2022 CLIMATE CHANGE REPORT

SUSTAINABLE THINKING

Snam is the leading European operator in natural gas transport, with a network of around 38,000 km in Italy and abroad. The company also deals with storage, of which it holds 17.1% of the European capacity, and regasification, with 6.5 billion cubic meters of gas that will rise to 16.6 billion cubic meters to 2024 due to the installation of regasification plants in Piombino and Ravenna. Snam is among the leading Italian listed companies by market capitalisation.

With its 80 years of experience in the development and management of infrastructure, Snam guarantees security of supply and promotes energy transition with investments in green gas (biomethane and hydrogen), energy efficiency and CCS (Carbon Capture and Storage) technology. It also creates new green areas through a benefit company focused on urban forestation projects.

Snam is committed, among the first companies in the energy sector, to achieving zero net greenhouse gas emissions ("Scope 1" and "Scope 2" emissions) by 2040. As of 2021, the company has set a reduction target on indirect "Scope 3" emissions compared to subsidiaries and suppliers by 2030. The corporate business model of the company is based on sustainable growth, transparency, the development of talent and diversity and the protection and social development of local communities.

www.snam.it

2022

CLIMATE CHANGE REPORT

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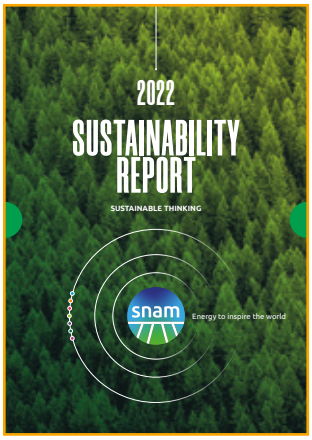
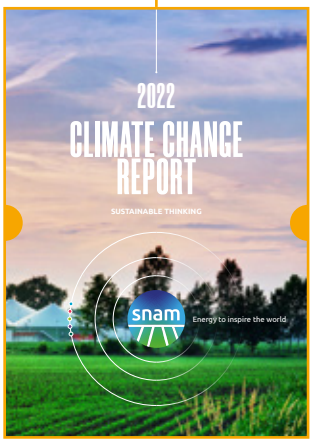
VOLUNTARY



SUSTAINABILITY REPORT

Drawn up in accordance with the GRI Sustainability Reporting Standards, it presents initiatives, major projects, performance and targets on **environmental, social and economic (ESG)** issues in order to strengthen the relationship and collaboration with all the Group's stakeholders.

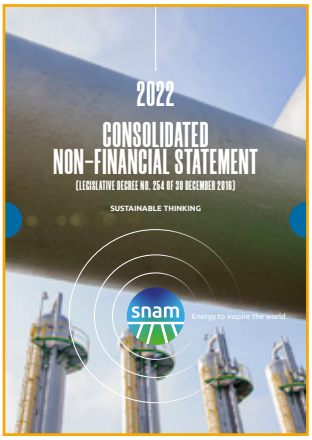


CLIMATE CHANGE REPORT

It describes the **governance, strategy** and scenarios, risks and **opportunities, metrics** and **targets for the fight against climate change**, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), established by the Financial Stability Board.

ANNUAL REPORT

It provides a **comprehensive view of financial and non-financial performance** through the information contained in the Report on Operations - Integrated Report, the Non-Financial Statement, the Consolidated Financial Statements and the Annual Financial Statements.



NON-FINANCIAL CONSOLIDATED STATEMENT

The document, drawn up in accordance with Legislative Decree 254/2016, describes the company management and organizational models, the policies implemented, the risks, their management and mitigation measures, as well as the performances in relation to the sustainability issues relevant to the Group.

MANDATORY

REPORT ON CORPORATE GOVERNANCE AND OWNERSHIP STRUCTURE

It provides detailed information about the Company, its **governance structure** system, the **ownership structure**, the **internal control and risk management system** and related topics.

REPORT ON THE REMUNERATION POLICY AND FEES PAID

It describes and explores the company's **Remuneration Policy of Directors and Managers with Strategic Responsibilities**, specifying the goals, the involved bodies, the procedures for its adoption and implementation in addition to the fees paid.

Snam has structured its reporting in an integrated manner with the aim of providing a broad, complete, transparent and responsible response to its stakeholders' requests, presenting a detailed view of its activities, performance and objectives for the future.

FOCUS ON

CLIMATE CHANGE REPORT

This report describes the **Company's approach to climate change**, the strengthening of its commitment to guiding its choices and initiatives towards a sustainable energy transition, towards achieving national and European decarbonisation targets.

In particular, this document is drawn up in compliance with the recommendation of the **"Task Force on Climate-related Financial Disclosures"** (TCFD) of the **Financial Stability Board** (FSB) and reports on: the global energy and climate scenarios taken into consideration by the Company; the strategy developed ad hoc to respond to changes in the reference context; the risks and opportunities related to climate change, with its impacts and management approaches; the roles and responsibilities of the organisation for the management of climate change issues; the performance and climate objectives set in the medium to long term.

LETTER TO STAKEHOLDERS

Chairwoman

MONICA DE VIRGILIIS

CEO

STEFANO VENIER

2022 was a turning point for the global energy system, which had to cope with the geopolitical, economic and social consequences of the Russian invasion of Ukraine. The ongoing war has completely reshaped the priorities of the energy sector, which had already been under strain in the previous months. The gradual decline in the flow of Russian-sourced natural gas to Europe has brought general attention back to the issue of security of supply in a way that has been unprecedented. A complex scenario that Snam was able to tackle effectively and quickly.

In full harmony with the measures taken by the government and thanks to our tangible and intangible assets, Snam responded to the short-term crisis in real time while still managing not to lose sight of the objective of working towards building a more resilient energy system geared towards enabling the energy transition. The hourglass of gas flows was overturned, and Snam accompanied this change of direction while preventing any disturbances to the system and without forgetting to support the country's decarbonisation.

Snam's commitment to the 2040 carbon neutrality targets remains unchanged, despite the current challenging context. Changes in the industrial set-up and in gas transport flows have had and will have an impact on emissions, but countermeasures have already been taken in the past year that will yield results in the medium to long term. The plan to replace compressor stations with dual-fuel (gas/electric) solutions has been updated and actions to reduce methane emissions (-46% in 2022 compared to 2015) beyond plan targets and UNEP, United Nations Environment Programme, objectives will continue.

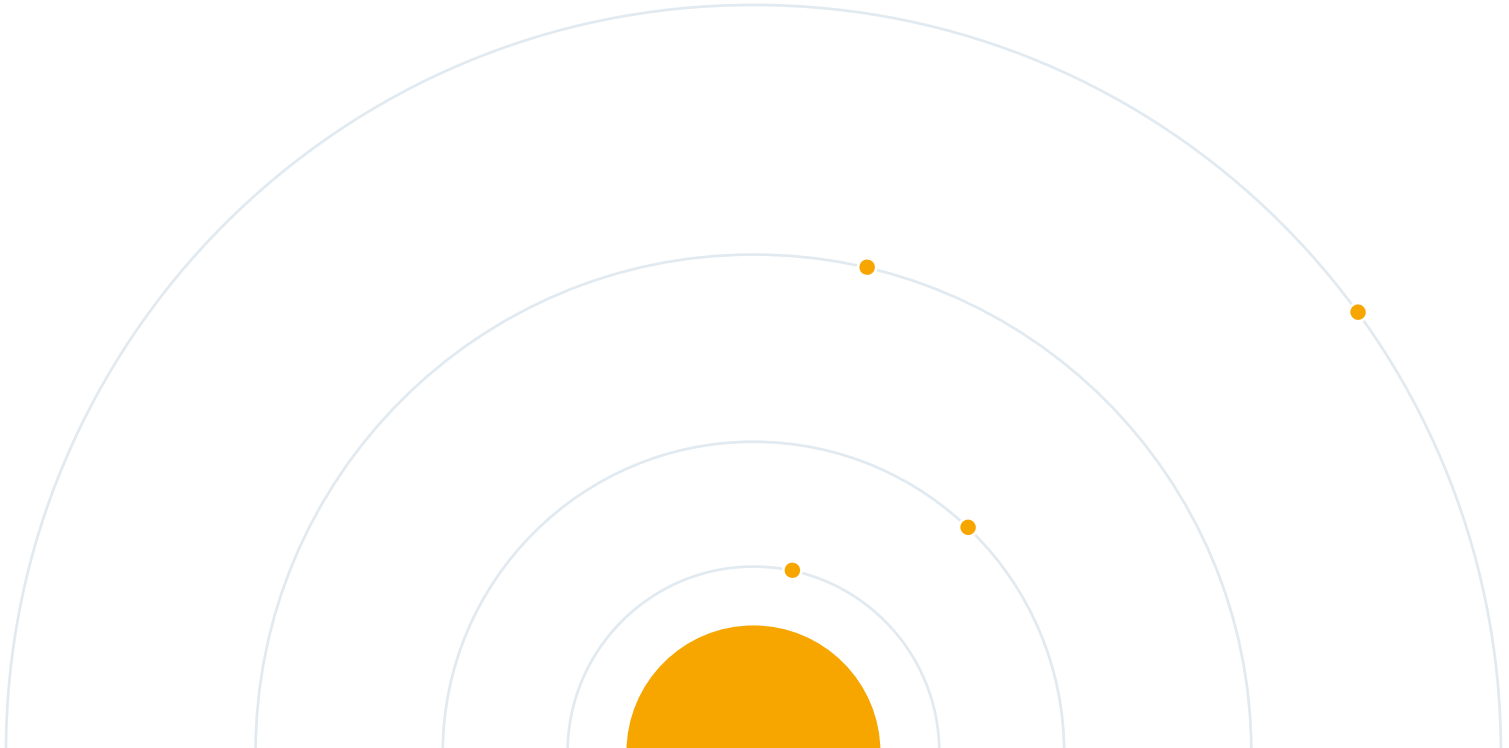
The direction to follow has been outlined and specified both in the 2022-2026 Strategic Plan presented last January and in our vision to 2030, which includes: a) infrastructure development, all in an H2-readiness perspective; b) decarbonisation through green gases (hydrogen and biomethane), CCS and energy efficiency; c) digitalisation and optimisation of assets and industrial processes. Three guidelines on which we have planned ten billion euros of investments over the plan period.

We have consolidated our commitment to the energy transition by acting as enablers of new technological solutions for decarbonisation: we have increased our presence in biomethane with BioEnerys; we have continued to invest in energy efficiency and sign agreements with the public administration with Renovit; in a joint venture with Eni, we have launched the first Italian CCS (carbon capture and storage) project. The memorandum of understanding concluded with Edison for the development of the Small Scale LNG business goes in the direction of the commitments for decarbonising land, sea and rail transport. Our commitment to innovation and new technologies continues with the Snaminnova and HyAccelerator programmes, the latter dedicated to technologies for hydrogen development and decarbonisation.

In short, the Snam of today is a company with a clear strategic development path ahead, capable of rebalancing the 'energy trilemma' (security, competitiveness, sustainability of supplies) called into question by the events of recent years.

The decarbonisation of the energy system is a multi-level, interconnected process: geography, timing, investments, prices, technologies, geopolitical factors. For this very reason, the energy transition is not a linear path, and the events of recent months have made this clear. By anticipating and managing this framework, we have shown that we can be protagonists in the ongoing processes, and that we are capable of building a corridor of security for the country and for its stakeholders. Thanks to our assets, and the skills of our people, we are ready to seize every opportunity to consolidate and develop our globally-recognised leadership in energy.

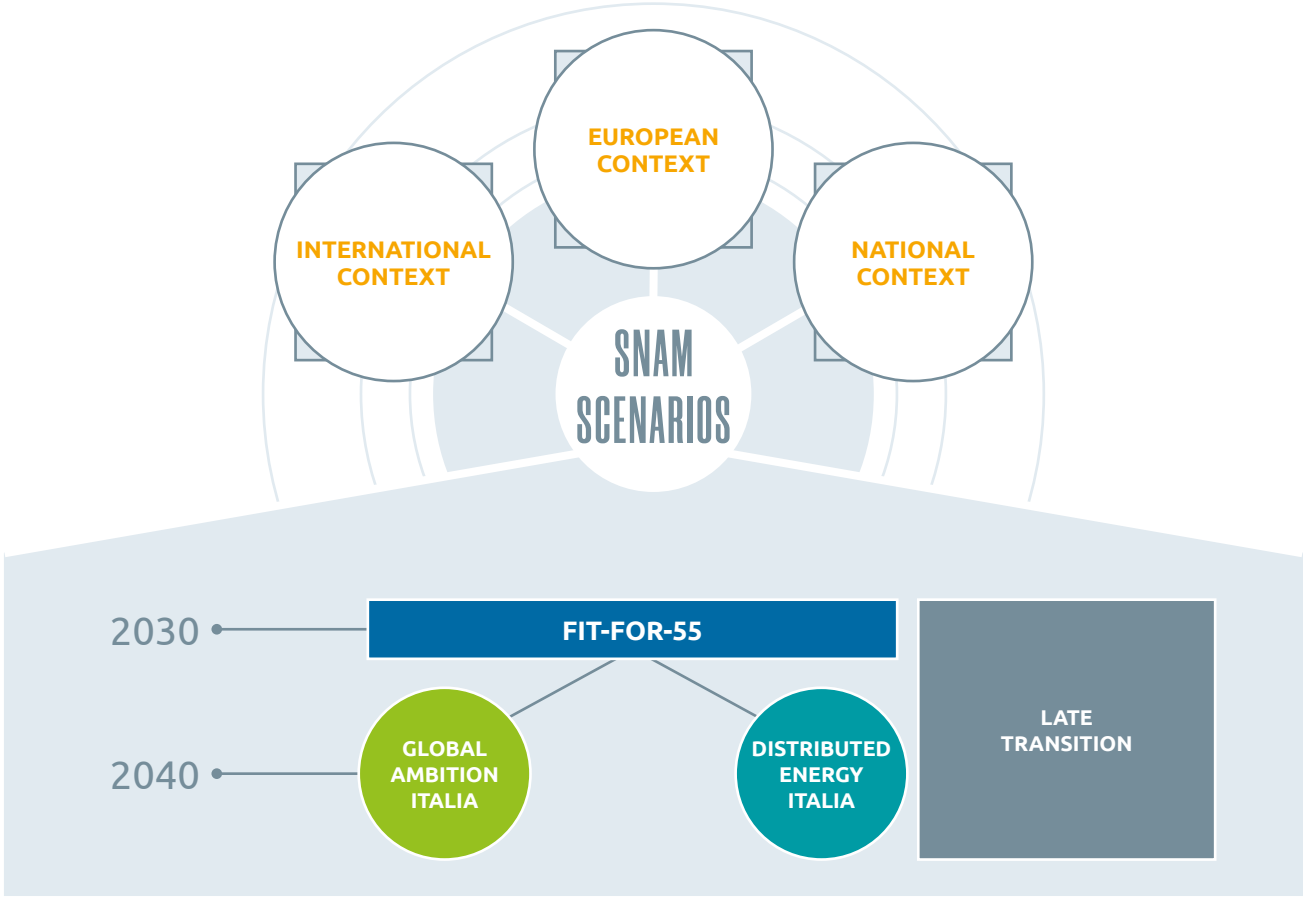
Chairwoman *CEO*



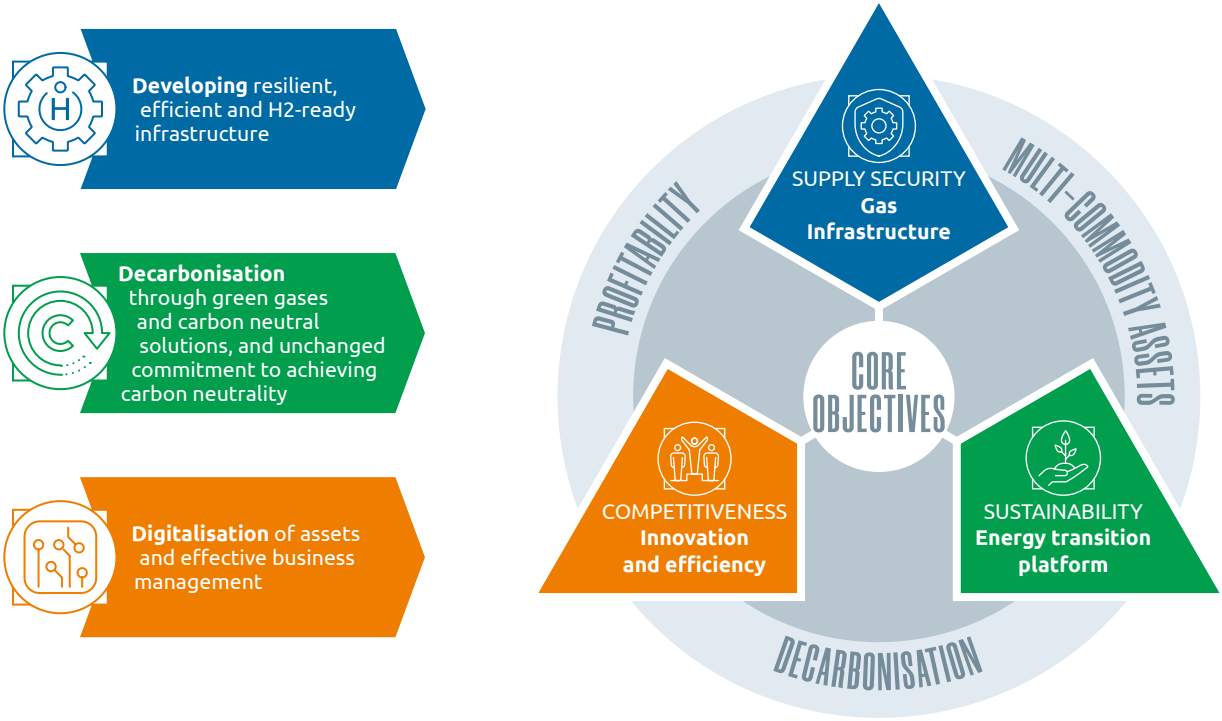
EXECUTIVE SUMMARY

This document has been prepared in accordance with the recommendations of the **Task Force on Climate-related Financial Disclosures** (TCFD) of the Financial Stability Board (FSB) and describes: the roles and responsibilities within the Group for managing climate change, the global energy and climate scenarios, the new 2022-2026 Strategic Plan, the ERM (Enterprise Risk Management) Model for identifying, assessing and managing risks and opportunities related to climate change and the climate performance and objectives set for 2030 and 2040 in relation to the **Carbon Neutrality** decarbonisation strategy.

