration of adjacent plants, as well as management and operational interventions, including the optimization of the production networks, improvement of the management of the electricity generation and electrification system through imports from the national grid. Among the energy efficiency actions, other Scope 1 GHG emission reduction measures from stationary combustion are also monitored, such as fuel replacement (e.g. diesel vs. fuel gas) and renewable energy.

CCS projects

Carbon capture and storage (CCS) is a mature, safe and highly effective solution for reducing emissions from energy-intensive or 'hard-to-abate' industrial sectors and gas-fired power generation, in a context of growing energy demand, partly due to the development of data centres for artificial intelligence and digital services. For Eni, CCS is a key decarbonization lever on the path to carbon neutrality and represents an opportunity both to reduce emissions from its own operations and to provide a service supporting the decarbonization of third-party industrial activities, ensuring greater competitiveness for industrial activity.

Eni aims to achieve a gross CO₂ reinjection capacity of over 15 million tonnes/y before 2030, more than 40 million tonnes/y after 2030 and over 60 million tonnes/y beyond 2050.

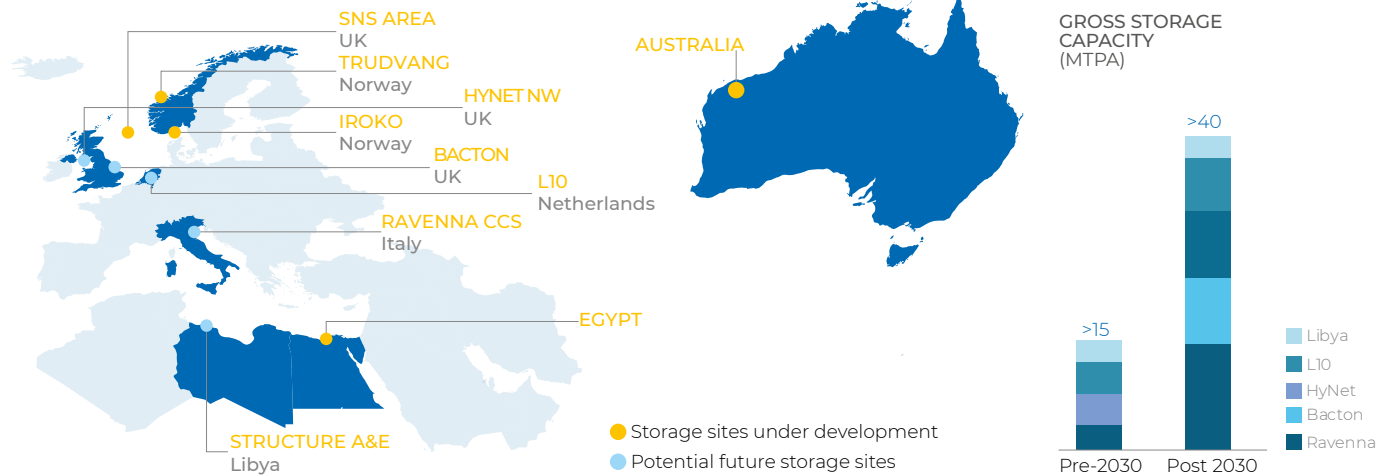
In Italy, Phase 1 of the Ravenna CCS project was launched in August 2024, developed jointly with Snam through a 50/50 joint venture. This phase is storing around 20kton/year of CO₂ captured from Eni's natural gas treatment plant in Casalborgorsetti, near Ravenna. The project includes a Phase 2 at a larger industrial scale aiming to inject into the reservoir 4 million tonnes/year by 2030, with the potential for further expansion based on market demand, up to 16 million tonnes/year. This target is compatible with the total storage capacity of the depleted gas fields in the Adriatic, currently estimated at over 500 million tonnes.

In the UK, Eni has established a leadership position with the Liverpool Bay CCS, as part of the HyNet North West Cluster project under development, selected by the UK Government as one of two priority CCS projects for the Country. The project aims to decarbonize industrial areas in the North West of England and North Wales through the capture, transport, and storage of CO₂ emitted by existing local hard-to-abate industrial activities and by future hydrogen production. Eni is the 100% operator for CO₂ transport and storage activities and will convert and reuse its depleted offshore gas fields and part of the existing infrastructure in Liverpool Bay. Early 2025, the project received the economic license from the UK Authorities and entered the execution phase. The volume of CO₂ to be stored in the reservoir will be 4.5 million tonnes/year before 2030, with the aim to increase in the following years up to 10 million tonnes/year. In October 2024, the UK Government announced the allocation of funds of about £22 billion in 25 years for the two priority projects of HyNet NW and East Coast Cluster. Also in the UK, Eni is advancing the engineering phase for the development of the Bacton CCS project, which involves the repurposing of the depleted offshore Hewett gas field, to contribute to the decarbonization of the south-eastern region of the Country and the industrial area of London. In the Netherlands, Eni is developing the L10 CCS project, which involves CO₂ storage in depleted offshore gas fields in the North Sea to support the decarbonization of industrial emitters in the Rotterdam area.

As with other transition-related businesses, CCS is also suited to development under Eni's satellite model. To this end, in 2025, Eni will launch a new satellite carbon capture and storage company to consolidate its CCS projects into a single entity.

>15 Mton
CO₂ Transport &
Storage Capacity in
2030 to reach
~60 Mton
CO₂/y by 2050

STORAGE SITES



~15 Mton
CO₂/year from carbon
offsets in 2030
<25 Mton
CO₂/y by 2050

Carbon offset

Eni supports the development of projects aimed at generating carbon credits in the voluntary market for offsetting residual GHG emissions that cannot otherwise be reduced. In line with ESRS standards, Eni intends to use carbon credits certified according to the highest, internationally recognized standards¹⁴, to achieve its Net Zero target by 2050 for Net GHG lifecycle emissions and Net carbon intensity (Scope 1+2+3), after reducing 90-95% of GHG emissions in the value chain. Currently, most of the carbon credits used by Eni derive from projects for the conservation of natural ecosystems, thereby reducing CO₂ emissions that would otherwise be released into the atmosphere. Eni's strategy foresees to progressively increase the share of credits from the so-called Carbon Dioxide Removal (CDR) projects, which capture CO₂ directly from the atmosphere (e.g. ecosystem restoration or increase of CO₂ stocks in the soil through appropriate agricultural practices). In 2019, Eni launched the first **Natural Climate Solutions** (NCS) activities¹⁵. These are projects for the protection, sustainable management of land and restoration of natural ecosystems. These initiatives conserve habitats in which plants and animals live, increase the resilience and adaptive capacities of environmental systems to climate change, and promote local sustainable development. The first projects promoted by Eni were framed within the 'Reducing Emissions from Deforestation and forest Degradation' (REDD+) scheme, defined and promoted by the United Nations. The application of **technological solutions** represents an additional lever for offsetting residual emissions. Since 2018, the company has launched the 'Eni for Clean Cooking' programme to develop projects that promote the introduction of improved cooking stoves that reduce the consumption of wood biomass with the aim of improving people's health conditions and forest conservation. Feasibility studies were launched during the year for the use of 'advanced' clean cooking systems that prefigure the deployment of induction stoves in urban areas and pyrolysis stoves in rural areas that promote, from a circular economy perspective, the use of agricultural waste, including by-products from Eni's agri-feedstock supply chain. The clean cooking programme offers environmental and social benefits, in line with several Sustainable Development Goals (SDGs) and combining emissions reduction with equitable and sustainable local development. One of the objectives of the programme is to encourage local production of cookstoves, aiming to support employment and supply chains in the host Country and improving the technological know-how and production capacity of local labour. For further insights on the social impacts of the 'Eni for Clean Cooking' programme, refer to **Alliances for development** chapter.