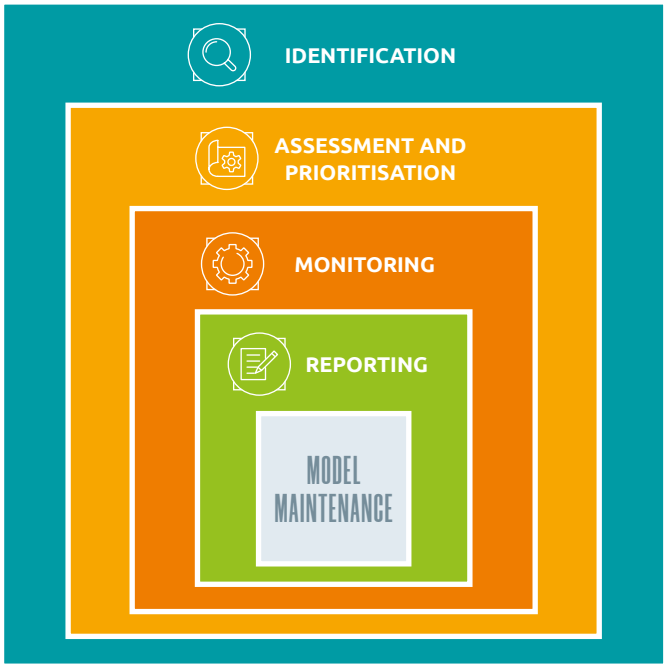
The context and reference scenarios. This chapter presents the current context in which Snam operates, currently characterised by the numerous challenges that have emerged following the Russian invasion of Ukraine, in particular the **'energy trilemma'**: guaranteeing at the same time security of supply, sustainability and accessibility of energy sources , in the framework of a just transition, i.e., leaving no one behind. The chapter explores the importance of source diversification, with particular reference to the spread of alternative energy carriers, such as hydrogen and biomethane, and of carbon capture, utilisation and storage technologies, which are necessary to achieve the decarbonisation targets set at European and national levels. Lastly, the chapter also outlines the different gas supply and demand scenarios developed by the Company, which are at the base of the new Strategic Plan and consider a time horizon to 2040.



Snam's strategy. This chapter presents the 2022-2026 Strategic Plan based on three pillars: the development of gas infrastructure, the acceleration of the energy transition (leveraging energy efficiency, green molecules and carbon capture and storage technologies), and innovation and efficiency through the digitalisation and optimisation of assets and industrial processes. The new Plan also confirms the Group's commitment to the fight against climate change and to achieving the targets set out in the decarbonisation strategy and the ESG Scorecard.

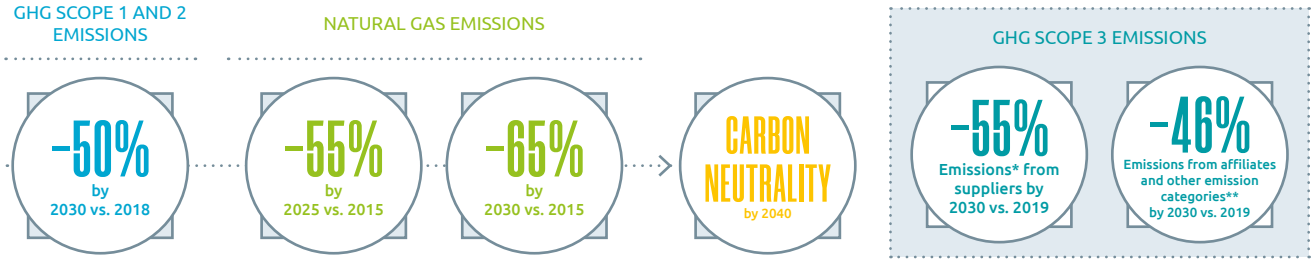


The ERM model and the risks and opportunities related to climate change. This chapter describes the risks and opportunities related to climate change that could affect the Company's business and that Snam evaluates and constantly monitors to continue to operate sustainably also in the long-term, guiding its strategies. The actual and prospective risks and opportunities associated with Snam's corporate strategy are identified, assessed and managed through the ERM Model, which integrates the risks and opportunities related to climate change.



Governance to manage Climate Change. This chapter presents Snam's governance system which, among other things, has the task of overseeing ESG (Environmental, Social & Governance) issues, including aspects related to climate change. The activities of the Board of Directors (BoD), the Chief Executive Officer (CEO) and the management, aimed at ensuring the proper management and monitoring of these issues in the conduct of business, fall within this context. The Board of Directors is supported by various committees, including: the Environmental, Social & Governance and Energy Transition Scenarios (ESG +ETS) Committee, the Audit, Risk and Related Party Transactions Committee and the Remuneration and Appointments Committee.

Acting for tomorrow: Snam's commitment to fight climate change. This chapter illustrates the Company's objectives for reducing climate-changing emissions and presents the results achieved as part of Snam's concrete commitment to decarbonisation, achieved through the monitoring and continuous improvement of its performance.



* Emissions are expressed in terms of supply chain emission intensity (tCO_{2eq}/M€ CapEx)
** Other emissions considered are those related to the production and transmission of fuel and energy, employee business and home-work travel

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

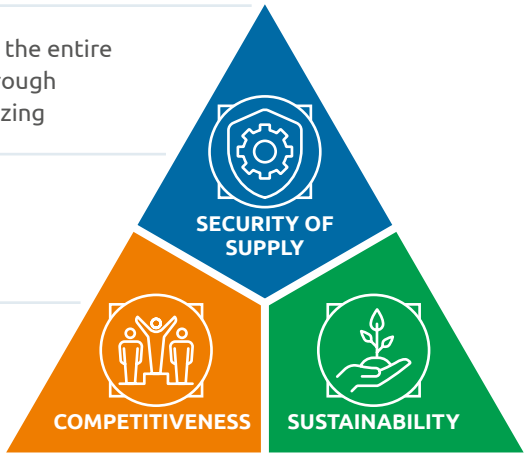
The Task Force on Climate-related Financial Disclosures, established by the **Financial Stability Board** (FSB) at the request of the G20 (Group of 20) **Finance Ministers and Central Bank Governors**, has the objective of developing voluntary policies consistent with the financial risks related to the climate, that can be used by Companies in providing information to investors, lenders, insurers and other interested parties.
The Task Force on Climate-related Financial Disclosures has structured its **recommendations** for climate-related financial reporting into four thematic areas, applicable by all organisations without distinction. The recommendations in the **four areas** are summarised below:

GOVERNANCE	Describe the governance model of the organisation in relation to the risks and opportunities related to climate change
STRATEGY	Describe the actual or potential impacts of the risks and opportunities related to climate change on the business, strategy and financial planning of the organisation
RISK MANAGEMENT	Describe how the organisation identifies, assesses and manages the risks related to climate change
METRICS & TARGETS	Describe the metrics and targets used by the organisation to assess and manage the significant risks and opportunities related to climate change

THE CONTEXT AND REFERENCE SCENARIOS

In recent years, climate change-related phenomena have led to the definition of policies at international and national level, as well as medium- and long-term emission reduction targets with the aim of achieving carbon neutrality by 2050. Energy companies play a key role in this context, as they are able to significantly contribute to the achievement of a low-carbon economy. This role has become even more important following the Russian-Ukrainian conflict, which has put the so-called **'energy trilemma' (security of supply, sustainability and competitiveness)** back at the centre of the public debate. In the current context, the trilemma needs to be rebalanced in order to make Europe independent of Russian gas imports, achieve carbon neutrality targets and ensure fairly energy accessibility. With this in mind, diversifying gas routes, accelerating the development of renewables, green gases (biomethane and hydrogen) and carbon capture, utilisation and storage (CCUS) technologies, while at the same time favouring price containment also in order to counter the growing phenomenon of energy poverty, will be decisive actions in resolving the 'energy trilemma'. Considering the current context and reference scenarios, as Italy's leading operator in the natural gas transportation, storage and regasification sectors, the Snam Group is at the forefront in facilitating the development of the value chain associated with the biomethane, hydrogen and energy efficiency business through infrastructure projects capable of meeting the current challenging needs of the energy transportation system.

SECURITY OF SUPPLY	Developing gas infrastructure along the entire value chain to improve resilience through greater flexibility and appropriate sizing
SUSTAINABILITY	Accelerating the energy transition through the development of green and low-carbon gases
COMPETITIVENESS	Ensuring cost competitiveness through innovation and efficiency initiatives

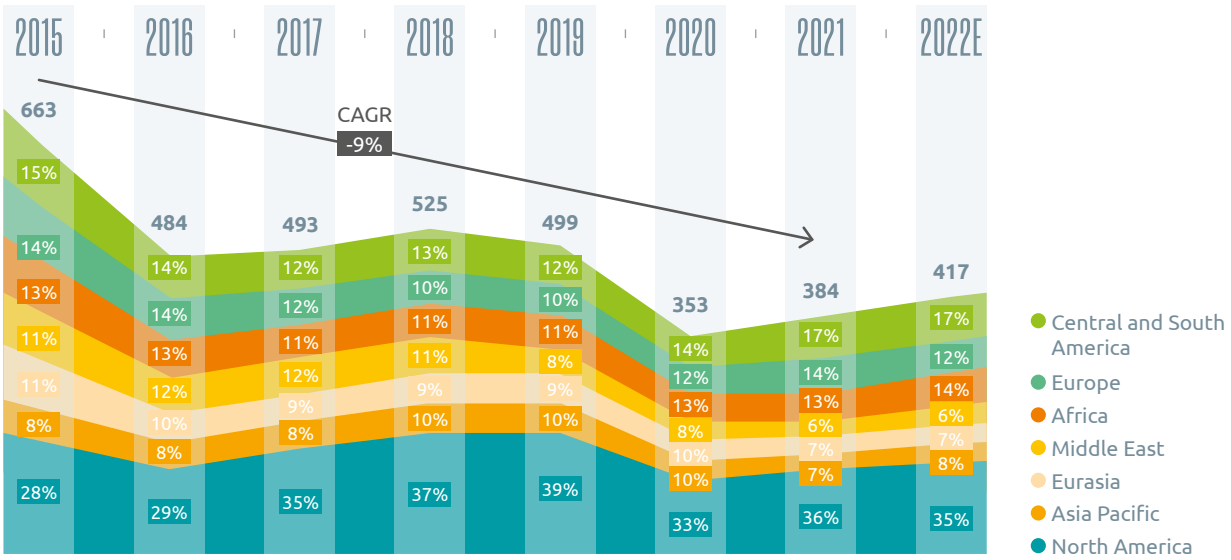


THE INTERNATIONAL CONTEXT

Over the past two years, the volatility of gas prices, limited investments in the energy sector together with the effects of the Russian-Ukrainian conflict have shown how vulnerable the energy sector is to the dynamics arising from unstable contexts. This has led to completely redefined priorities, bringing the focus back to the issue of **security of supply**.

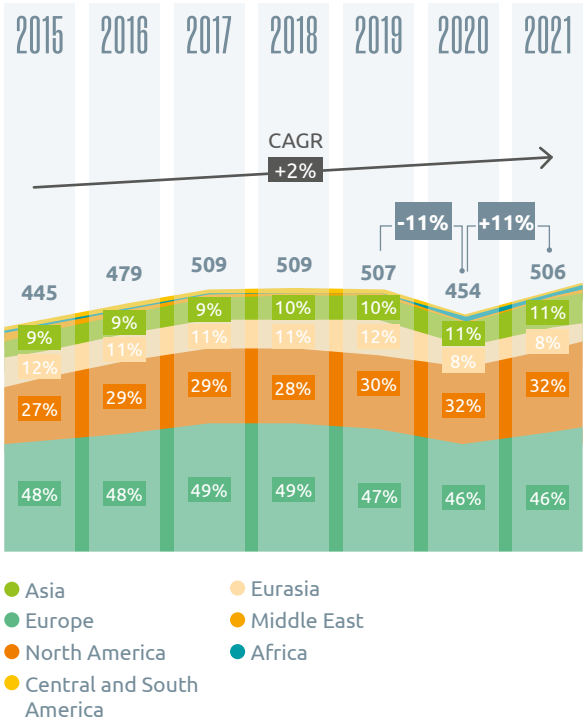
In fact, there has been a significant drop in upstream oil & gas investments over the past ten years (-37%), mainly due to low prices and the uncertainty of the long-term role of gas, which led to tensions on gas supply (especially LNG) as early as the end of 2021. In addition, gas storage levels in Europe reached unbelievably low levels in the summer of 2021 due to the sharp drop in temperatures during the winter period, which required more gas for heating. At the same time, Europe has witnessed, on the one hand, a growth in demand for gas via pipelines at a rate comparable to the global growth of the economy and, on the other hand, much more accelerated growth in demand for liquid gas (LNG) led by China - at the beginning of its coal phase-out path in favour of less polluting fuels in heating, industry and thermoelectricity. Therefore, the gas market was already under severe price and demand tension before the conflict, which aggravated the situation with the decrease of Russian exports to Europe throughout the autumn of 2021.

INVESTMENT IN UPSTREAM OIL & GAS BY CONTINENT, BILLION DOLLARS, %

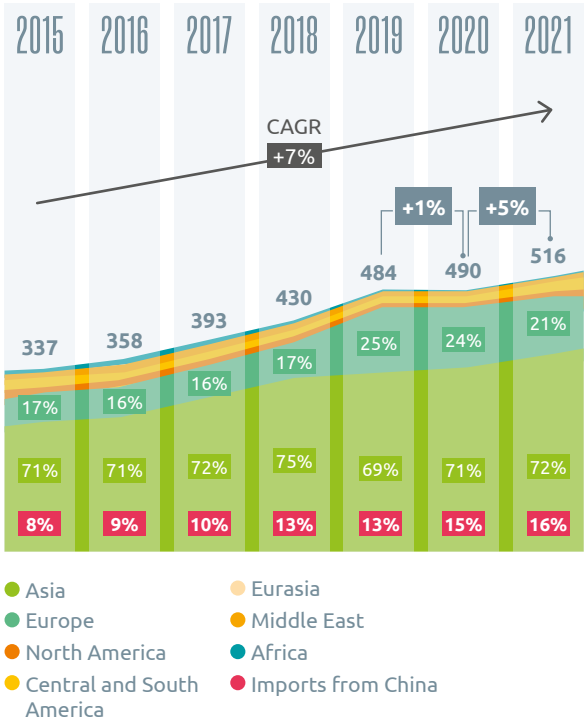


Source: World Energy Investment 2022, IEA

PIPELINE IMPORTS BY GEOGRAPHICAL AREA, BCM

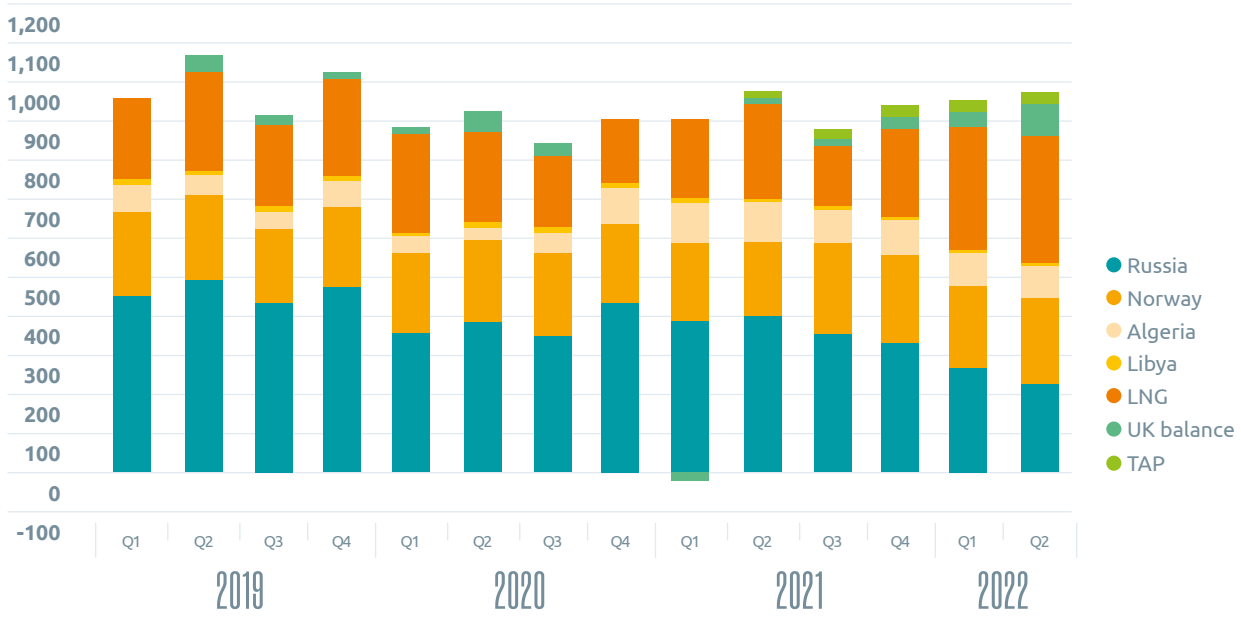


WORLD LNG IMPORTS, BCM



The strong interdependence between gas supply from Russia and gas demand by the EU has grown over the past ten years, up to 2019 when the share of Russian gas (including LNG) needed to meet total EU demand reached 47%, only to fall to around 40% in 2021.

EUROPEAN UNION IMPORT OF NATURAL GAS BY SOURCE (2019-2022), TWH



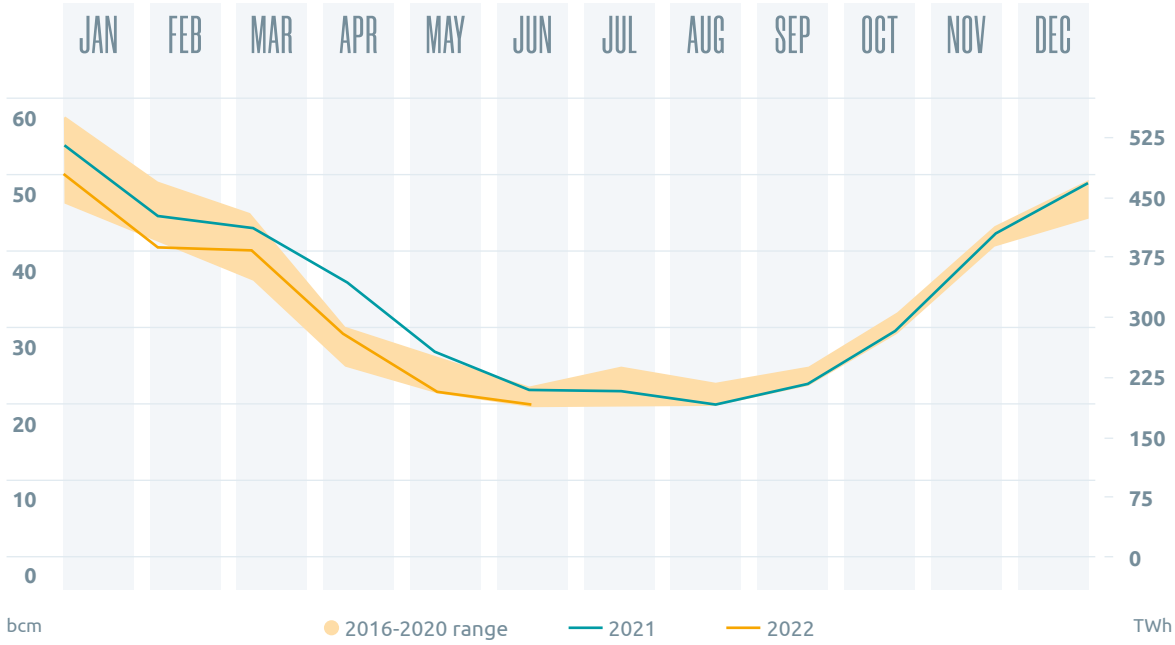
Source: Based on data from the ENTSO-G Transparency Platform as at 6 September 2022

Notes: exports to the Baltic States and Finland are not included due to the unavailability of reliable data. Russia, Norway, Algeria and Libya only include pipeline imports. LNG imports from these countries are reported in the LNG category. A trade balance with the UK has been estimated, considering that it is no longer part of the EU and it is not easy to determine the origin of gas molecules arriving in the EU after passing through the UK market. Imports through the Trans Adriatic Pipeline (TAP) since 2021 are also included.