Focus on

Natural Climate Solutions (NCS)

The main forest protection and conservation initiatives supported by Eni include the: the Luangwa Community Forest Project (LCFP), Lower Zambezi REDD+ Project (LZRP) and Kafue in **Zambia**, Ntakata Mountains and Makame in **Tanzania**, Mai Ndombe in the **Democratic Republic of Congo**, Great Limpopo REDD+ Project (GLRP) in **Mozambique**, and Amigos de Calakmul in **Mexico**. In November 2024, Eni signed an agreement with Ministry of Water and Forests of Côte d'Ivoire to launch a forest conservation and restoration project in the Country. The agreement, defined in partnership with Ivorian Authorities, aligns with the Country's National Development Plans and its strategy to reduce deforestation and related emissions, while also contributing to the achievement of Net Zero emissions in the development of the Baleine project. The initiative focuses on two main areas: (i) forest and biodiversity conservation with enhanced monitoring activities, as well as awareness-raising and training programmes for communities and relevant institutions; and (ii) the restoration of forest areas, combined with sustainable agricultural initiatives benefiting local communities. In addition to these initiatives, Eni is promoting Sustainable Agriculture Land Management (SALM), including the adoption of farming practices that increase organic carbon in the soil and the integration of tree species in agricultural crops. In this context, Eni has launched, the Makueni Agroforestry Carbon Project (MACP) in Kenya, which will cover a target area of 40,000 hectares. The project will generate socio-economic benefits such as income stabilization for around 100,000 to about 100,000 local farmers and contribute to reducing soil erosion and improving the productivity and fertility of agricultural lands. Throughout the year, evaluations continued for additional NCS initiatives, both for ecosystem restoration and sustainable management, as well as in SALM initiatives in Africa, Latin America and Asia. In 2024, Eni's credit portfolio recorded the addition of approximately 5.3 million tonnes of CO₂¹⁶.

14 Verra's Verified Carbon Standard (VCS) or the Gold Standard (GS). In addition, the credits are accompanied by an additional certification, such as the Climate Community & Biodiversity Standards (CCBS) or the Sustainable Development Verified Impact Standard (SD VSta) which attests to their socio-environmental benefits (e.g. biodiversity conservation, economic development and improvement of local communities living conditions).
15 Natural Climate Solutions are nature-based climate change solutions. They are based on nature's ability to remove and store carbon from the atmosphere (Source: Natural Climate Solutions Alliance, NCSA, 2022).
16 5.3 million tonnes of CO₂ represent the credits generated by Eni's project portfolio. Withdrawals amounted to 5.9 million tonnes of CO₂ (contributing to the reduction of net emissions). The difference between withdrawals and incoming credits is covered by the available credit stock.

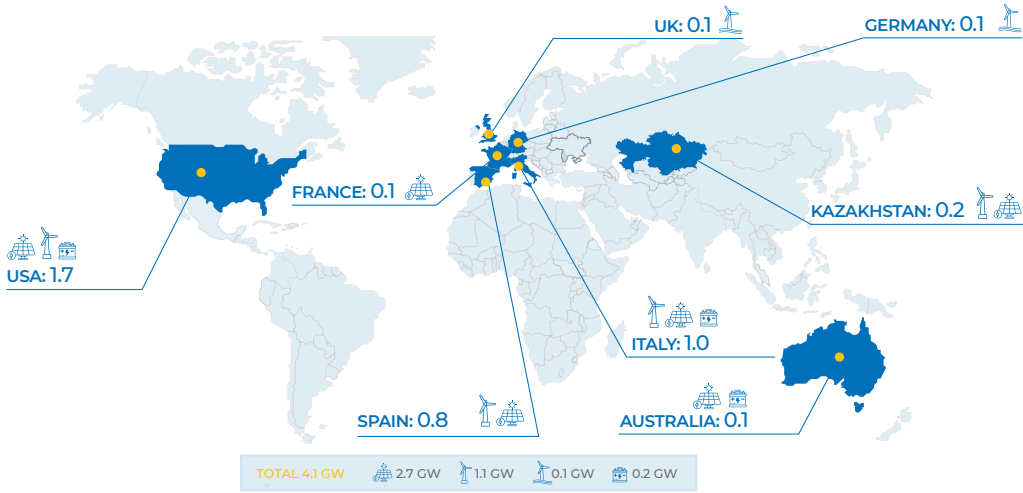
INVESTING IN NEW ENERGY

Eni is expanding its offering of lower-carbon services and products through an integrated approach that combines different solutions and technologies along the value chain, developing new energy services and enhancing the value of its transition businesses. In this context, Plenitude and Enilive are playing a key role in the growth of power generation capacity from renewable sources and biofuel production, while Versalis is investing in the development of chemical platforms from renewable raw materials, in the circular economy and the progressive decarbonization of its assets.

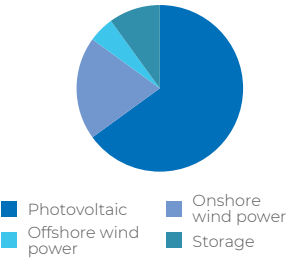
PLENITUDE
Renewables

In 2024, Plenitude continued the growing path started in previous years, reaching an installed capacity of 4.1 GW, up 37% from 3 GW in 2023. The share of installed capacity outside Italy increased from 68% to 74%, driven mainly by expansion in Spain (+507 MW; +107%) and the US¹⁷ (+399 MW; +32%). These results are in line with the target of reaching 10 GW in 2028, and 15 GW in 2030, to reach 60 GW by 2050.

INSTALLED CAPACITY OF RENEWABLE ENERGY PRODUCTION PLANTS BY COUNTRY AND TECHNOLOGY (AS OF 31 DECEMBER 2024) (GW)



INSTALLED CAPACITY BY 2030 BY TECHNOLOGY



The development of the wind and photovoltaic sectors is a key component of Plenitude's global growth strategy. In 2024, new production plants were built and started up and important agreements were signed to strengthen Plenitude's presence in Italy and abroad. In 2024, new developments in the wind power sector were concentrated in Italy, Spain and the UK. In Italy, operations started on a new 39 MW onshore wind farm in Calabria, consisting of nine latest-generation wind turbines with an expected annual power production of 84 GWh/year. In Spain, a wind farm was started up in Soria with an installed capacity of about 13 MW and an estimated production of 31 GWh/year. Finally, in the UK, the installation of a further 28 turbines was completed at the Dogger Bank offshore wind farm. The installed photovoltaic capacity has seen significant progress, particularly in Spain with the completion of the Caparacena plant (150 MW) and the partial completion of plants in Guillena (166 MW out of 230 MW) and Badajoz (86 MW out of 330 MW) plants. Plenitude has finalised the purchase of the already operational Grijota 1 and 2 plants (105 MW in total), in the region of Castilla y Leon. Moreover, the Villanueva II plant (50 MW), which covers an area of about 100 hectares and consists of more than 76,000 photovoltaic modules, was connected to the national transmission grid and will produce more than 100 GWh/year. Construction also began on the Renopool plant (330 MW), the largest photovoltaic unit ever built by Plenitude, which will include seven photovoltaic plants and a power substation, with an estimated production of 660 GWh/year. Finally, construction has started on a plant in Villarino de los Aires (220 MW), which is scheduled for completion by 2025.

17 The figure includes 199 GW related to the acquisition of 2 photovoltaic plants in the United States (agreement signed in December 2024 with the closing of the transaction by the first quarter of 2025).

15 GW
in 2030 and
60 GW
in 2050 of installed
capacity from
renewable sources

40k
electric vehicle
charging points
by 2030 and
~160k
by 2050

Electric Mobility

In 2024 Plenitude further established itself as a key player in the electric vehicle charging services sector. As of December 31, there were more than 21k installed charging points in Italy and in Europe, a 12% increase compared to 19k in 2023, in line with the upgrading plan of the network infrastructure. The development of the e-mobility business plans to reach over 24k installed charging points by the end of 2025, 40k by 2030 and about 160k by 2050.

For more information on the products and services provided by Plenitude in order to support the energy transition of its customers, see the chapter **Sustainability in the value chain** in this document. For more information on Plenitude's activities, please see also the Plenitude [Sustainability and Impact Report 2024](#).