To cope with the drop in Russian gas imports via pipeline resulting from the Russian-Ukrainian war, the EU maximised imports from other countries (+17 bcm, +20%) and increased its use of liquefied natural gas (LNG), (+28 bcm, +56%). In order to structurally support the tensions related to the progressive achievement of independence from Russian gas, the EU has implemented a series of measures to ensure security of supply and market resilience, introducing obligations to fill storage facilities at least up to 80% for 2022/2023 and 90% thereafter, on the increase of LNG imports, including through Floating Storage and Regasification Units (FSRUs) and reducing gas demand by 15% between August 2022 and March 2023, compared to the average of the last five years, providing expedients such that the reduction request for Italy is about 7% on an annual basis.

In this regard, the International Energy Agency has estimated that if European states were to reduce their gas demand in the winter period by 9% compared to the average demand of the previous five years, storage would remain above 25% even in the case of reduced LNG amounts. A 13% reduction in demand would instead be necessary, especially during the winter period, in order to guarantee filling above 33%. Based on 2022 data, according to the report 'Natural gas supply-demand balance of the European Union in 2023' prepared by the IEA, gas demand in the European Union fell by approximately 13% (or 55 bcm) compared to 2021, the steepest absolute reduction in history.

EU GAS CONSUMPTION

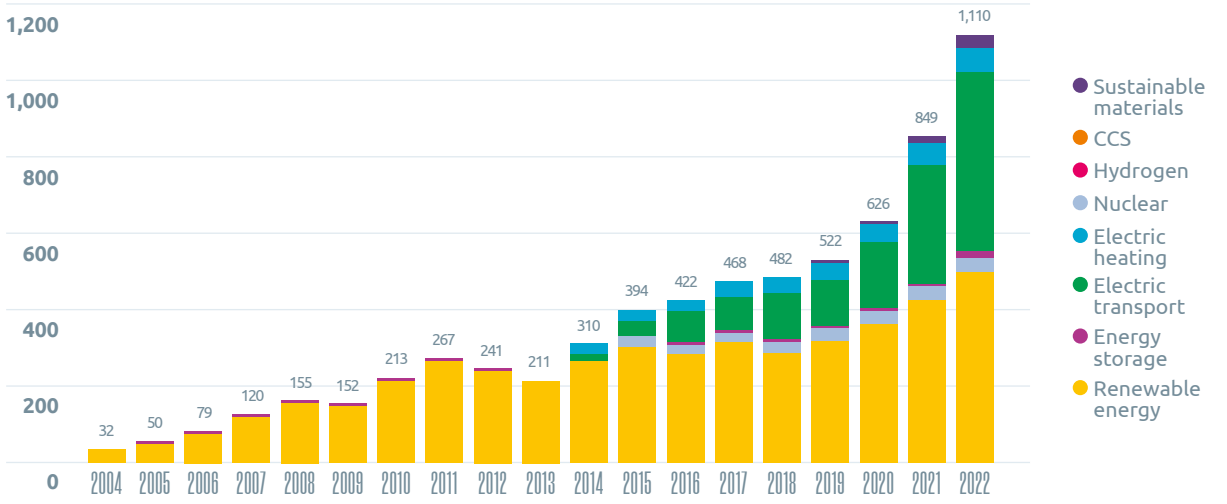


Source: Eurostat, data as at 15 September 2022

Despite having highlighted the vulnerabilities of the energy system, 2022 also therefore opened a **new era for the gas sector**. The rapid changes necessitated by the current situation and the demands of the institutions have highlighted the key role that the energy world will play in ensuring a sustainable and secure energy future and in achieving the **energy transition** in line with the goals of the Paris Agreement and the UN Sustainable Development Goals.

To facilitate the transition, it will be crucial to adopt a **strategy of diversification of sources** through the gradual replacement of fossil fuels, increasing the share of renewables in the energy mix, and with green gases, in particular biomethane, hydrogen, as well as by envisaging the application of CCUS technologies for natural gas uses in the industrial sphere and hydrogen and power generation. In fact, these applications will play a crucial role in the decarbonisation of energy sectors and so-called hard-to-abate industries with emissions including steel, chemicals, ceramics, paper, glass, cement and foundries, where emissions are related to both production processes and high processing temperatures. Confirming the above, according to BloombergNEF's **Energy Transition Investment Trends 2023**, some 1.1 trillion dollars were invested globally in decarbonising the energy system in 2022 (up 31% from 2021), including 495 billion dollars in new renewable energy capacity, 1.1 billion dollars on hydrogen, 6.4 million dollars on CCS and 30 billion euros in sustainable materials, highlighting the clear direction from institutions and industry sectors.

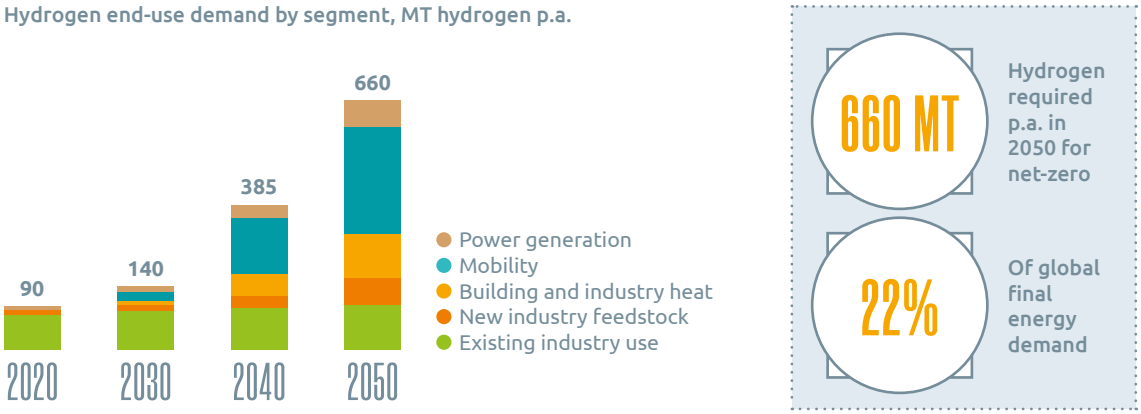
GLOBAL INVESTMENTS IN ENERGY TRANSITION BY SECTOR (2004-2022), BILLIONS OF DOLLARS



Source: BloombergNEF

In this context, hydrogen can contribute to energy security as a substitute to fossil fuels, decreasing the dependence on them. In fact, hydrogen is a fuel that can be fully decarbonised, as it can be produced from renewable energy or through gas with carbon capture. Thanks to the support policies and regulatory systems that will encourage its development, it can become a commodity with an international market. The **Global Hydrogen Review 2022** published by the International Environmental Agency (IEA) reports that **hydrogen demand** reached 94 million tonnes in 2021, recovering to pre-pandemic levels (91 million tonnes in 2019) and thus accounting for 2.5% of global final energy consumption. This increase is mainly attributable to the use of hydrogen in refining and industry, while demand for new applications has grown to around 40,000 tonnes (+60% since 2020), allowing significant growth to be expected over the next 30 years. In this respect, the **Energy Transition Outlook 2022** published by DNV estimates that until 2030, considering the high costs, the demand for hydrogen will be supported by government-defined incentives and the gradual integration of green gas into the existing natural gas infrastructure. Between 2030 and 2040, the cost of hydrogen will halve compared to 2020, making it possible for it to be used more widely in industry and, later, in residential transport. From 2040, it is expected that green gas and its more affordable derivatives (1-2 $/kg) will be used more frequently in hard-to-abate sectors to achieve decarbonisation targets and in sustainable mobility. According to estimates by the Hydrogen Council, thanks to the measures implemented at an institutional level and by the sectors concerned, the demand for hydrogen by 2050 could exceed 600 million tons.

GLOBAL HYDROGEN DEMAND BY SEGMENT UNTIL 2050, MtH_2/year



Source: Hydrogen for Net-Zero, 2021 Hydrogen Council

The technologies that will contribute to the energy transition and thus to achieving the decarbonisation targets include **CCUS (Carbon Capture Use and Storage)** and **Direct Air Carbon Capture (DACC)** systems, a technology still under study, which could potentially increase the amount of CO_2 captured. Indeed, while combustion emissions can be reduced by using environmentally-friendly fuels such as biomethane and hydrogen, process emissions can only be reduced by CCUS, by up to 90%, which ensures that they are captured during production, preventing them from being released into the atmosphere. At present, these technologies are mainly applied in the energy sector, but it is expected that other sectors will also begin to use them to cope with rising CO_2 prices.

To achieve the decarbonisation targets for 2050, the combined action of hydrogen and CCUS will be crucial, as it will be necessary to capture at least **7 giga tonnes** of CO_2, according to BloombergNEF estimates.

In a scenario where energy costs could rise to meet the need for decarbonisation, it is even more important to ensure energy accessibility for all, countering the growing phenomenon of **energy poverty** that is spreading even among EU countries, which have been hit by the significant increase in gas prices following the Russian-Ukrainian conflict. According to the World Energy Outlook, some 75 million people who have recently gained access to energy may not be able to pay for it. The inability to ensure access to electricity for millions of people does not only have consequences in terms of jobs, but affects all dimensions of the social sphere, with repercussions on physical and mental health and thus increased social costs. The energy transition provides an opportunity to build a more secure and sustainable energy system which, among other benefits, also reduces exposure to fossil fuel price volatility.

THE EUROPEAN AND NATIONAL STRATEGY

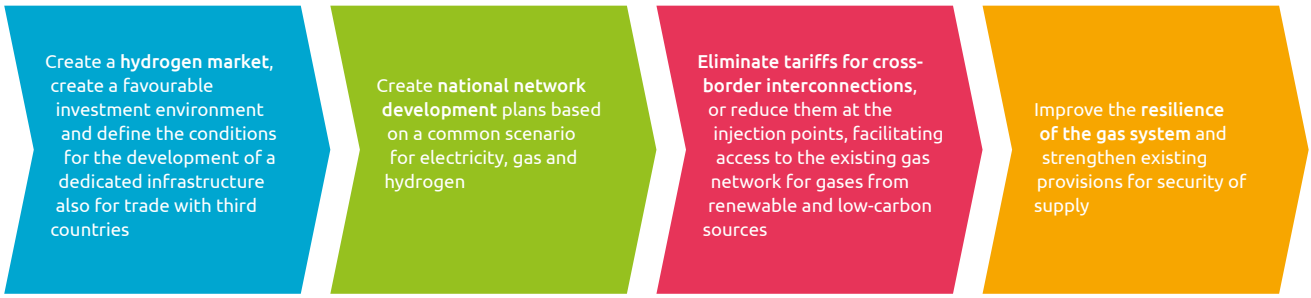
Starting in 2019, with the approval of the **European Green Deal**, the European Union has set out on a path towards a low-carbon economy, with the ultimate goal of achieving carbon neutrality by 2050.

To support the achievement of the 2030 and 2050 targets, the European Commission has promoted a series of legislative initiatives built around two main European policy documents:

- **EU Strategy on Energy System Integration**, which aims to optimise and modernise the European energy system as a whole by connecting different energy carriers with each other and with end-use sectors, leveraging emerging technologies, processes and business models;
- **Hydrogen Strategy**, in continuity with the EU Strategy on Energy System Integration, which intends to create a European hydrogen ecosystem by moving from research and development projects to the creation of scalable hydrogen infrastructures, leveraging the opportunity to decarbonise the European Union through the production and use of renewable hydrogen;
- **EU Methane Strategy**, which aims to reduce methane emissions, improve air quality and strengthen European leadership in combating climate change through, for example, improved measurement, reporting and verification of these emissions by the energy sector, with the mandatory adoption of leak detection and repair tools.

In terms of legislative proposals, the main reforms proposed by the Commission and still under consideration by the European institutions are:

- **Fit for 55**, a set of proposals to update EU regulations related to the decarbonisation of energy systems, in line with the climate objectives agreed by the Council and the European Parliament. The package of proposals aims to provide a coherent and balanced framework for achieving the EU's climate objectives, capable of:
  - ensuring a fair and socially just transition;
  - maintaining and strengthening the innovation and competitiveness of EU industry while ensuring a level playing field with economic operators in third countries;
  - supporting the EU's leading position in the global fight against climate change;
- **Hydrogen and gas markets decarbonisation package**, a set of regulatory revisions aimed at decarbonising the EU gas market by facilitating the deployment of renewable and low-carbon gases, including hydrogen, and ensuring energy security for all European citizens. The main objectives include:



Lastly, following Russia's invasion of Ukraine, the European Commission presented the REPower EU Plan in March 2022, setting out a series of legislative and non-legislative measures aimed at reducing Europe's dependence on natural gas from Russia.

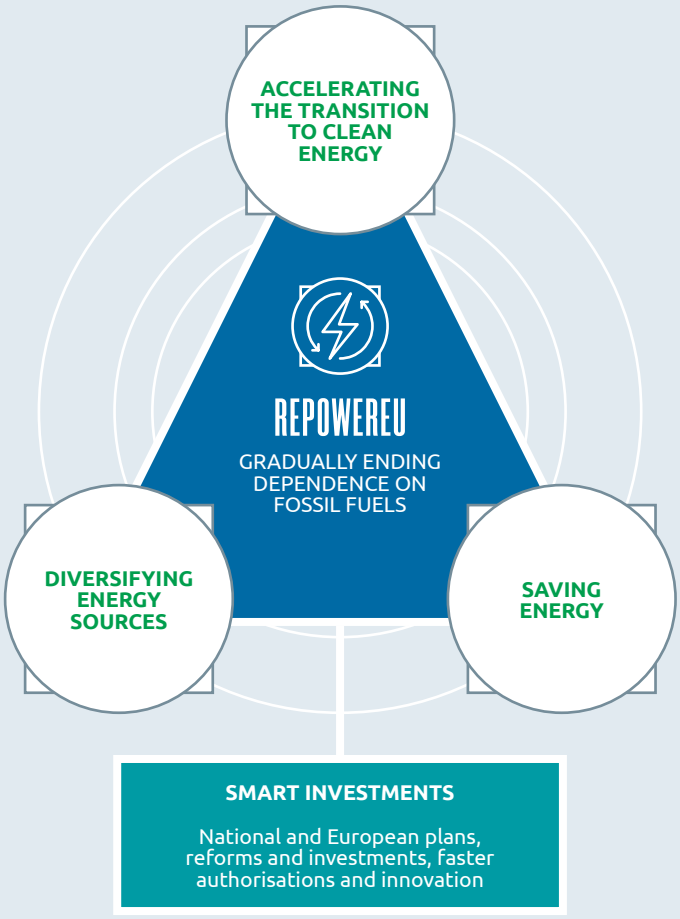
REPower EU

On 18 May 2022, the European Commission published **REPowerEU**, a plan based on the Fit for 55 package that presents three achievable objectives through the combined action of short-, medium- and long-term targets and measures.

Save energy

Energy saving is the quickest and cheapest way to tackle the current energy crisis. Reducing consumption by increasing efficiency is an essential part of the clean energy transition that can make the EU economy more resilient and protect its competitiveness in the face of high fossil fuel prices. The Fit for 55 proposals would reduce gas consumption by 30% by 2030; of these savings, more than one third would be achieved by reaching the EU energy efficiency target. A further reduction in energy consumption compared to the previous proposal and more ambitious targets for renewables would allow the EU to fully achieve the REPowerEU goals without affecting the other components of the Fit for 55 package.
The Commission therefore proposed to raise the binding target of the Energy Efficiency Directive to 13%.

In addition, the commitment of all member states is crucial for saving energy. Therefore, **guidelines for updating national energy and climate plans will be published in 2024**.



REPowerEU Plan infographic, COM(2022) 230 final, of 18/05/2022

Diversifying energy sources

In October 2022, the Commission announced its intention to set up an EU platform for the voluntary joint procurement of gas, LNG and hydrogen that will enable:

- aggregating and structuring the demand for green gas;
- optimising the use of gas import, storage and transport infrastructures to maximise security of supply and stock replenishment; and
- establishing long-term cooperation frameworks with trusted partners.

Together with the development of hydrogen and renewable energies and related trade, as well as cooperation on methane emission reduction strategies, this platform will significantly contribute to achieving energy independence from Russian gas.

Moreover, among the actions implemented to diversify energy supply sources, more than 10 LNG import terminal projects have been proposed in Europe since the beginning of the conflict. Most of these projects are storage units and floating regasification units (FSRUs), which have the advantage of being able to be commissioned in little time where the gas transport and distribution infrastructure is already in place.

Accelerating the transition to clean energy

The acceleration and massive deployment of renewables in power generation, industry, construction and transport will allow fossil fuels to be abandoned more quickly. Over time, they will also drive down electricity prices and reduce imports of fossil fuels.

With a view to promoting renewable energy, the Commission plans to increase **the 2030 target of the Renewable Energy Directive** from 40% in last year's proposal **to 45%**, and to install more than **320 GW of solar photovoltaics by 2025** and almost 600 GW by 2030. Furthermore, the EU should support the large-scale deployment of heat pumps, as well as the development of electricity storage capacities.

Renewable hydrogen will be instrumental in replacing natural gas, coal and oil in hard-to-abate industries and transportation. Therefore, the REPowerEU plan sets a target of **20 million tonnes of renewable hydrogen** by 2030 divided between that which is **domestically produced** and **imported**.

The Plan also envisages an increase in sustainable **biomethane production** up to 35 bcm by 2030 as a cost-efficient way to achieve the goal of reducing natural gas imports from Russia.

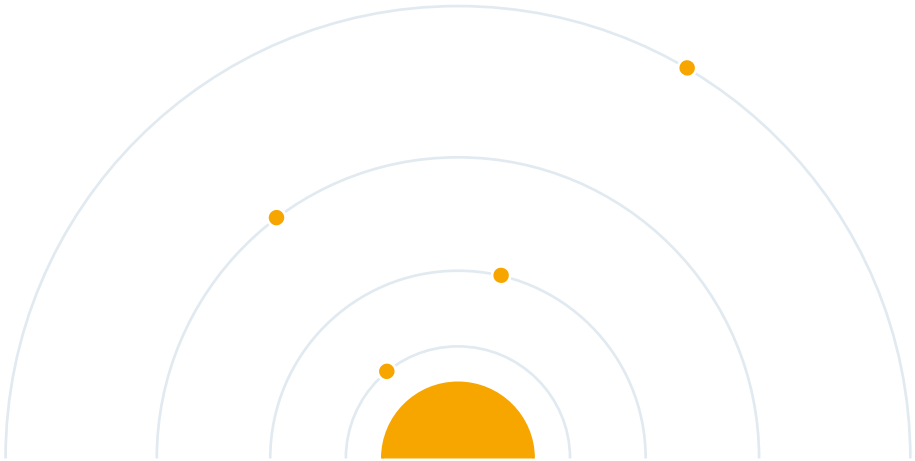
Lastly, the ecological transition will be achieved above all by the progressive **reduction and replacement of fossil fuels** in all economic sectors, **through electrification, the use of hydrogen and biomethane**.

Smart investments

According to the Commission's analysis, REPowerEU will require additional **investments of 210 billion euros between now and 2027**, in addition to those needed to achieve the objectives of the Fit for 55 package proposals. These investments will however pay off: by 2030, the implementation of the Fit for 55 framework and the REPowerEU plan will enable the EU to save 80 billion euros annually on gas imports, 12 billion euros on oil imports and 1.7 billion euros on coal imports.

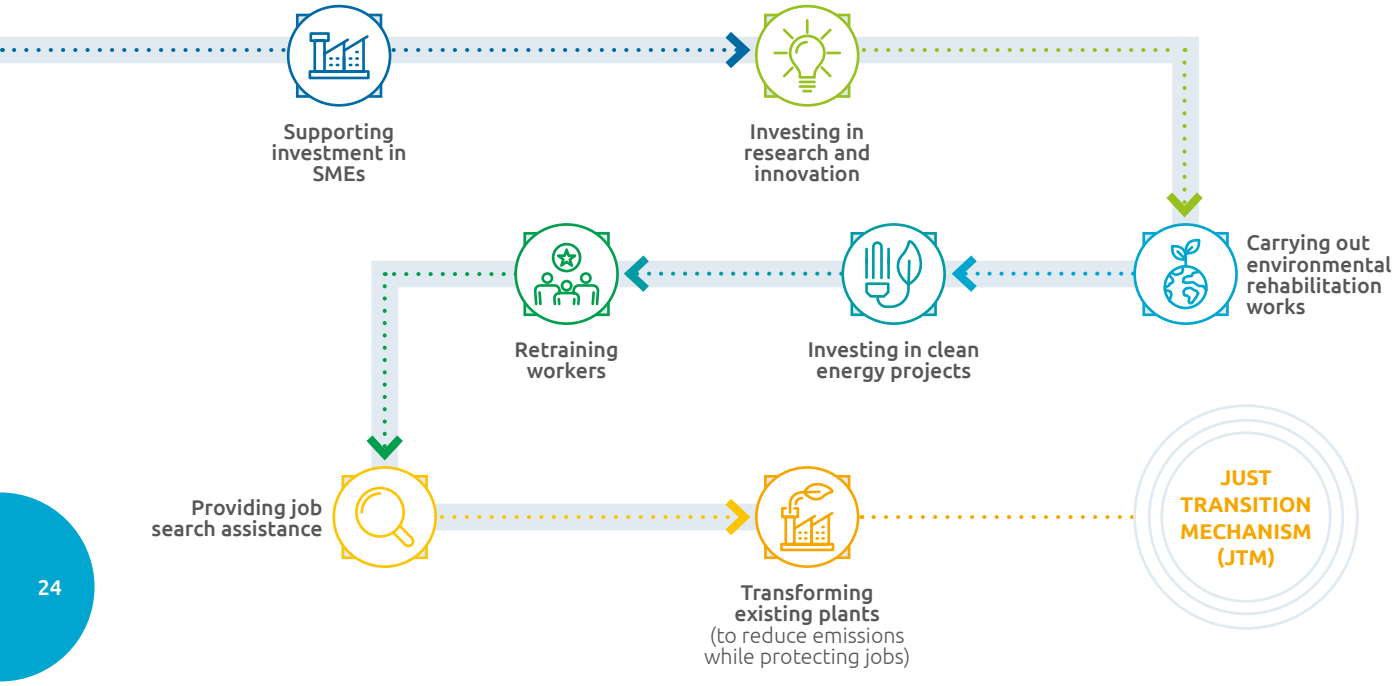
Based on the principles of fairness and solidarity of the European Green Deal and in the REPowerEU package, the European Commission has envisaged that the energy transition process should be founded on the principles of fairness and solidarity, on the basis of which no one should be left behind. All thanks to an enhanced cross-border solidarity mechanism, with a view to fostering the **just transition**.

Indeed, the transition to carbon neutrality brings numerous advantages and opportunities for the European Union, but it also brings challenges and difficulties, especially for certain regions and sectors, also due to the disparities in terms of the financial resources that Member States and territories will be able to invest in the transition. Therefore, it will be necessary to implement effective employment, skills and social policies in line with the European pillar of social rights in order for the 2050 carbon neutrality target to be reached in a fair and solidarity-based manner.



In this regard, the EU will leverage the **Just Transition Mechanism (JTM)** adopted in 2020 as part of the European Green Deal. The mechanism will mobilise at least 100 billion euros of investment between 2021 and 2027 and reach almost 150 billion euros over the next 10 years. The aim of the Just Transition Mechanism is to support the regions, industries and workers that will be most affected by the socio-economic repercussions of the transition through three pillars: a new Just Transition Fund, a dedicated programme within InvestEU and a new loan instrument for the public sector.

This mechanism has several actions that depend on the circumstances of the territory for which they are intended and the measures already introduced by the Member States in terms of policies and investments. In particular, through the JTM, the European Union plans to:



Also at the national level, the Italian government plans to accompany the territories with the greatest difficulties in their transition path and especially in the face of the challenges posed by the energy crisis of 2022. One of the main actions implemented is the creation of **energy communities** and the acceleration of approval processes to make them active.

Furthermore, in order to cope with the current energy crisis, Italy has also adopted the target set at European level of reducing gas consumption by 15% between August 2022 and March 2023, compared to the average of the last five years. Thanks to the exemptions accessible by the state, the target for Italy has been reduced to -7% year-on-year.

At the end of 2022, Italy recorded a significant drop in consumption, down 9.8% compared to 2021, with gas demand at 68.5 billion cubic metres, a sharp decrease from 75.9 billion cubic metres the previous year (Source: https://dgsaie.mise.gov.it/gas_naturale_bilancio.php?lang=en_US). In addition, comparing consumption between August and November 2022 with the same months in the period 2017-2021, Italy recorded a reduction in consumption of 14.7%, completely in line with the defined target. As in Europe, a reduction in gas imports in Italy was followed by a 47% increase in LNG volumes compared to 2021 (Source: https://dgsaie.mise.gov.it/gas_naturale_bilancio.php?lang=en_US).

Among other actions implemented to tackle the energy crisis and increase storage and mostly regasification capacity to ensure supplies differentiation, through Snam, Italy has secured the acquisition of two floating regasification plants (FSRU), in addition to the one located in Panigaglia. The ships have a storage capacity of 170,000 cubic metres each and feed the gas into the existing network after regasifying it from its liquid form (LNG) with an annual regasification capacity of 5 billion cubic metres.

For more information, see the chapter 'Ensuring energy security thanks to the infrastructures, Reliable, secure and resilient Infrastructure' in the 2022 Sustainability Report.

In addition to these measures, the Italian government intends to follow European provisions aimed at diversifying sources of supply and achieving the ecological transition in a fair and equitable manner, leveraging collaboration between regions, through the definition of environmental and climate plans that take into account the specificities of each one, and on already existing instruments.

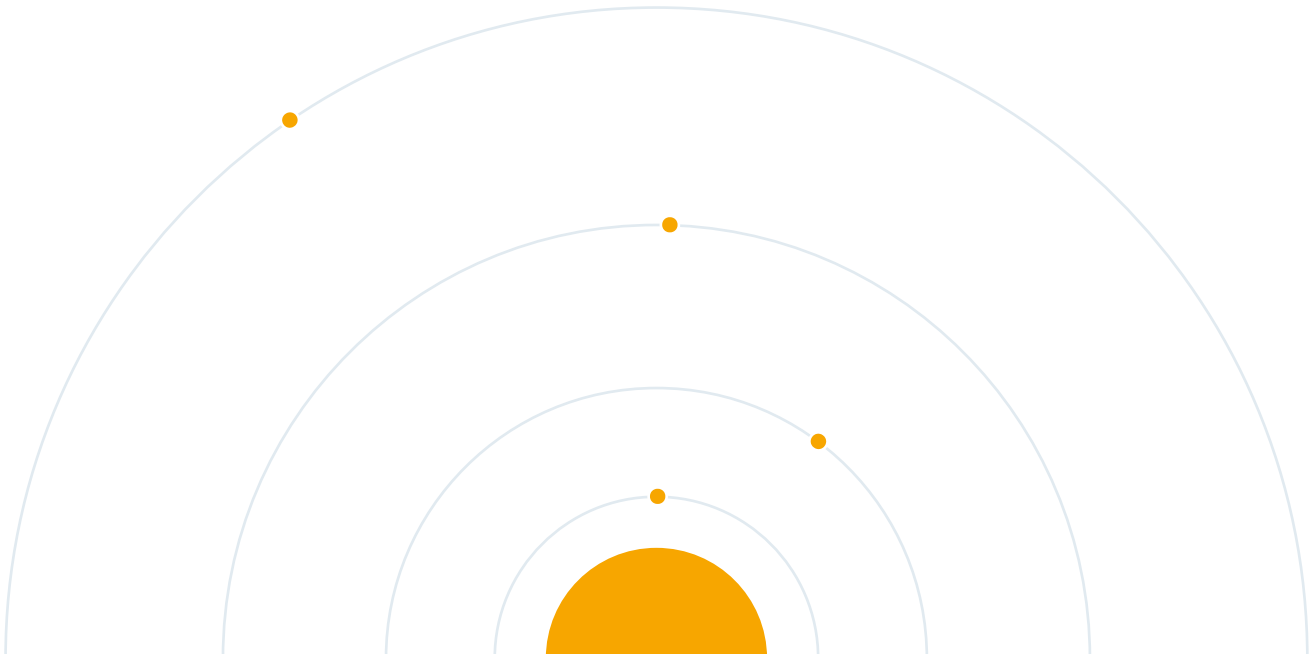
These include the **National Recovery and Resilience Plan (NRRP)**, which could be updated in the face of the energy crisis and by integrating the provisions of REPowerEU. The NRRP envisages investments totalling **220 billion euros** in six areas, one of which relates to the **'Green Revolution and Ecological Transition'** pillar. Among its components, this area includes a number of initiatives and objectives related to the theme **'Renewable Energy, Hydrogen, Network and Sustainable Mobility'**, which has five main actions, including:

- **increasing the share of energy produced from renewable energy sources** with 5.9 billion euros investments through support for energy communities and collective self-production facilities, research into innovative off-shore renewable energy production solutions and the development of biomethane;
- **promoting the production, distribution and end-use of hydrogen**, in line with EU and national strategies, offering investments of around 3.2 billion euros in addition to tax incentives and instruments for spreading green hydrogen consumption in the transport sector.

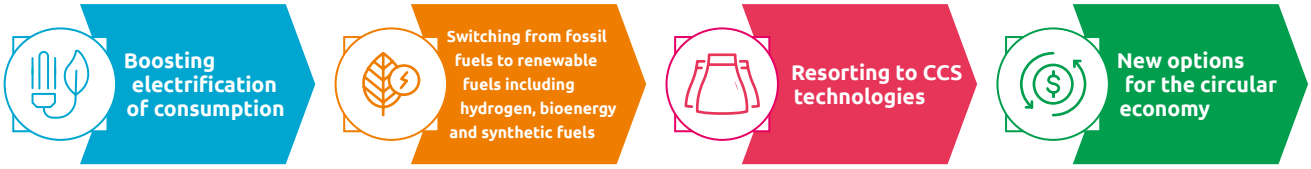
In particular, the NRRP plans to support the development of biomethane through the conversion and modernisation of existing biogas plants and the creation of new plants for the production of biomethane from agricultural matrices or organic waste. The incentives for reaching these objectives were formalised in 2022 with the publication of the **Biomethane Decree** which, taking into account specific sustainability criteria, provides for a 40% contribution on expenses incurred and an incentive tariff applied to net biomethane production for a duration of 15 years.

As for hydrogen, the NRRP supports its development through the creation of hydrogen valleys, i.e., ecosystems that include both hydrogen production and consumption, and refuelling stations, its application in rail transport and hard-to-abate sectors, the production of electrolysers for the creation of a national hydrogen supply chain, and the promotion of research and development projects in the field.

These actions have been defined while considering the targets identified at European level in the **Hydrogen Strategy** and at national level in the Preliminary Guidelines of the **National Hydrogen Strategy** aimed at accelerating the ecological transition and the achievement of the targets present in the **National Energy and Climate Plan**, which will be updated in the course of 2023 by integrating the targets present in the Fit for 55 and REPowerEU directives. In particular, in the Preliminary Guidelines, hydrogen plays a key role in achieving decarbonisation targets, forecasting green gas penetration at 2% by 2030 and 20% by 2050.



The NRRP, National Hydrogen Strategy and Biomethane Decree initiatives are part of the broader goal of reducing greenhouse gas emissions to achieve carbon neutrality by 2050 contained in the **Italian long-term strategy** published in 2021. In particular, the strategy identified four main levers:



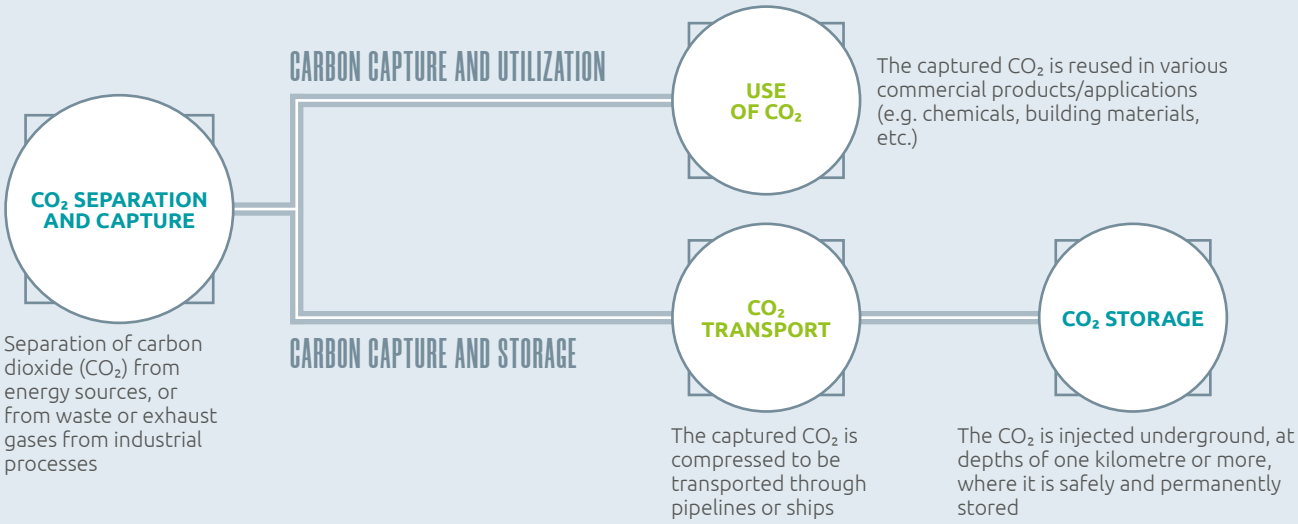
Among other things, the strategy envisages a significant reduction in final consumption compared to current levels and a major re-composition of the energy sources and carriers used. With this in mind, it envisages that by 2050 electricity will exceed 50%, and the renewable energies, not only in the form of electricity, but also in the form of biomethane and hydrogen, will cover no less than 85-90% of final consumption, and that the adoption of circular practices will make the energy use of waste marginal. To meet evolving demand, electricity production will have to more than double from today's level and reach 600-700 TWh with a share covered by renewables between 95 and 100%, partly due to the spread of off-shore wind and mainly solar development. In addition, in order to significantly reduce emissions, a strong push will be needed for the production of hydrogen derived from renewables combined with captured bio-CO_2, which will enable the production of biomethane and fuels similar to conventional fuels but with zero greenhouse gas emissions. Finally, in order to cope with the residual emissions and to reach the goal of carbon neutrality by 2050, the strategy envisages the use of CCUS technologies, which would contribute to the capture of at least 20-40 million tonnes of CO_{2eq}.

CCUS: TECHNOLOGIES FOR DECARBONISATION

Scenarios defined at the international and national level and the world's leading climate and energy bodies, including the UN IPCC and the IEA, are highlighting the crucial role that carbon capture, utilisation and storage (CCUS) technologies could play in the long term in pursuing the goals set in the Paris Agreement in 2015, in addition to energy from renewable sources and green gases.

The adoption of CCUS technologies has the ultimate goal of capturing carbon dioxide emissions, transporting them, for example via dedicated pipelines, and storing them safely underground/underwater to combat climate change.

In particular, CCUS will be crucial for the hard-to-abate sectors, such as cement, iron and steel, aluminium, pulp and paper, or refineries, and for reducing CO_2 from the atmosphere. CCUS is therefore an option for limiting both combustion and process emissions. This technique can be an alternative or a supplement not only for the hard-to-abate sectors but also for industries using zero-emission fuel, where the application of CCUS allows for negative emissions.



Although still largely in the prototype stage and therefore not yet available for large-scale commercial use, these technologies have seen significant growth in investments over the past year. According to the **'Global Status of CCS 2022'**, as of September, the total capacity of CCUS projects under development amounted to 244 million tonnes per year (Mtpa) of CO_2 (+44% compared to 2021) for a total of 196 installations worldwide.

The growth trend is set to continue in the coming years, but must be supported by institutions through targeted policies and incentives. Currently, together with North America, Europe is the continent with the strongest CCUS mechanisms and policies.

In this regard, the European Commission has committed to presenting a **European CCS Strategy in 2023**.

Within the country, the first steps are being taken towards the creation of a CCUS technology infrastructure with the Ravenna **CO_2 capture and storage project** (Ravenna CCS Project) where depleted gas fields and decommissioned assets will be exploited for carbon dioxide storage. The Ravenna CCS Project sees the collaboration of Snam and Eni, who signed a 50:50 joint venture agreement in December 2022. In Phase 1, 25,000 tonnes of CO_2 will be captured from Eni's natural gas processing plant in Casalborsetti (Ravenna), taking advantage of Snam's expertise in transport and molecule management. The CO_2 will then be piped to the Porto Corsini Mare Ovest platform and finally injected into the depleted gas field of the same name. The Project represents a fundamental step towards meeting the decarbonisation needs of heavy industries and allows Italy to enter the CCS value chain along with other European countries where such technologies are at a more advanced stage of development, notably the United Kingdom, the Netherlands, Denmark and Norway.