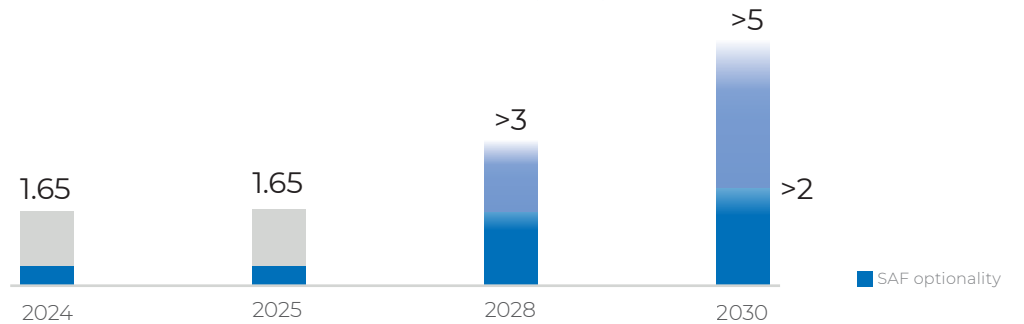


ENILIVE
Biofuels

Enilive is one of the leading companies in the global biorefining sector, with decades of operational experience, thanks to its proprietary technology Ecofining™ that enables the transformation of biogenic raw materials, such as waste, residues, and oils into high-quality biofuels. This technology also enables the valorization of existing strategic assets for energy production.

In 2024, Enilive's biorefining capacity was 1.65 million tonnes and is expected to reach a capacity of over 3 million tonnes/year in 2028 and over 5 million tonnes/year in 2030. As for Sustainable Aviation Fuel (SAF), the company is aiming for a production capacity of over 2 million tonnes/year by 2030. In order to achieve this development plan, in September 2024, the programme to convert the Livorno refinery into a biorefinery was approved, based on the model already implemented in Venice in 2014 and in Gela in 2019. The Livorno biorefinery will have a planned capacity of 500 thousand tonnes/year of HVO diesel, VVO naphtha and bio-LPG. The evaluation of a biorefinery in the Versalis site in Priolo is also underway, while a fifth project is currently being studied in Italy.

DELIVERING CAPACITY AND SAF OPTIONALITY (MTPA)



In 2024, Enilive's
biorefining capacity was
1.65 million
tonnes

As part of its international expansion, Enilive participates in the Chalmette biorefinery in Louisiana (USA) and is developing two new biorefining plants, one in South Korea and the other in Malaysia, both based on Ecofining™ technology. In Malaysia, Enilive, together with Petronas and Euglena Co. Ltd, will build a plant with a capacity of 650,000 tonnes/year, scheduled for 2028, while in South Korea, in collaboration with LG Chem a biorefinery with a capacity of 400,000 tonnes/year will be developed.



Italy	Livorno	FID January 2024	Start-up in 2026	>	~500 Kton Total capacity
	Venice (expansion)	FID expected in 2025	Start-up in 2027	>	Up to 600 Kton Total Capacity
	Sannazzaro	FID expected in 2025	Start-up in December 2027	>	550 Kton Total capacity
	Priolo	FID expected in 2025	Start-up in December 2028	>	500 Kton Total capacity
Malaysia	Pengerang	FID July 2024 and EPC awarded	Start-up in 2028	>	650 Kton Total capacity
South Korea	Daesan/Seosan	FID July 2024 and EPC awarded	Start-up in 2027	>	400 Kton Total capacity