The Ravenna CCS Project will be the first building block for the development of CCS technologies in Italy. In fact, the possibility of transforming the old, unproductive coal mines in Sulcis (Sardinia) into a reservoir for captured CO_2 is also being evaluated.

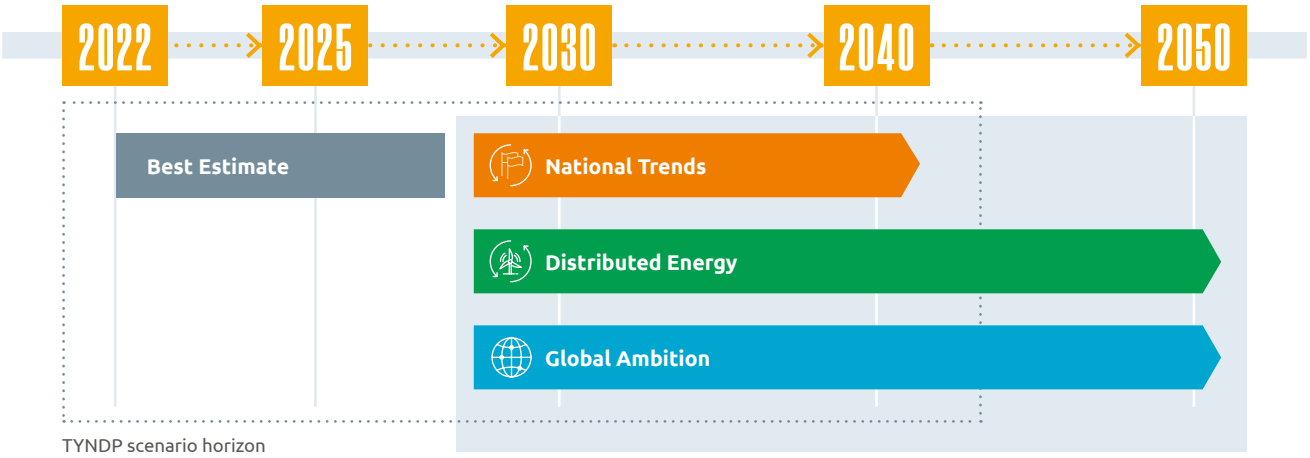
THE ROLE OF GAS

The gas sector, and especially the companies that guarantee its transportation, must contribute to the achievement of the international community's challenging decarbonisation goals, without forgetting the issue of security of supply. The European associations of Transmission System Operators (TSOs) for electricity and gas (ENTSO-E and ENTSOG) are increasingly engaged in favouring and developing the cooperation of national operators in order to align the sector's priorities with the European objectives.

Snam is a member of ENTSOG (European Network of Transmission System Operators for Gas), a European association established in 2009 to improve cooperation in Europe between national gas transmission system operators. The aim is to be able to ensure that the European transmission system develops in line with EU energy and climate objectives. To this end, every two years ENTSOG and ENTSO-E draw up their Ten-Year Network Development Plan (TYNDP) on the basis of the national plans. It presents the strategies and paths for the development of European electricity (ENTSO-E TYNDP) and gas (ENTSOG TYNDP) network.

The TYNDP plans provide a vision of the future energy system based on scenarios jointly developed by ENTSOG and ENTSO-E, which in turn are defined by scenario elaborations and EU energy and environmental policy objectives. Input from association members and the best information available from studies, publications and discussions with leading energy sector organisations is taken into account in developing these scenarios. In particular, the studies and publications of the International Energy Agency (IEA) are a reference for the long-term evolution of commodity prices and emission costs (CO_2).

In April 2022, ENTSO-E and ENTSOG published the new Scenario Report for the TYNDP in which there is one short-term and three long-term scenarios:



- **Best Estimate 2025** reflects current national and European policies and considers a sensitivity analysis in relation to the role of coal and gas in the energy sector at 2025.

- **National Trends**, in line with national energy and climate policies (National Energy and Climate Plans, hydrogen strategies, etc.), based on targets defined at European level, considers the best available knowledge in the electricity and gas sector.

- **Distributed Energy** envisages the maximisation of renewable energy production in Europe and a strong reduction in energy imports. Furthermore, this scenario aims to achieve energy autonomy through local initiatives implemented by citizens, communities and organisations, supported by the authorities.

- **Global Ambition** envisages the development of a variety of renewable and low-carbon technologies and the use of global energy trading as a means for accelerating decarbonisation. It also foresees significant cost reductions in emerging technologies due to economies of scale and an increase in decarbonised energy imports.

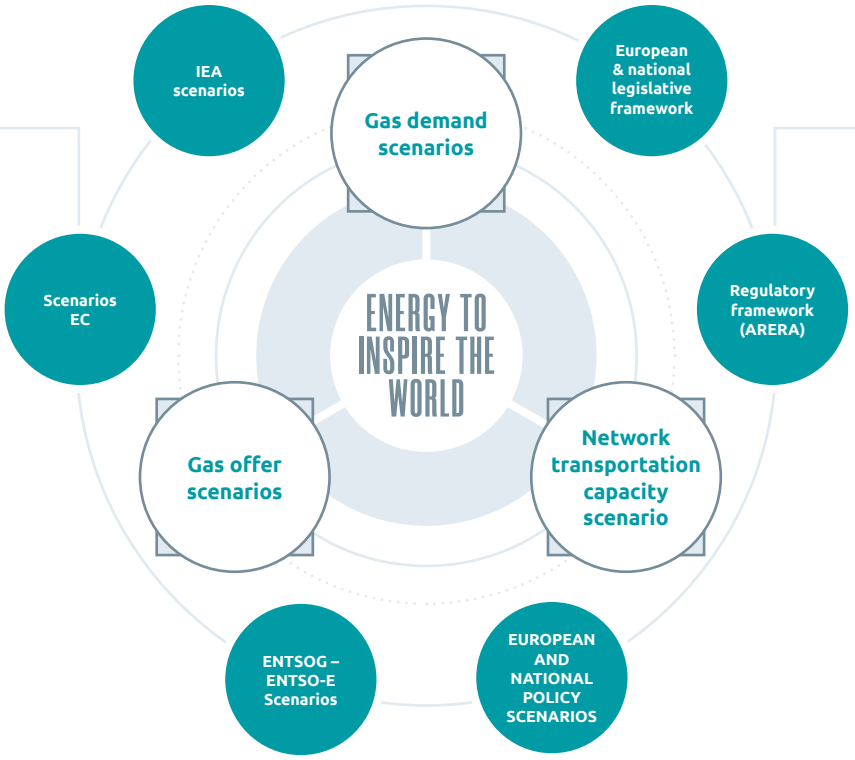
The Distributed Energy and Global Ambition scenarios are developed in accordance with the targets defined in COP21 (Paris Agreement), ensuring that the temperature increase is limited to below 1.5° C compared to pre-industrial levels. Consequently, they represent a pathway to achieving carbon neutrality by 2050 with a reduction in emissions of at least 55% in 2030 compared to 1990. In particular, both scenarios envisage that in order to reach the climate targets set at European level, it will be necessary to continuously improve existing technologies and encourage a shift towards more efficient technologies. In addition, electrification and the increased deployment of hydrogen with electrolysers capable of producing green hydrogen are two other key elements of both scenarios. Finally, the use and integration of CCS technologies is planned, especially in the case of the Global Ambition scenario.

SNAM SCENARIOS[1]

International Energy Agency
The IEA scenarios, described in the World Energy Outlook, are used as reference for fuel prices (oil, gas and coal) and for CO_2 emissions.

European Commission
The scenarios developed by the European Commission define environmental and energy objectives at EU level (e.g. reduction of CO_2 emissions of 55% to 2030, renewable energy share of 40% to 2030, energy efficiency share in end use between 36% and 39% to 2030).

ENTSOG-ENTSO-E
The scenarios developed by ENTSO-E and ENTSOG in the 2022 TYNDP include three long-term scenarios (National Trends, Distributed Energy and Global Ambition) and one short-term scenario (Best Estimate 2022 and 2025).



Legislative framework
The European and national legislative context determines the regulatory constraints of reference in the definition of scenarios and of the Snam strategy.

ARERA
The Regulatory Authority for Energy, Networks and the Environment establishes the criteria for defining transportation tariffs, which are binding in defining Snam's scenarios and strategy.

Fit-for-55
Fit for 55 is a package of measures launched by the European Commission to achieve climate neutrality in 2050 with a target of a 55% reduction in emissions by 2030 compared to 1990.

PNIEC
Definition of energy and environmental policies of member states.

Snam is engaged in the national energy transition path and aims to become a multi-molecule gas infrastructure by 2030, capable of transporting and storing different types of gas, including biomethane and hydrogen. To this end, the company intends to take advantage of the sustainable, safe and technologically advanced infrastructure it has developed over the years, also leveraging its substantial investments in green projects, particularly in the fields of biomethane, hydrogen and energy efficiency. Snam elaborates its gas supply and demand scenarios in order to be able to define short, medium and long-term objectives for the business, taking into account the continuously changing environment and energy transition.

In cooperation with Terna, as required by the regulatory framework, Snam has prepared scenarios for the evolution of the national energy system in 2022, with particular focus on the evolution of gas and electricity supply and demand. The scenarios published in the "Scenarios 2022 Description Document"[2] are an articulation of the national landscape of the ENTSO scenarios, and are on a trajectory consistent with the goal of achieving carbon neutrality by 2050.

The scenarios use 2019 as their historical reference and are developed over a time horizon up to 2040, assuming a single scenario for 2030 consistent with the European targets of the **EU Fit-for-55** package and adapted to the national situation. Starting with a single scenario at 2030 for 2040, two scenarios were developed with different decarbonisation strategies on the path to net zero by 2050. These scenarios have been complemented by a Late Transition scenario that reaches the 2030 and 2040 energy/environmental targets late. A summary description of the scenarios is given below.

- Fit-for-55 **(FF55)** to 2030 and in line with the targets defined by Fit-for-55 at European level, targets a reduction in CO_2 emissions of -55% and a reduction in final consumption of around 16% to 2030;
- **Distributed Energy Italia (DE-IT)** to 2040, characterised by a strong penetration of the electric carrier in all sectors (civil, transport and industry) maximising the use of electric renewables and marginal support in some specific areas of CCS;
- **Global Ambition Italia (GA-IT)** to 2040, reflects the development of green gas-fuelled technologies, particularly in the transport sector, against reduced renewable generation compared to DE-IT. CCS technologies will be used both in thermal power plants and in the industrial sector, especially in processes with hard-to-abate emissions;
- **Late Transition (LT)** to 2030 and 2040, in line with the National Trend Italy published in February 2021, which refers to the renewables, efficiency and emissions targets of the National Energy and Climate Plan 2019, aiming for a CO_2 emission reduction of -40%, consistent with the Clean Energy Package target.

Each scenario has an information set of commodity prices, CO_2, gas supply and demand for the years 2030 and 2040.

Moreover, Snam has taken into consideration the legislative and regulatory framework defined at European and national level and by the Regulatory Authority for Energy, Networks and the Environment (ARERA), as well as a substantial amount of information derived from the scenarios of ENTSOG and ENTSO-E, from the European Commission, the IEA, including the Net Zero emissions by 2050 scenario (NZE). This information refers to prices, economic and technological growth trends and changes in the availability of energy sources and carriers, taking into account the geographical context in which Snam operates.

1 For the sake of completeness of information, there is also the Representative Concentration Pathway 2.6 (known as "RCP 2.6"), the scenario used by Snam for the assessment of physical risks.
2 "Document describing the 2022 scenarios" prepared jointly by Snam and Terna in conformity with resolutions 654/2017/R/EEL and 689/2017/R/GAS.

	Fit-for-55 (FF55)	Global Ambition Italia (GA-IT)	Distributed Energy Italia (DE-IT)	Late Transition (LT)
REFERENCE TEMPERATURE PER SCENARIO	Net Zero by 2050; -1.5°C	Net Zero by 2050; -1.5°C	Net Zero by 2050; -1.5°C	Net Zero by 2050; -1.5°C
TIME HORIZON	2030	2040	2040	2030, 2040
SOURCE	Fit for 55	IPCC Sixth Assessment Report	IPCC Sixth Assessment Report	National Energy and Climate Plan 2019
PARAMETERS USED	**The parameters used are common to all scenarios.** Trends in economic and demographic variables (2031-2040): • GDP (CAGR[3]): 0.3% • Population (mln)[4]: 59.7 • Family members (avg, n.)[5]: 1.9 • Inflation rate (avg,%): 1.9% • Exchange rate ($/€): 1.28		Commodity prices (2030, 2040): • Natural gas (€/MWh_th): 45 • CO_2 (€/t): 95 to 2030; 123 to 2040 • Coal (€/MWh_th): 9 • Brent ($/bbl): 95 • Brent (€/MWh_th): 46	
POLICIES AND TECHNOLOGICAL DEVELOPMENT	In line with the objectives defined in Fit-for-55: • CO_2 emissions -55% in the EU, -51% in Italy; • Energy efficiency in final consumption (about 95 Mtoe by 2030, -14% compared to 2019); • Maximised development of renewable energy sources capable of covering around 65% of electricity needs; • Strong growth in biomethane (5.4 bcm to 2030); • CCS development (5-15 mton CO_2 captured by 2030).	• Biomethane, H2 and e-fuel used in the transport sector (light-duty and heavy-duty trucks); • Heating of buildings through hybrid and purely electric heat pumps, Hydrogen as a substitute for natural gas in the industrial sector and as a green fuel in the transport sector Start of penetration in the civil sector; • Strong development of (electricity) generation from renewable sources; • Introduction of CCS for process emissions and power plants (up to 20 CO_2 mton captured).	• Strong electrification of transport (light-duty vehicles and light-duty trucks) and residential heating; • Hydrogen in industry, mainly hard-to-abate, and in transport. Marginal share in the civil sphere; • Maximum development of (electricity) generation from renewable sources; • Green gas and storage used as back-up for intermittent generation from renewable sources; • Residual use of CCS if necessary with captured volumes similar to Fit-for-55.	Not in line with the objectives defined in Fit-or-55: • CO_2 emissions -37%, in line with the Italian National Energy and Climate Plan 2019; • Limited development of green gases (1 bcm biomethane, 0.1 bcm eq. H_2 in 2030).

3 Source GDP, inflation rate and exchange rate: Moody's Baseline September 2021.
4 Revised Istat population forecast April 2021.
5 Revised based on Istat data April 2021.

In the 2030 Fit-for-55 scenario, gas demand is projected to decrease by about -13% compared to 2021. The volumes consist of natural gas, hydrogen and biomethane. Energy efficiency, electric renewables and the development of biomethane and green hydrogen are leveraged to achieve the emission reduction target of around -51% within the scenario. In fact, the 2030 Fit-for-55 scenario predicts a reduction in natural gas demand of about -23% compared to 2021 values. By contrast, demand for biomethane in 2030 is 5.4 billion cubic metres (57 TWh), in line with a growth path consistent with the development indications in the NRRP, which estimates biomethane production around 3.5 billion cubic metres by 2026. Hydrogen demand in 2030 is estimated at 2.2 billion cubic metres (methane equivalent) (23 TWh). In addition, there is an imminent need for carbon capture and sequestration technologies applied to both process emissions typical of certain industrial sectors and to the capture of combustion emissions, particularly in sectors already subject to the Emission Trading System (ETS).

The Global Ambition Italia scenario, on the other hand, forecasts gas demand of 59.4 billion cubic metres (629 TWh) by 2040. To achieve the decarbonisation targets, strong growth in green gases is estimated. In fact, demand for biomethane by 2040 is around 10.3 billion cubic metres (109 TWh), while demand for hydrogen reaches 12 billion cubic metres of methane equivalent (127 TWh). Natural gas volumes decreased by more than 30%, from 56.6 bcm to 37.1 bcm. Furthermore, in order to achieve the decarbonisation targets of 2040, combining the 2030 target and the net-zero target of 2050, a strong deployment of carbon dioxide capture and storage (CCS) technologies is planned.

By 2040, gas demand is 53 billion cubic metres (561 TWh) in the Distributed Energy Italia scenario. Again, the drive for decarbonisation contributes to the development of green gases such as hydrogen and biomethane, which replace natural gas consumption. In fact, natural gas volumes dropped by 37%, from 56.6 billion cubic metres to 35.4 in Distributed Energy Italia, while demand for hydrogen and biomethane by 2040 reaches 7.3 billion cubic metres of methane equivalent (77 TWh) and 10.3 billion cubic metres (109 TWh), respectively. As in the Global Ambition Italia scenario, the need emerges for the use of carbon dioxide capture and storage (CCS) applied to both the capture of process emissions that characterise some industrial sectors and to the capture of combustion emissions particularly in sectors that are subject to the ETS regime.

In the 2030 Late Transition scenario, gas demand decreases by -15% compared to 2021. In line with the Fit-for-55 scenario, the volumes consist of natural gas, hydrogen and biomethane. In the Late Transition scenario, the lower ambition for decarbonisation, which stops at around -40% CO_2 emissions by 2040, limits the need to develop biomethane and delays the entry of hydrogen, as well as not envisaging the use of carbon capture and sequestration technologies. Demand for natural gas in 2030 in the scenario is higher than in Fit-for-55 and shows a decrease of -20.7% compared to 2021 due to higher fossil gas consumption. For biomethane, the scenario assumes a volume of 7 billion cubic metres by 2040, while for hydrogen, which is still in an embryonic state, a demand of 3.9 billion cubic metres of methane equivalent (41 TWh) is estimated by 2040.

Fit-for-55

66.2 billions of m³

gas and green gas demand to **2030**

11.5 %

share of green gas in gas demand by **2030**

GLOBAL AMBITION ITALIA

59.4 billions of m³

gas and green gas demand to **2040**

37 %

share of green gas in gas demand by **2040**

DISTRIBUTED ENERGY ITALIA

53 billions of m³

gas and green gas demand to **2040**

33 %

share of green gas in gas demand by **2040**

LATE TRANSITION

61.7 billions of m³

gas and green gas demand to **2030**

67.5 billions of m³

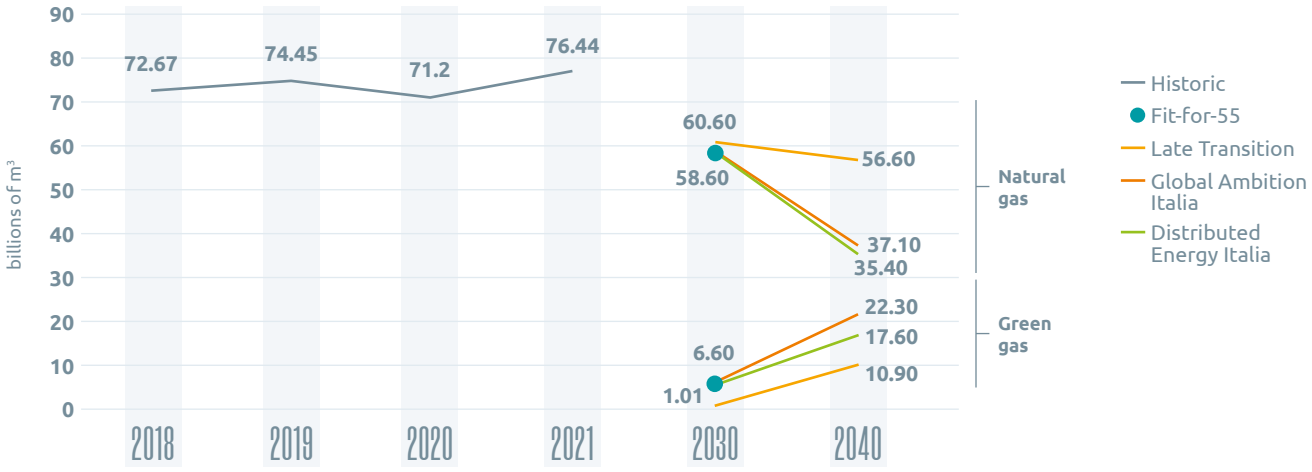
gas and green gas demand to **2040**

1.8 %

share of green gas in gas demand by **2030**

16.1 %

share of green gas in gas demand by **2040**



Note: the billions of m³ of hydrogen are equivalent, i.e., converted according to the different calorific value compared to natural gas.