Focus on

The role of SAF in the Decarbonization of the aviation sector

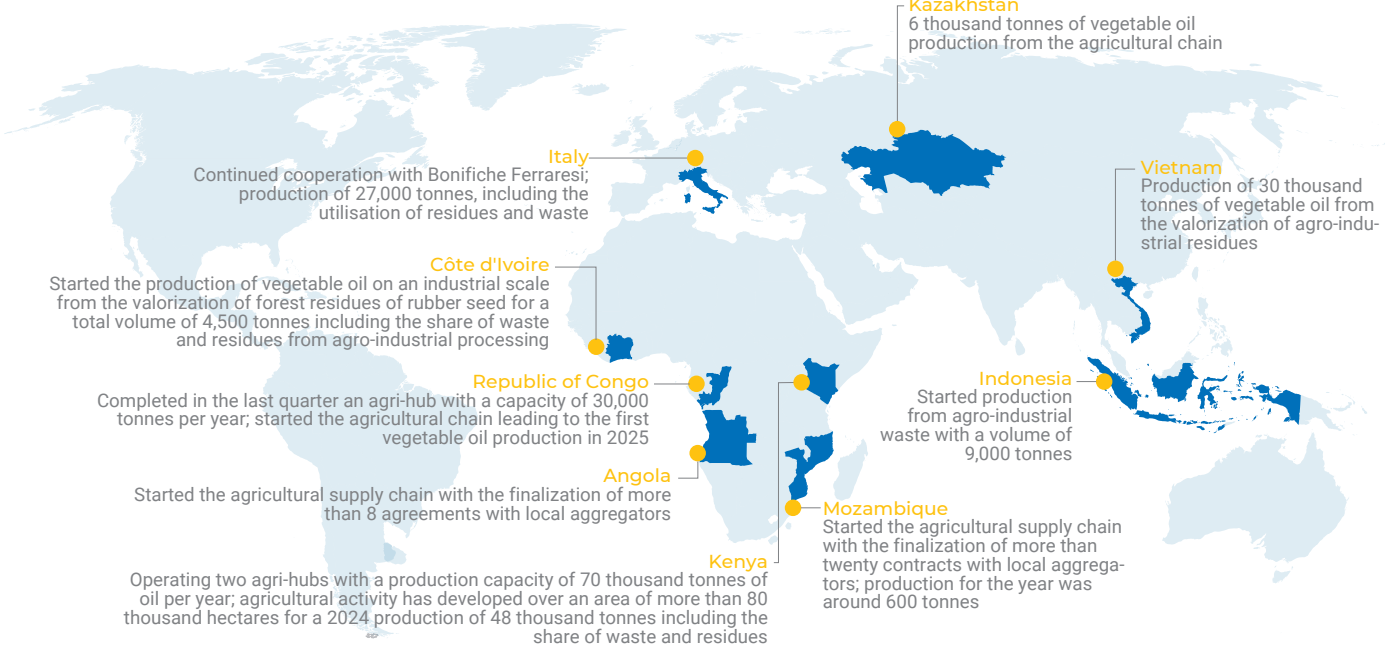
Sustainable Aviation Fuel (SAF) is a concrete solution for the decarbonization of aviation in the coming decades, enabling the replacement of fossil fuels with more sustainable fuels. In 2023, aviation accounted for about 2.5% of global CO₂ emissions, reaching nearly 950 million tonnes. The resumption of international travel after the pandemic has further increased the urgency of addressing emissions from the aviation sector, which is considered hard-to-abate, meaning that CO₂ emissions from this sector are difficult to reduce. SAF is a biofuel entirely produced from renewable raw materials, mainly waste and residues such as used cooking oil, animal fats and by-products of vegetable oil processing, by means of HEFA (Hydroprocessed Esters and Fatty Acids) technology. During production, raw materials undergo both to physical and chemical processes. Waste, residues and vegetable oils are transported to biorefineries by ships and tanker trucks and are stored in tanks before being processed: first through a physical process to remove impurities, and then with a chemical treatment that enables their transformation into biofuels. SAF can be blended up to 50% with conventional aviation fuel. At the European level, Regulation (EU) 2023/2405 (known as ReFuelEU Aviation) establishes minimum SAF quotas in jet fuel distributed at airports within the European Union, with a progressive increase from 2% in 2025 to 70% in 2050 (6% from 2030, 20% from 2035, 34% from 2040, 42% from 2045). In this context, Enilive has started significant investments to increase SAF production capacity. In January 2025, the Gela biorefinery began producing SAF using the proprietary Ecofining™ technology, with an annual capacity of 400,000 tonnes. This quantity represents almost a third of the expected European demand for 2025, positioning Enilive among the first companies in the world to produce significant volumes of SAF. The SAF production at Gela was made possible by specific interventions on the plant, in particular the upgrading of the isomerisation unit where a reactor and a product separation section were added, as well as modifications to the tank farm and logistics facilities. Eni is promoting initiatives to support the decarbonization of the aviation sector by collaborating with institutions, academia and industry partners. One example is the Pact for the Decarbonization of Air Transport, presented at COP28 in Dubai, which brings together strategic stakeholders to define a roadmap for the sector decarbonization. For more information on Enilive's SAF supply agreements in 2024, see the **Sustainability in the value chain** chapter.