THE DEVELOPMENT OF SCENARIOS IN DIFFERENT SECTORS

The **civil** sector combines residential and tertiary consumption and is currently Italy's main end-use sector for natural gas consumption (28.3 billion cubic metres in 2019). The Fit-for-55 and Late Transition scenarios forecast a demand for this sector for natural gas of 21.1 billion cubic metres by 2030. The Fit-for-55 scenario also forecasts a contribution of 1.6 billion cubic metres of biomethane. Hydrogen, on the other hand, is not expected to contribute. The downward trend is attributable to the energy efficiency of buildings and the modernisation of existing heating systems with more efficient systems. The scenarios to 2040, however, show substantial differences in the volumes consumed by the civil sector. In fact, it is assumed that the Global Ambition Italia scenario presents a lower penetration of electric technologies in heating, with a demand for natural gas in the civil sector remaining at around 12.2 billion cubic metres compared to 11.1 in the Distributed Energy Italia scenario. These scenarios have a significantly lower demand for fossil gas in the civil sector than the Late Transition scenario, which has a total volume of 17.7 billion cubic metres due to the lower efficiency and electrification of the sector. As far as biomethane is concerned, an increased consumption of 4.1 billion cubic metres in Global Ambition and 4.7 billion cubic metres in Distributed Energy Italia is expected by 2040, where alongside the penetration of electric heat pumps, a demand for heating remains to be served by renewable gas carriers in order to reduce emissions in the sector. Instead, the Late Transition envisages 2.2 billion cubic metres. As far as hydrogen in the civil sector is concerned, it emerges as an alternative particularly in the Global Ambition Italia scenario, characterised by less electrification of heating consumption. In fact, 1.8 billion cubic metres of hydrogen equivalent are planned for this scenario by 2040. In contrast, in the Distributed Energy Italia scenario characterised by a strong penetration of the electric carrier, only 0.3 billion cubic metres of hydrogen equivalent are expected by 2040.

In 2030, the demand for natural gas in the **industrial sector** projected by the Fit-for-55 scenario is 9.9 billion cubic metres, a reduction of about 0.5 billion cubic metres compared to a 2019 industrial demand of 10.4 billion cubic metres. In addition, around 1 billion cubic metres of biomethane is expected to be required in industrial consumption, where it plays a key role in reducing emissions and environmental costs for companies. With regard to hydrogen, a contribution of 0.2 billion cubic metres equivalent is expected, concentrated in the hard-to-abate energy sectors. In the Late Transition scenario, demand for natural gas is very similar, while the consumption of biomethane and hydrogen is not expected. By 2040, the demand for natural gas in direct industrial use is very similar in the two scenarios, with Global Ambition Italia presenting a demand of 5.6 billion cubic metres and Distributed Energy Italia forecasting a demand of around 6.0 billion cubic metres. Again, the Late Transition scenario has higher volumes of natural gas than the other scenarios projected to 2040, amounting to 8.8 billion cubic metres. This difference is caused by both the lower efficiency of the Late Transition scenario and the lower penetration of the sum of the other carriers (1.5 billion cubic metres of biomethane and 2 billion cubic metres of hydrogen equivalent). Regarding biomethane in the industrial sector, the expected demand in 2040 is 1 billion cubic metres in Global Ambition Italia and 1.3 billion cubic metres in Distributed Energy Italia. While as far as hydrogen is concerned, its penetration is significant, especially in the Global Ambition Italia scenario, where 3.8 billion cubic metres are expected, in which it mainly replaces natural gas consumption. In the Distributed Energy Italia scenario, the share of hydrogen is lower but not negligible at 1.8 billion cubic metres, particularly in the so-called hard-to-abate sectors.

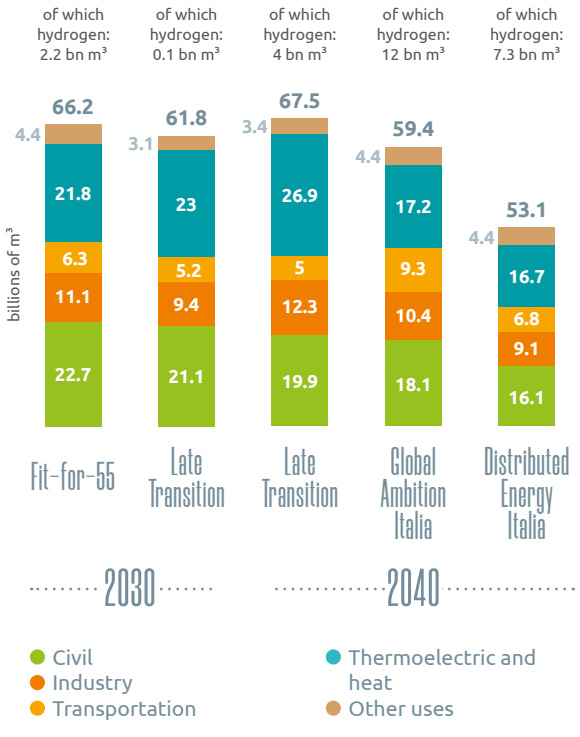
In the **transport sector**, the demand for natural gas in 2030 projected in the Fit-for-55 scenario is 3.9 billion cubic metres, of which approximately 1.2 billion cubic metres is CNG (compressed natural gas) and the difference of 2.7 billion cubic metres is associated with freight transport. If LNG consumption in bunkers is included, amounting to 1.1 billion cubic metres, the total demand for natural

gas in transport is 5 billion cubic metres. The penetration scenario for biomethane sees approximately 1.5 billion cubic metres. and is part of the share of biofuels released for consumption. A hydrogen demand of 0.9 billion cubic metres equivalent is also expected, mainly concentrated in heavy transport. The 2030 Late Transition scenario, on the other hand, assumes development of biomethane consistent with the Italian National Energy and Climate Plan 2019 vision of 1 billion cubic metres of biomethane growth for the transport sector alone. For hydrogen, a consumption of 0.1 billion cubic metres is estimated, and lastly a contribution of natural gas similar to the Fit-for-55 scenario. By 2040, the same demand for natural gas in the transport sector between the Distributed Energy Italia and Global Ambition Italia scenarios is expected to be 1.6 billion cubic metres, of which about 1.1 billion cubic metres of LNG in heavy transport. If LNG consumption in bunkers is included, amounting to 1.1 billion cubic metres, the total demand for natural gas in transport is 2.7 billion cubic metres. The Late Transition scenario, on the other hand, results in a higher natural gas consumption in transport, 2.5 billion cubic metres due to the lower penetration of electric vehicles, and a lower consumption of green gases of 0.5 billion cubic metres of biomethane and 2 billion cubic metres of hydrogen equivalent by 2040. A share of 1.4 billion cubic metres of natural gas bunkers is also considered in the Late Transition. Also by 2040, a significant contribution of biomethane, assumed to be 2.9 billion cubic metres, is expected for the Global Ambition Italia scenario. In contrast, Distributed Energy Italia forecasts 1.6 billion cubic metres. The demand for hydrogen in 2040 in the Distributed Energy Italia and Global Ambition Italia scenarios is mainly concentrated in the transport sector as a decarbonised alternative to petroleum products and LNG in heavy and long-haul transport. Again, demand is higher in the Global Ambition Italia scenario (4.8 billion cubic metres equivalent) than in Distributed Energy Italia (3.6 billion cubic metres equivalent).

In the **thermoelectric and heat** sector, the Fit-for-55 scenario estimates a natural gas volume of 20.4 billion cubic metres in 2030. This includes electricity production and heat production, whether from cogeneration or integration boilers. Biomethane also complements natural gas in power generation, offering a programmable renewable power generation option with a consumption of around 1.4 billion cubic metres. In the 2030 Late Transition scenario, thermoelectric natural gas demand is higher and consumption reaches 23 billion cubic metres. In this scenario, no biomethane consumption is expected in the thermoelectric sector by 2030, as the limited quantities (1 billion cubic metres) are all allocated to the transport sector. By 2040, the demand for thermoelectric natural gas is very similar between the two scenarios, with a volume of 14 billion cubic metres for Distributed Energy Italia and 14.9 billion cubic metres for Global Ambition Italia. In the Late Transition scenario, the volumes of thermoelectric natural gas are much higher, remaining at around 24 billion cubic metres, to which 2.8 billion cubic metres of biomethane must be added. Demand for natural gas is higher due to the lower contribution of renewables in covering electricity demand. The use of biomethane contributes as a programmable renewable resource to the decarbonisation of electricity generation in the other scenarios as well. In particular, the volumes for the Distributed Energy Italia scenario are around 2.7 billion cubic metres, while for the Global Ambition Italia scenario, they reach 2.3 billion cubic metres. Lastly, in the Late Transition the demand for biomethane will reach 2.8 billion cubic metres in 2040. The use of hydrogen is not envisaged in this sector.

The **other sectors** of natural gas consumption are the agricultural sector, non-energy uses and energy sector consumption and losses. Natural gas demand in the 2030 Fit-for-55 scenario is about 3.3 billion cubic metres in the other uses (energy branch, non-energy uses, bunkers and consumption and losses), while hydrogen reaches 1.1 billion cubic metres. The scenarios to 2040, on the other hand, predict a demand for natural gas of 2.8 billion cubic metres in other uses. As for hydrogen demand in other uses, it is assumed to be the same for both scenarios to 2040 (1.6 billion cubic metres) and is associated with hydrogen consumption in the synthetic chemicals and energy branch, mainly concentrated in the refinery sector for the production of liquid biofuels and e-fuels. In the Late Transition scenario, on the other hand, no hydrogen consumption is expected in the other uses.

GAS DEMAND IN DIFFERENT SCENARIOS



SNAM'S STRATEGY

BUILDING A SECURE AND SUSTAINABLE ENERGY SYSTEM: THE 2022-2026 STRATEGIC PLAN

Developing resilient, efficient and H2-ready infrastructure

Decarbonisation through green gases and carbon neutral solutions, and unchanged commitment to achieving carbon neutrality

Digitalisation of assets and effective business management

Snam is determined to play an essential role in building a **more sustainable, resilient and durable energy system**, seizing and creating opportunities for the Group's long-term strategies that have emerged from the current environment characterised by extreme uncertainty and volatility.

Indeed, in the current crisis scenario, Snam has been able to manage the emergency situation and consolidate its position as the main operator in the energy sector by providing effective responses in the short term, which have represented the basis on which the **2022-2026 Strategic Plan** has been founded.

In line with European objectives, including those presented in the REPowerEU Plan, Snam has increased its investments to 10 billion euros (+23% compared to the previous Plan), of which 9 billion euros aimed at strengthening gas infrastructures, making them more flexible and multi-purpose. 450 million euros will be allocated to the Group's **innovation** and **digitalisation** programme for projects dedicated to security and supply continuity.

At the same time, 1 billion euros will be allocated to energy transition businesses, leveraging energy efficiency, green molecules and CCS.

PILLARS OF THE 2022-2026 STRATEGIC PLAN

GAS INFRASTRUCTURE

We invest in a multi-purpose gas infrastructure, meaning it is compatible with different gases along the entire value chain

- **Network** development: Adriatic backbone (to enhance South-North flows)
- **Storage**: expansion and optimisation of the system and first investments in the Alfonsine storage field
- **LNG** import: acquisition of 2 FSRUs
- Replacement of >1,000 km of pipeline
- Strengthening **interconnections**
- **SMALL SCALE LNG** infrastructure

SUSTAINABILITY

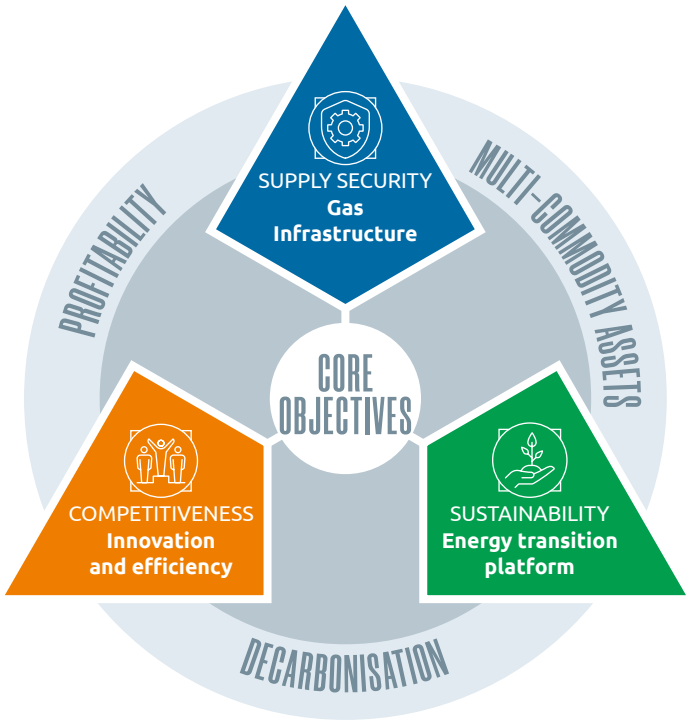
We develop green gases and contribute to the decarbonisation of consumption, developing the energy transition platform

- **Biomethane**: target >100MW installed capacity
- **H2** projects: demand development and skills enhancement
- **CCS** technologies: building a CCS ecosystem in Italy by leveraging equity investments in northern European companies
- **Energy Efficiency**: diversifying growth through public-private partnerships and energy performance contracts

COMPETITIVENESS

We digitalise and optimise assets and industrial processes

- **SnamTEC**: >50 active projects
- Focus on cost efficiency, preparation for ROSS*
- Flexibility and effectiveness for performance-based incentives



*ROSS: new regulation based on total expenditure (CapEx + OpEx)

Gas Infrastructure

Providing greater flexibility to the gas infrastructure along the entire value chain is one of the main objectives pursued by Snam in order to strengthen its resilience in times of emergencies.

The gradual replacement of obsolete infrastructure, the installation of dual-fuel compressor stations, the development of **small scale LNG** (SSLNG) and the expansion of the network of **LNG and bio-LNG** stations is envisaged over the plan period.

Snam will allocate 6.3 billion euros to the transportation network by 2026, in particular to the expansion of the **Adriatic backbone**, which will be completed by 2027 to meet the need to increase gas transportation capacity from South to North, giving greater flexibility to the system. To date, the Adriatic Line consists of three sections from Sulmona to Minerbio and a compressor station in Sulmona. In addition, part of the investments dedicated to the gas transportation network will also be allocated to the application of the **Asset Health Methodology** developed by Snam for assessing the state of health of natural gas transportation infrastructures. It was prepared by Snam Rete Gas in coordination with the other Italian gas transportation companies (in accordance with the mandate set forth in ARERA Resolution No. 195/2022/R/Gas), with the support of leading international consulting firms (Copperleaf) and academic institutes (Turin Polytechnic Institute).

ASSET HEALTH METHODOLOGY

The natural gas transportation system in Italy represents an essential energy infrastructure and a crucial asset for the social and economic well-being of citizens and businesses.

Today's infrastructure has been gradually built up since the 1950s-60s to meet the country's growing demand for natural gas. As a result, the age of the pipelines forming part of the operational network varies significantly and a significant proportion of these infrastructures have already reached the end of their economic-technical life cycle. In practice, there is a wide range of situations that require specific assessments carried out on a case-by-case basis.

The asset management process that has been developed since the 1980s has evolved considerably, resulting in numerous regulations and standards. The most recent is **ISO 55000**, which defines the main tasks of a structured and effective asset management system.

The **Asset Health Methodology (MAH)** developed by Snam is based on these principles and takes its cue from best practices implemented internationally in various infrastructure sectors, particularly in the energy sector. This methodology identifies the **principles and approaches adopted by Italian gas transportation system operators in order to assess the health of their assets**. It also provides an additional tool to support investment decisions regarding the replacement of obsolete or fully depreciated assets.

For more information, please visit https://www.snam.it/it/trasporto/metodologia_asset_health/.

Of the 9 billion euros allocated to infrastructure in the Plan, Snam intends to allocate 1.3 billion euros to **expand, upgrade and optimise the storage system** in order to make it more flexible and increase its overall capacity to 16 bcm by 2026. More capacity will also be achieved thanks to the new Alfonsine plant, (+1.8 bcm or 15%), which will be completed within the next five years with the financial support of 50 million euros planned for 2022-2026.

Snam will invest an additional 1.4 billion euros in LNG imports through the 2 new **floating regasification units (FRSUs)** that will contribute to increasing the Group's regasification capacity. With a regasification capacity increased to about 27 bcm, LNG will be able to meet about 40% of the expected gas demand in the medium term. With this in mind, and with a share of about 17 bcm of regasification capacity, Snam will become one of the largest LNG operators in Europe, thus ensuring greater security and diversification of Italy's energy supplies.

Floating gasifiers or FSRUs are terminals capable of storing and regasifying natural gas. They are mounted on ships located in the vicinity of a port area, on the quayside or offshore, and receive liquefied natural gas (LNG) at a temperature of about -160°C from other LNG carriers and regasify it (i.e. bring it to a gaseous state) in order to feed it into the national gas transmission network.

For more information on the functioning of the FSRUs, see the chapter 'Snam Profile, Gas Infrastructure Business' in the 2022 Annual Report.

In line with future scenarios, which foresee the introduction of increasing volumes of hydrogen into the national and European system, investments in the modernisation of the transport and storage infrastructure have continued from an **H2-ready** and **multi-purpose** perspective: to date, 99% of the entire Snam network is capable of transporting up to 100% hydrogen (in accordance with ASME regulation B31.12[6]) and by the end of 2022, 750 km of the network have already been certified by an external body (RINA), with the aim of certifying more than 3,000 km and replacing more than 1,000 km with an H2-ready perspective within the Plan horizon. In this respect, Snam has studied the development of a **backbone completely dedicated to hydrogen**: 2,300 km of network, approximately 70% of which resulted from the repurposing of existing infrastructure. The hydrogen backbone will also contribute to the creation of an integrated and interconnected European hydrogen market, where Italy will play the role of transit country for green gas. In this scenario, hydrogen storage will be significant in mitigating the volatility resulting from the increasing share of renewables produced, as well as providing flexibility to the energy system with a capacity of 1.5 bcm. Given the project's potential, the Group has applied for **EU PCI** (Projects of Common Interest), which brings together projects of common interest and which the Commission has identified as a key priority for the interconnection of the European Union's energy system infrastructure.

In November 2022, Snam successfully completed a series of tests at its Istrana (TV) compressor station aimed at experimenting with the use of hydrogen as a fuel to power the plant's gas turbines, using a mixture of hydrogen (at 10%) and natural gas.

6 The ASME (American Society of Mechanical Engineers) is a non-profit US association that enables collaboration, knowledge sharing and skills development across all engineering disciplines. ASME B31.12 is a standard for hydrogen pipes and pipelines and contains the requirements that infrastructures should have in order to enable the transport of hydrogen in a safe and quality manner.

Energy Transition Platform

Energy transition, the **promotion of renewable energy sources and resources, environmental protection, the achievement of carbon neutrality** and the **pursuit of sustainable success** are some of Snam's key objectives, based on which it orients its activities. In particular, over the 2022-2026 plan period, the development of green gases (hydrogen and biomethane) and energy efficiency measures, including CCS technologies, will be the drivers that will accompany Snam on its path to enabling the country's decarbonisation with total investments amounting to 1 billion euros.

Biomethane

Among the green gases, biomethane is the most advanced, readily available and rapidly scalable. Through the operation of **BioEnerys** (formerly Snam4Environment), Snam has built a solid position in this segment, with about 40 MW of biogas and biomethane plants operational at the end of 2022. In this sense, the Group intends to act as the industrial developer of a **national biomethane platform**, directing investments in agricultural production matrices, but also in **small-scale (bio) LNG** and **downstream LNG**, exploiting the synergies between biomethane and these sectors.

Moreover, leveraging the incentives of the **Biomethane Decree** and strong financial support from the investments included in the Plan (amounting to 550 million euros), Snam plans to commission over **100 MW** of plants, in operation by 2026 (with an expected production of approx. 200 million cubic metres), based on both the modernisation of biogas plants and new biomethane plants.

Decarbonisation Projects

Leveraging funds from the NRRP, Horizon Europe and the Innovation Fund, the **Decarbonisation Projects** Function will work on the development of the **hydrogen** market with the aim of implementing large-scale projects. In this regard, the strategic partnership with De Nora will enable Snam to improve its technological positioning, while increasing its level of competitiveness in new projects.

The Italian Gigafactory is a collaboration between Snam and De Nora for the production of components for complete electrolysers. It has received financial support of up to 63 million euros under the **IPCEI Hy2Tech** programme, a project of common interest approved by the Commission to support research and innovation in hydrogen technology.

In addition, the Group will continue to invest in research and development activities, such as **Hyaccelerator**, the acceleration project for hydrogen start-ups established for developing the most innovative companies in the sector.

Decarbonisation Projects will also develop **CCS** technologies with the aim of achieving global decarbonisation targets. Snam intends to leverage its position by collaborating with companies such as the UK-based **Storegga** and the Anglo-Irish **dCarbonX**, to support the decarbonisation of hard-to-abate sectors, starting in northern Italy.

In December 2022, Snam and Eni signed an agreement to develop the first CCS project in Italy. **The two companies** will collaborate on the **development** and **management** of **Phase 1** of the **Ravenna CO_2 capture and storage** (CCS) **project**. The agreement also envisages the continuation of studies and preparatory activities for subsequent development phases.

Phase 1 of the Ravenna CCS Project envisages the **capture of 25,000 tonnes of CO_2** from Eni's natural gas treatment plant in Casalborsetti (Ravenna). Once captured, the CO_2 will be piped to the Porto Corsini Mare Ovest platform and finally injected into the depleted gas field of the same name in the Ravenna offshore area.

The project represents a fundamental element in meeting the **decarbonisation** needs of steel mills, cement factories, ceramic and chemical industries, and more generally of the hard-to-abate sectors through an immediately available, highly efficient and effective technological process that allows to exploit the infrastructures and skills already present in the area. The planned activities will create new job opportunities, with an estimated total of over 500 new jobs in the first phase of the project alone.

Energy efficiency

Through **Renovit**, Snam continues to offer energy efficiency solutions (solar panels, combined heating and power and deep renovation of buildings) in the residential, industrial, tertiary and public administration sectors by investing around 200 million euros over the plan period.

renovit

Innovation and Efficiency

Ensuring effective infrastructure management through the digitalisation of assets and industrial processes is one of the objectives pursued by Snam: as part of its Strategic Plan, Snam intends to invest in **SnamTEC**, the Group's innovation and digitalisation platform with more than 50 projects in four main macro-areas: security, asset resilience, process optimisation and activities to improve business sustainability.

Snam's goal is to create the **Asset Control Room** by 2026, an integrated, 100% digital, twin 3D data platform that will further improve the security and integrity of Snam's assets and activities, making them more cost-efficient.

For more information on Snam's innovation and digitalisation strategy, see the chapter Developing innovation thanks to the know how, Promoting the business' innovation and digitalization in the 2022 Sustainability Report.

NATIONAL AND INTERNATIONAL STRATEGIC PARTNERSHIPS

Snam consolidates its value creation by including, among its enabling competencies, the finalisation of national and international strategic partnerships, through which it increases the value of its portfolio of associate companies. These have recently included participation in the Southern Corridor with Algeria, consisting of TTPC and TMPC, grouped in clusters to reflect their role with respect to short- and medium-term strategic objectives.

The first group, consisting of the assets defined as **'Value Enhancers'** of the national infrastructure, includes all those investees with a connection to Snam's network in Italy, which contribute about 60% of the expected net income from investees by 2026.

On the other hand, the French Teréga, the British Interconnector and the Emirates Adnoc are defined as **'Enablers'** of business optionality: although they do not have a connection to Snam's Italian network, they offer market visibility, as well as business opportunities and possibilities with respect to portfolio evolutions.

Lastly, Snam can boast holdings such as those in Italgas and ITM Power, which are part of a group logic that guarantees greater opportunities.

Value enhancer
of the national infrastructure, thanks to direct or virtual connection

GAS CONNECT AUSTRIA · Trans Adriatic Pipeline · EMG · OLT · Adriatic LNG · TAG · desfa · DE NORA · TTPC-TMPC

Value enablers
of business optionality

TERÉGA · interconnector · ADNOC

Opportunistic assets

Italgas · ITM POWER

Sound Financial Structure and Regulated Investments

Over the 2022-2026 period Snam plans to achieve sustainable growth in key performance indicators whilst preserving its financial solidity[7]. Over the plan horizon, an average annual growth rate (CAGR) **of more than 5% of the RAB[8] is expected in 2022-2026**, more than double the forecast for the previous plan horizon (2021-2025) due to higher investments and to the deflater.

In addition, Snam estimates an average annual **EBITDA** growth of **about 7%**, compared to 4.5% in the previous plan, with a higher degree of certainty and visibility mainly due to the growth in RAB (80%), higher remuneration from the regulatory framework, the growing contribution of output-based incentives and the energy transition business. Together, these factors will contribute to the **expected Group EBITDA growth of 2.85 billion euros by 2026**, of which approximately 140 million euros will be related to energy transition businesses.

Over the plan period, Snam expects to maintain an average annual growth of **3% in net profit** due to increased industrial profitability of the business and efficiency measures, offset by an increase in financial costs due to higher interest rates, which are assumed to average 2% over the plan period, compared to a forecast of 1.1% in the previous 2021-2025 plan.

With regard to the cost of debt, Snam intends to devote future efforts to limiting the negative effects of the worsening macroeconomic scenario. In order to mitigate the consequences of the current environment, Snam will leverage the significant portion of fixed-rate debt (currently around 80%), the medium- to long-term duration of debt (five years) and a maturity profile that is well spread out over time. These actions will allow Snam to maintain the average cost of debt at 2%.

Instead, the main levers for the future will be a greater diversification of funding tools and sources and the use of more flexible debt instruments, also by virtue of the strong long-term relationship with major national and international banks.

Over the plan period, with **debt expected to rise to around 18 billion euros in 2026**, Snam plans to maintain credit ratios consistent with current creditworthiness and a mix of fixed and floating debt of around 2/3.

Lastly, in the area of sustainable finance, Snam continues to support its growth, including through future bond issues linked to ESG objectives, including **Sustainability-Linked-Bonds** or **Use of Proceeds.**

VISION TO 2030

Thanks to its work and by actively participating in the transformation process of the energy sector, Snam will be able to seize the important development opportunities that will characterise the next decade. In order to enable this transition, in the period 2022-2030, the Group plans to continue its commitment, investing up to 20 billion euros on the three pillars of the 'energy trilemma', in particular:

SECURITY OF SUPPLY

- Maintaining the **reliability and resilience of assets, reducing the carbon footprint** and **replacing obsolete assets**
- Increased **system flexibility** thanks to the completion of the **Adriatic Line** (2.5 billion euros in planned investments by 2027) and the development of new storage capacity (+15%) through the **Alfonsine** site (around 1 billion euros in planned investments, mainly after 2026)

SUSTAINABILITY

- Multi-molecule asset conversion through the **construction of the hydrogen backbone** and **hydrogen storage facilities**, whose investments will depend on the evolution of the regulatory framework
- Continued development of the existing **Energy Transition Platform**

COMPETITIVENESS

- **Continued focus on operational effectiveness** also through **innovation and digitalisation**
- Maximising asset conversion to realise a **cost-efficient future energy system**

7 Macro assumptions: average deflater 2022-26 of 2.3% and WACC by 2026 of 5.4% for transport, 6.0% for storage and 6.1% for LNG.
8 "RAB" means Regulatory Asset Base, or net Capital Invested for regulatory purposes calculated on the basis of the rules defined by the Electricity, Gas and Water Authority, to determine reference revenues for regulated business.

SUSTAINABILITY STRATEGY

Aware of its role in the country system, for years now Snam has been defining a sustainability strategy based on the challenge of decarbonisation and ecological transition, on its commitment to guaranteeing job security to its people as well as continuous professional growth, in a context of sustainability governance that guarantees the skills and commitment of the entire company. The Group also pays particular attention to the issue of **just transition**, protecting its employees and suppliers including through the development of specific programmes and policies (e.g., HSEQ policy, Social Supply Chain Policy), as well as providing training and carrying out awareness-raising activities, which all contribute to making Group employees more competent and more aware, in order to accompany them along the path of ecological transition in which **Snam** is a protagonist, all thanks also to the work of the **Snam Foundation**.

Snam has integrated sustainability into its business model, formalising its commitment to combating climate change through its **Carbon Neutrality strategy** to 2040 and defining the **ESG Scorecard**, which monitors all key ESG benchmark KPIs.

The commitment of top management is absolute within this process, witnessed by the presence of KPIs related to sustainability aspects among the targets of the short- and long-term variable incentive defined in the Company's **Remuneration Policy**. In particular, the following KPIs are included in 2022 related to short term objectives: the weighted accident frequency and severity index, inclusion in the DJSI, FTSE4GOOD, CDP Climate Change, and Sustainalytics sustainability indices, and an increase in sustainable financing. In the long term the reduction of natural gas emissions and equal representation in terms of gender diversity in the management team (middle and senior management) are contemplated.

National and international activities: Snam and climate change

Snam has been involved, for many years, in various very important international initiatives on the issue of climate changes. Below is a brief summary of the activities carried out in 2022.

UNEP OGMP 2.0 FRAMEWORK

In 2020, Snam joined the Oil & Gas Methane Partnership OGMP 2.0, the voluntary initiative launched by the United Nations Environment Programme to support Oil & Gas companies in reducing methane emissions. This initiative is also reflected in the Methane Strategy and in the European Commission's recently published proposal for a European regulation on reducing methane emissions in the energy sector.

Adhering to the framework represents an important opportunity for gas companies to demonstrate their credibility and commitment to GHG reduction. In 2022, Snam maintained the **Gold Standard**, the highest level envisaged by the UN protocol on methane emissions (for more information, please refer to the in-depth discussion in the section 'Acting for tomorrow: Snam's commitment to fight climate change, Greenhouse gas emissions').

METHANE GUIDING PRINCIPLES (MGP)

Snam has signed the Methane Guiding Principles (MGP), a partnership between oil and gas operators across the entire value chain, and non-industrial organisations/research bodies/NGOs. 27 companies in the sector currently subscribe to the MGP and commit themselves to the following guiding principles:

- continuously reduce methane emissions;
- promote high performance along the value chain;
- improve the accuracy of methane emission data;
- promote appropriate policies and regulations on methane emissions and increase transparency.

The group's various activities include the publication of best practice guidelines for the quantification and reduction of methane emissions. In 2022, Snam took contributed to the preparation of the **Oil and Gas Sector Toolkit for the Global Methane Pledge**, to support governments of countries that have joined the Global Methane Pledge in developing policies and regulations on methane emissions.

CLIMATE-RELATED FINANCIAL DISCLOSURES

A Task Force launched by the Financial Stability Board with the goal of establishing recommendations and guidelines to improve the disclosure of companies on financial aspects related to climate change. During 2022, Snam published its **fourth report on Climate Change**.

GERG

European Association for research in the gas industry in which there is international cooperation on methane emissions. By adhering to the UNEP OGMP 2.0 Framework, European gas companies, including Snam, have decided to develop a research project to correlate methane emissions with the top down and bottom up methods foreseen in the international protocols, following three different phases. **Field tests** were carried out in 2022 **in a compressor station using different data reconciliation methods**.

MARCOGAZ - GIE

The European technical association of the gas industry (**Marcogaz**) and **Gas Infrastructure Europe** are two associations that are particularly active on issues related to climate change and methane emissions. Over the last few years, several documents have been developed that have become points of reference for the sector at an international level and in the definition of which Snam actively participated. The main activities in 2022 concerned the **analysis and drafting of comments to the proposed European regulation on methane emissions** and starting the development of a set of **Best Available Technologies** (BAT) applicable in the gas industry for limiting methane emissions.

CEN

Snam follows the implementation of the sector legislation on methane emissions at **CEN**, the European standardisation body, which is based on the 'pre-standardisation document' relating to the assessment of methane emissions carried out at Marcogaz. During 2022, a draft of standard TS 17874 was produced, which will be the first European document to present **quantification of methane emissions in gas infrastructure**. The document is not limited to fugitive emissions but also considers other types of unburnt emissions. Comments received during the enquiry phase must be closed before formal approval.

IGU

Set up by the **International Gas Union**, Snam participates in the **Group of Experts on Methane Emissions** (GEME), which is responsible for keeping the various players in the gas chain up to date with the latest news from around the world.

ITALIAN GAS COMMITTEE (CIG)

Snam is the representative of the **Italian Gas Committee** (CIG) at the European standardisation body, CEN, in the initiative aimed at implementing sector legislation on methane emissions.

Among other activities, Snam also coordinates the Technical Commission of UNI - Ente Italiano di Normazione on the supervision of technical activities of a regulatory nature related to the topic of 'methane emissions' and in particular the work of the Joint Group composed of GERG, GIE, ENTSOG, EUROGAS, MARCOGAZ. Furthermore, it actively participates in development and collaboration initiatives with IMEO and OGMP 2.0, as well as in regulatory activities at European level with ACER and CEER.

TOWARDS CARBON NEUTRALITY

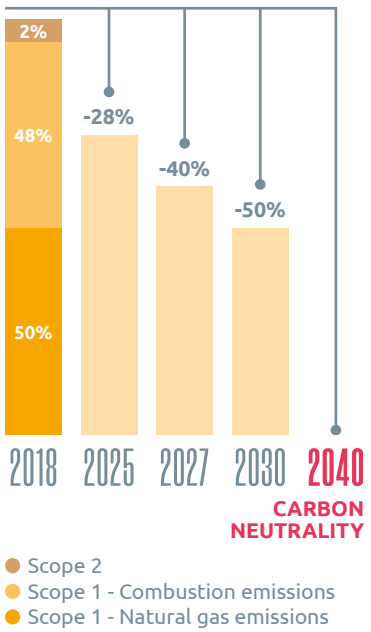
The issue of climate change is central to Snam, which has defined an ad hoc decarbonisation strategy aimed at limiting and reducing greenhouse gas emissions, energy efficiency and the search for innovative, low-carbon solutions. The Group has outlined a clear pathway with intermediate targets at 2025, 2027 and 2030 in order to achieve **carbon neutrality in its operations by 2040** (to be understood as net zero emissions, also taking off-setting actions into account) and progressively reduce emissions along the value chain.

Developed using the generic SBTi (Science-Based Targets initiative) methodology, the 2030 targets are in line with the goal of limiting global warming to within 1.5°C set in the Paris Agreement.

Snam plans to reduce GHG (greenhouse gas) Scope 1 and Scope 2 emissions by 28% by 2025, 40% by 2027 and 50% by 2030 (vs 2018), up to achieving carbon neutrality by 2040. The Company also set a target on natural gas emissions of -55% by 2025 and -65% by 2030 (vs 2015), more challenging than what has been established by both the OGMP 2.0 (-45% by 2025 vs 2015) and the Global Methane Pledge (-30% by 2030 vs 2020) in relation to methane.

Snam has set two targets for Scope 3 GHG emissions: -46% by 2030 (vs 2019), concerning emissions from associate companies and other minor emission categories, and -55% by 2030 (vs 2019), in relation to the emission intensity of the supply chain.

GHG SCOPE 1 AND 2 EMISSIONS



Actions to reduce GHG Scope 1 emissions

Reducing emissions from combustion

- Conversion of compressor stations to dual fuel (installation of new electric compressors in compressor stations and gas storage)
- Installation of boilers/ high-efficiency heat generators
- Increasing energy efficiency and energy savings in buildings

Reduction of methane emissions

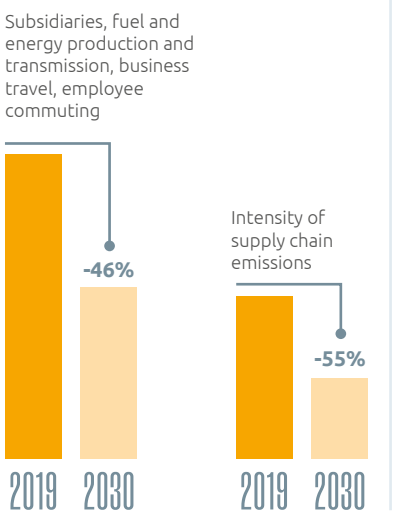
- Adoption of Leak Detection and Repair (LDAR) systems in all the most relevant installations
- Replacement of valves in approximately 350 pressure reduction and compressor stations
- Replacement of more than 3,000 pneumatic actuators with low-emission, air-powered or electric instruments
- Recompression of natural gas in the network during planned maintenance (with an annual reduction target of 40%)
- Modification of gas boil-off compressors and installation of back-up compressors in the LNG terminal

Actions to reduce GHG Scope 2 emissions

- Progressive increase in the share of renewable electricity, including production from photovoltaic plants
- New headquarters with LEED GOLD certification

For Scope 1 and Scope 2 emissions that cannot be eliminated by 2040 through the above-mentioned measures, Snam has planned offsetting measures through certified offsetting projects.