Agri-feedstock initiatives

Eni's development model for the agri-feedstock initiatives is targeted to provide vegetable oil to feed Eni's supply chains, starting from the feedstock produced by the cultivation of degraded land, rotational crops and the valorization of waste and residues from the agro-food industry and forestry supply chains. With an end-to-end approach aims to ensure volumes of vegetable oil at competitive cost, supporting the expansion of Eni's biorefining activities, while enabling significant positive impacts on local development and employment. Eni's agri-feedstock supply chains are certified according to the ISCC-EU (International Sustainability and Carbon Certification) sustainability scheme, one of the main voluntary standards recognized by the European Commission for the certification of biofuels (EU RED II). In 2024, production of vegetable oil amounted to 130 ktonnes; volumes have tripled compared to the previous year. The goal is to reach more than 1 million tonnes by 2030 involving about 700 thousand farmers on an area of 1 million hectares.

In addition to Italy, Eni's agri-feedstock activities in 2024 were carried out in Africa (Côte d'Ivoire, the Republic of Congo, Angola, Kenya and Mozambique) and Asia (Indonesia, Vietnam and Kazakhstan). Moreover, a series of assessments were launched in Europe, South America (Brazil) and other Countries in Africa and Asia to identify further opportunities for the development of the agri-feedstock business, and in Rwanda the production of quality seed aimed at farmers in other African Countries progressed.

AGRI-FEEDSTOCK 2024



VERSALIS AND THE TRANSFORMATION OF CHEMISTRY

Versalis is committed to promoting the use of raw materials from renewable sources, identifying alternative feedstocks and developing solutions in the field of circularity. In 2024, Eni defined the Plan for the transformation and relaunch of Versalis, also with a view to decarbonization. The plan envisages new industrial plants consistent with the energy transition with an expected cut of about 1 million tonnes of CO₂, about 40% of Versalis' emissions in Italy. The Plan aims to invest in the development of new platforms for chemicals from renewable feedstock, circular and specialized products, expanding sectors in which Versalis has consolidated a leadership position.

PARTNERSHIPS FOR DECARBONIZATION

Eni has long been engaged in collaboration and dialogue with academia, civil society, institutions and companies to promote energy transition by generating new knowledge, sharing best practices and fostering initiatives that create value both for the company and its stakeholders. Eni has signed collaboration agreements with national oil companies (NOCs) and joint venture partners, including EGAS, Sonatrach and SOCAR, to share its expertise in managing and reducing methane emissions. Eni has also formed partnerships with energy-intensive companies to develop and promote lower carbon solutions. In this context, Eni has joined the 'Pact for the Decarbonization of Air Transport' (PACTA), an initiative promoted in collaboration with Aeroporti di Roma to define a roadmap for the decarbonization of the aviation sector by 2050. Eni is also working on innovative solutions with universities and start-ups, such as in the case of magnetic confinement fusion. Finally, collaborations with international organizations and participation in global initiatives aim to develop best practices for monitoring, reporting and reducing emissions, as well as promoting the adoption of new technologies throughout the sector.

Global organisations and initiatives

Oil & Gas Methane Partnership (OGMP)

Eni is a founding member of the Oil & Gas Methane Partnership 2.0 (OGMP 2.0), the United Nations Environment Programme's (UNEP) flagship programme for the reporting and mitigation of methane emissions in the oil and gas sector.

Oil and Gas Climate Initiative (OGCI)

Eni is a founding member of the Oil and Gas Climate Initiative (OGCI), an organization that brings together 12 of the world's largest oil and gas companies to lead the industry's response to climate change. OGCI members have founded the Climate Investment (CI), a specialised decarbonization investor, with the aim of reducing greenhouse gas emissions in the short-term through investment and market adoption innovations from portfolio company, supported by a network of investors and global partnerships.

Methane Guiding Principles (MGP)

Eni is a founding member of the Methane Guiding Principles (MGP) , an initiative that currently includes 46 members with the aim of reducing methane emissions along the oil and gas supply chain, involving key stakeholders from the industry.

IPIECA and IOGP (International Association of Oil & Gas Producers)

Eni actively participates in expert groups, such as IPIECA, the Global Oil and Gas Association for Advancing Environmental and Social Performance across the Energy Transition, the first industry association on environmental and social issues for the oil and gas sector; and IOGP, a forum aimed at sharing knowledge and best practices in safety, health, environment, engineering and, more recently, industrial and energy transitions.

Oil & Gas Decarbonization Charter (OGDC)

Eni is a signatory to the Oil & Gas Decarbonization Charter (OGDC), a unique collaboration aimed at accelerating the decarbonization of the global oil and gas sector by promoting inclusive cooperation within the industry and knowledge sharing. Already endorsed by companies representing 43% of global oil and gas production, the Charter defines a series of goals to achieve Net Zero emissions operations by or before 2050.

Global Flaring and Methane Reduction (GFMR)

In the context of COP28, Eni announced its commitment as a donor to the Global Flaring and Methane Reduction (GFMR) Trust Fund, an initiative launched by the World Bank to support governments and operators in developing Countries in eliminating routine flaring and reducing methane emissions in the oil and gas sector to near zero by 2030. The fund aims to provide technical assistance, enable policy and regulatory reforms, strengthen institutions and mobilize financing to support governments and operators in their efforts.

As part of its **advocacy activities**, Eni expresses its position on climate change and related climate strategy issues by engaging in direct dialogue with policymakers and, indirectly, through trade associations. For more details, see the [Eni's lobbying activities](#) chapter in the Sustainability Statement.

Case study

Collaboration between Eni and Sonatrach on energy efficiency

In 2024, Eni and Sonatrach completed a joint Energy Assessment project at the ZCINA site, a plant operated by Sonatrach in Algeria, the result of an intense and fruitful collaboration between the two companies on energy efficiency. The initiative was launched as part of the Memorandum of Intent (MoI) signed between the two companies. Through this agreement, both companies formalized their joint commitment to identifying potential initiatives for CO₂ emission reduction and implementing the best available technologies to achieve this goal. This initiative also serves as foundations for further strategic and innovative collaborations in the sector.

A key aspect of the project was the training of Sonatrach personnel on the Energy Assessment methodology, carried out both on-site and at Eni's headquarters. The skills acquired will enable Sonatrach to independently conduct Energy Assessments at its sites in the future.

This initiative marks a significant step in Eni and Sonatrach's shared journey towards decarbonization, contributing to the spread of innovative and sustainable practices in the energy sector.

Focus on

Key collaborations for the decarbonization of transport sector

As part of its initiatives supporting the energy transition, in 2024 Eni signed agreements with key players in the sector — Fincantieri, FS Italiane, and MSC — with the goal of accelerating the decarbonization of transport.

The agreement between Eni, Fincantieri and RINA, with the support of Bain & Company establishes a commitment to develop joint initiatives aimed at medium-to-long-term decarbonization solutions for the maritime sector, including the development of complementary solutions to fuels already available for other hard-to-abate sectors. The establishment of a permanent global observatory to monitor technological, regulatory and market developments is also being considered.

FS Italiane Group and Eni signed a three-year letter of intent to collaborate in identifying and developing opportunities such as the use of alternative fuels for transport, intermodal logistics solutions, and best practices in energy efficiency. The agreement also includes the definition of regulations, methodologies and technical standards, as well as the testing of new technologies related to sustainability and the circular economy.

Eni and MSC signed a Memorandum of Understanding for the potential use on MSC's cargos and cruise fleets of LNG, as well as lower carbon energy carriers, such as HVO and bio-GNL biofuels, and lubricants from renewable raw materials. The agreement aims to generate new synergies between the two companies in logistics and transport services for the management of raw materials and agri-feedstocks destined for biorefining, as well as for the storage and transport of HVO biofuels using intermodal transport solutions via sea, rail, and road. The agreement also includes circular economy practices, such as the use on MSC cruise fleets of plastics made from renewable or recycled feedstocks.