GHG SCOPE 3 EMISSIONS



Actions to reduce GHG Scope 3 emissions

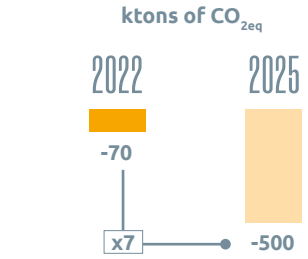
Initiatives with Associate companies
Snam maintains ongoing dialogue with investee companies to share best practices and guide them in defining decarbonisation strategies and plans.

Initiatives with suppliers
Snam encourages its suppliers to reduce their emissions:

- involving them in the **definition of clear reduction plans** by establishing new ESG criteria in scoring models, including specific requirements related to decarbonisation;
- **supporting them at the beginning of their emission reduction journey** through webinars to raise awareness of climate change and GHG emissions and through one-to-one interviews;
- by asking its most significant suppliers (in terms of emissions) to complete the **CDP Supply Chain questionnaire**.

Initiatives to reduce other indirect emissions
Snam intends to reduce fuel and electricity consumption, the number of business trips by favouring online meetings and promoting a remote work policy.

EMISSIONS AVOIDED BY 2025



Thanks to biomethane production and energy efficiency projects

Snam can play a very significant role as an enabler of the country's energy transition. The Group's activities related to the energy transition business contribute to avoiding emissions that would otherwise be generated by other actors in the country system. Specifically, from the combined effect of emissions not produced as a result of **Renovit**'s energy efficiency measures, as well as emissions from the combustion of biomethane produced by **BioEnerys**, which can be considered zero if associated with the Guarantees of Origin, Snam has estimated it will have avoided **500 ktons of CO_{2eq}** emissions by 2025.

Since 2010, Snam has participated in the CDP questionnaire (formerly the Carbon Disclosure Project), one of the most internationally recognised not-for-profit organisations for assessing transparency in the disclosure of information on climate change and greenhouse gas emissions by member companies. In 2022, Snam was placed on the CDP's 'Climate Change A List', which groups together the best-performing companies at global level.

Snam and participation in the UN OGMP 2.0 protocol

Already in 2020, Snam had joined the **Oil & Gas Methane Partnership OGMP 2.0** Protocol, a voluntary initiative launched within UNEP (United Nations Environment Programme) to support energy companies in reducing methane emissions, which several leading international oil & gas companies have joined. Adherence to the framework will also provide unambiguous and shared methodologies for better accounting of natural gas and methane emissions.

Snam participates directly in the working tables with UNEP where it is working to implement the application of the protocol; some of the actions carried out concerned reporting activities and the drafting of guidelines that will apply to the Oil & Gas world.

In 2022, Snam drew up its own **emissions accounting** in accordance with the reporting models provided for by the protocol, assessing all the different types of methane emissions and the various assets, including the compressor stations for gas transportation, storage concessions and the LNG regasification terminal in Panigaglia, including plants in the transportation network. In addition, the **'implementation plans'** were updated, describing the activities to be developed in the coming years. One particular aspect concerned Snam's advocacy role, which involved all the associated companies, with the aim of finalising the drafting of a specific action plan that was subsequently forwarded to the UN within the set deadline.

All these activities have allowed Snam to achieve the **Gold Standard** in 2021 and maintain it in 2022, which is the maximum level required by the UN Protocol on Methane Emissions certified in the 2022 report published by the International Methane Observatory[9] published by UNEP. This recognition provides governments and the public with the assurance that Snam manages emissions responsibly, tracks and monitors its progress with a structured and reliable methodology, and declares emission reduction and containment targets.

Snam has also voluntarily set a target to reduce natural gas emissions by 55% by 2025 compared to the 2015 values. This target is more ambitious than those recommended in relation to methane by both the Oil & Gas Methane Partnership OGMP 2.0 (-45% by 2015), a voluntary initiative led by the United Nations, and the Global Methane Pledge (-30% by 2030 compared to 2020 levels), the agreement between the United States and the European Union presented at the 26th United Nations Climate Change Conference (COP26) held in Glasgow in November 2021 (to which 130 countries including Italy signed up).

9 The report is available at the following website: https://www.globalmethanepledge.org/

ACTING FOR TOMORROW: SNAM'S COMMITMENT TO FIGHT CLIMATE CHANGE

Snam's decarbonisation strategy presented in the chapter 'Snam's Strategy, Towards Carbon Neutrality', has targets, including interim targets, to reduce CO_{2eq} Scope 1 and Scope 2 emissions, as well as to reduce methane emissions, with the ultimate goal of achieving carbon neutrality in its operations by 2040. In 2022, Snam renewed its commitment by setting a new target on methane emissions by 2030, with the aim of reducing them by 65% compared to 2015.

In order to evaluate the progress made with respect to the set targets, the Group constantly monitors the evolution of its performance trends, identifying, at the same time, actions for improvement and adopting transparent communication addressed to all stakeholders. With this in mind, Snam measures and reports climate performance in relation to energy consumption, energy produced from renewable sources, greenhouse gas emissions, emissions from the combustion process and natural gas emissions, as well as other indicators included in the Group's ESG Scorecard.

ENERGY EFFICIENCY

Energy efficiency is one of the main tools for decarbonisation, also supporting economic, social and technological development at country level with lower costs and more competitive companies.

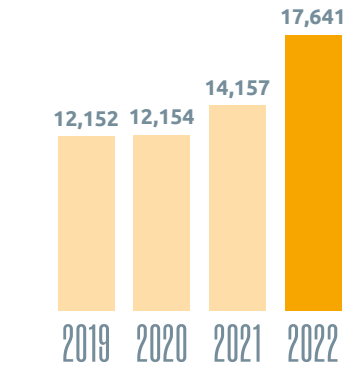
The most significant share of Snam's energy consumption is related to the operation of gas turbines used by the compression and storage plants, which account for 83% of total consumption. **The energy consumed** in order for the turbines to provide the necessary pressure for transporting gas along the national network and its storage in reservoirs **depends on the amount of gas transported and stored and the distance between the entry point into the network and the downstream redelivery point**.

The route that the gas must follow to reach the consumption areas (the barycentre point of which is currently just below the Po Valley) and, consequently, the necessary thrust and the number of compression plants involved, have a significant impact on energy requirements. In particular, the North African and TAP-related backbone (which saw a 15% increase in gas transported in 2022) requires gas to be transported over a greater number of km and using more facilities than the Russian one (gas entering Tarvisio reduced by 52%): **in 2022, the overall reshuffle of gas entry points led to more operating hours for the compression plants equal to about 13.5 thousand (+25%), to which about 4.5 thousand additional operating hours (+17%) of the storage plants are added against a substantially stable amount of gas injected into the network**.

In response to this consumption, and in addition to the actions better described in the following paragraphs as part of the path towards carbon neutrality (e.g., the gradual replacement of gas turbines with electric compressors in gas transportation and storage plants), in order to reduce its energy consumption and its impact on the environment, Snam has launched energy management initiatives, including:

- the installation of photovoltaic plants at the main premises for the production of green electricity;
- the installation of cogenerators fuelled by biogas from the anaerobic digestion of agricultural waste or waste for the production of electricity;
- the acquisition of electricity from certified renewable sources through specific supply contracts;

2019-2022 ENERGY CONSUMPTION (TJ)



- the installation of high-efficiency heat generators, in particular at gas reduction and regulation plants;
- the installation of trigeneration plants;
- investments in the improvement of the energy efficiency of buildings.

In 2022, Snam's total energy consumption amounted to 17,641 TJ, almost entirely attributable to natural gas (96.4%) used mainly for the operation of transportation, storage and regasification plants, for heating buildings and for automotive use. The regulated business accounts for 94% of the total (+18% compared to 2021) while the unregulated and energy transition business accounts for 6% (tenfold compared to 2021).

Snam also contributes to the reduction of emissions and energy efficiency in its operations through the installation of renewable energy plants[10], which increased compared to the previous year following the installation of photovoltaic plants in the gas transportation network (3,621 units in 2022, +28% compared to 2021). The increase in installed capacity from 1.3 MW to 4.7 MW (+259%) is mainly due to the plants of the energy transition businesses and new photovoltaic systems connected to the grid. Similarly, there was an increase in the energy produced, from 950 MWh in 2021 to over 2,900 MWh in 2022, or +208%. The share of green electricity in the total[11] increased from 41% in 2021 to 52% in 2022, very close to the target of reaching 55% in 2030.

RENEWABLE ENERGY PLANTS

Type	2020			2021			2022		
	no.	Total power (kW)	Energy produced (MWh)	no.	Total power (kW)	Energy produced (MWh)	no.	Total power (kW)	Energy produced (MWh)
Wind generators	1(*)	1.7		1 (*)	1.8		**1(*)**	**1.8**	
Photovoltaic systems	2,355(*)	1,198	872	2,829 (*)	1,306	**950**	**3,620(*)**	**4,698**	**2,923**
TOTAL	**2,356**	**1,200**		**2,830**	**1,308**		3,621	4,699	

(*) Back-up plants = 3,574, of which 3,573 photovoltaic and 1 wind.

The energy KPIs set by Snam have been increased further, making them more challenging, with the goal of achieving them by 2026, especially with reference to energy production from the trigeneration plants installed in the Gallese and Istrana power plants. The Group's multi-year energy efficiency targets are in line with expectations, while the KPI that foresees the achievement of an annual production of electricity from photovoltaic plants of the regulated business of at least 860 MWh has been amply met, with 1,035 MWh reached in 2022.

In 2022, energy efficiency works in the Group's buildings resulted in gas savings of 40,000 m³ compared to 30,000 m³ in 2021 and electricity savings of 145 MWh, up from 80 MWh in the previous year, which is in line with the 2025 target (to save of 75,000 m³ per year of gas and of 250 MWh per year of electricity).

10 The renewable energy installations do not include cogeneration plants from 2022.
11 The KPI also includes energy produced by Snam since 2022. The values for 2020 and 2021 are unchanged. Considering only the share of purchased green electricity, the percentage for 2022 would be 51%.

OBJECTIVES AND PERFORMANCE

SDGs	KPI		Target	Performance 2022	
7 AFFORDABLE AND CLEAN ENERGY 13 CLIMATE ACTION	MWh production of electricity from photovoltaic (*)	ESG SCORECARD	>860 MWh by 2022 >900 MWh by 2026	1,035 MWh	✓
	Increasing green electricity consumed out of the total (**)		55% by 2030	52%	⚙
	Trigeneration plants		Production of 17,000 MWh from trigeneration plants by 2026	7,297 MWh	⚙
	High-efficiency heat generators		110 MW by 2025	101 MW	⚙
	Improvement of the energy efficiency of buildings		Savings of 75,000 m³ per year of gas and 250 MWh per year of electricity by 2025	40,000 m³ 145 MWh	⚙
	Installation of LED lighting systems		Replace 534 kW with 1,860 MWh savings by 2022	534 kW 1,860 MWh	✓
	% of retrofitted or methane-powered cars out of the total company car fleet	ESG SCORECARD	55% by 2022	59%	✓

(*) Related to regulated business.
(**) From 2022, the KPI also includes energy produced by Snam. The values for 2020 and 2021 are unchanged. Considering only the share of green electricity consumed, the percentage for 2022 would be 51 percent.

ESG SCORECARD KPIs included in the ESG Scorecard

CARBON NEUTRALITY KPI included in the Carbon Neutrality strategy

✓ Target reached / in line

⚙ Target in progress

⊘ Target not reached

ENERGY EFFICIENCY: TOWARDS OBTAINING ENERGY CERTIFICATION AND THE PERFORMANCE OF CARRYING OUT ENERGY DIAGNOSTICS

Starting in 2023, in line with the current energy context, Snam has set itself the goal of obtaining **ISO 50001** energy certification, a strategic tool to implement and maintain an Energy Management System (EMS) and continuously improve its energy performance through a more efficient and effective use of energy.

The standard provides companies with a framework for managing their energy performance and related costs, helping them to reduce their environmental impact and meet their emission reduction targets. The definition of the certification perimeter will involve several companies, including Snam and GNL Italia for the entire process, Bioenerys, Renovit and Greenture (formerly Snam4Mobility) for the buildings part. In addition to the preparation of the system documentation, which will be integrated into the management system already in place, the technical documentation and related **Energy Analyses** will have to be developed, which will assess the energy aspects of the business in detail. The corresponding energy models and global performance indicators and improvement plans will be prepared with the acquisition of the energy data of each functional area.

In the course of 2023, in accordance with the **European Energy Efficiency Directive** and the Italian transposition into Legislative Decree 102/2014, Snam will carry out **Energy Diagnostics** for all Group companies as part of the 'Energy Managers' Table'. The determination of the sites to be subjected to Diagnosis will be carried out following the cluster approach envisaged by the MISE and ENEA indications, which lay down the possibility for companies with sites connected in a network system (e.g., gas pipeline network, compression stations, reduction plants, storage concessions) to consider the system itself as a single virtual site and therefore subject the network connecting the various sites to Energy Diagnostics.

The Energy Diagnostics will make it possible to detect the **energy performance of plants** in order to improve them and assess any anomalies, as well as optimise energy requirements.

The activities described above will contribute to reducing Snam's carbon footprint, consistent with the decarbonisation objectives of the Carbon Neutrality strategy by 2040.

GREENHOUSE GAS EMISSIONS

Combating climate change is the main challenge to which the energy world is called to respond by mitigating and reducing its greenhouse gas emissions. Using energy efficiently and procuring it from renewable energy sources are at the heart of Snam's strategy, which aims to contribute actively to achieving an energy mix made up of a good percentage of green gases, with the aim of reducing climate-changing gas emissions in the short term.

In 2022, the methane coefficient for **global warming potential** (GWP) was updated. This value expresses the contribution to the greenhouse effect of a gas compared to CO_2, whose reference potential is 1. According to the Sixth Assessment Report - IPCC, the new value is 29.8 compared to the previous value of 28. Therefore, the GHG Scope 1 and Scope 3 emissions from previous years were recalculated.

Total GHG Scope 1 and Scope 2 emissions were approximately 1.52 million tonnes of CO_{2eq} (+3% vs. 2021); to these are added Scope 3 emissions of 1.34 million tonnes CO_{2eq} (+43% vs. 2021) including 0.85 related to the supply chain and 0.3 related to associates; the Group's total GHG emissions are therefore 2.86 million tonnes CO_{2eq} (+19% vs. 2021). With reference to the regulated scope alone, which is more in line with the scope in place at the time of the announcement of decarbonisation commitments, Scope 1&2 emissions amounted to 1.45 million tonnes CO_{2eq} (-0.6% compared to 2021) and Scope 3 supplier emissions amounted to 0.56 million tonnes CO_{2eq}.

The overall Group figure is affected by various factors with uneven trends:

- the increased intensity of activity (e.g., the use of more energy-intensive supply backbones, the increased filling of storage), which increased combustion emissions;
- the significant reduction in the share of Scope 1 emissions related to methane gas thanks to the activities implemented that achieved -46% emissions compared to 2015, three years ahead of the UNEP protocol target;
- the increase in orders that led to an increase in the Scope 3 emissions of suppliers; the impact of some non-repeatable items (e.g., ancillary services related to the implementation of the FSRU in Piombino) and the impact of the different Italian energy mix in 2022 on the supply chain must also be considered on this figure.
- The increased weight of unregulated business (e.g., increased from 1 to 4% of total Scope 1&2 emissions);
- the less than proportional increase in Scope 1 and 2 emissions (+3% vs 2021) compared to that recorded for energy consumption (+25%), due to measures concerning the recovery of natural gas emissions and energy efficiency and the increasing use of green electricity. Together, these activities avoided the emission of about **213,000 tonnes of CO_{2eq}**

Compared to the previous year, the CO_2 emissions from combustion increased by 25% compared to 2021, reaching 0.98 million tonnes as a result of the increased activities carried out in 2022 for security of supply purposes (e.g., the overturning of the hourglass with the increase in imports from the south) as shown by the increase in overall consumption in the compression plants of the gas transmission network (+12%), in the storage plants (+20%), in the Panigaglia regasification terminal (+110%). CH_4 emissions, on the other hand, are decreasing sharply, from 0.66 million tonnes CO_{2eq} to 0.51 million tonnes CO_{2eq} in 2022.

Despite the general increase in emissions, also due to the contingent situation arising from the Russian-Ukrainian conflict, Snam continued its ongoing emission reduction activities, including:

- reduction of natural gas emissions through gas recompression, hot tapping, LDAR, etc.;
- production and/or purchase of electricity from renewable sources;
- installation of heat generators with greater efficiency;

- installation of plants with LED lighting replacing other lighting equipment with greater consumption;
- savings derived from the restructuring and energy efficiency of buildings;
- expansion of smart working by employees, partly due to the Covid-19 pandemic.

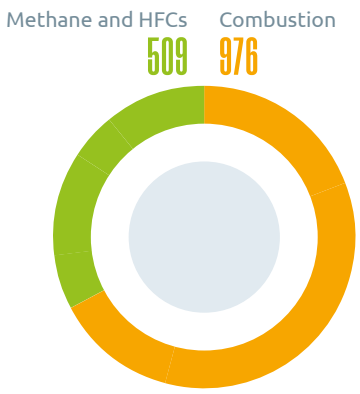
DIRECT EMISSIONS (SCOPE 1)

Methane (CH_4), the main component of natural gas, and carbon dioxide (CO_2) are the main greenhouse gas emissions emitted by Snam. Methane emissions arise from the release of natural gas into the atmosphere and are generated by normal plant operation, by operations to connect new gas pipelines and the maintenance thereof, or by accidental events occurring on infrastructure, whereas the CO_2 produced is directly correlated with fuel consumption.

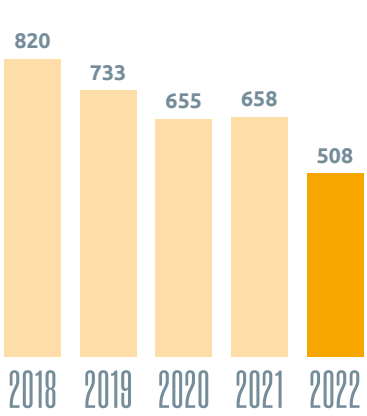
In line with previous years, among the direct Scope 1 emissions by Snam, the marginal contribution from the use of hydroflurocarbons (HFC) in refrigeration systems was slightly more than 1 kt of CO_{2eq}.

Snam's direct emissions in 2022 amounted to around 1.48 million tonnes of CO_{2eq}, an increase of 3% compared with 2021, however down -4% vs 2018, the target year. Natural gas emissions were substantially reduced by 2021 (-23%), ahead of the Company's projection for 2025 (-55% compared to 2015).

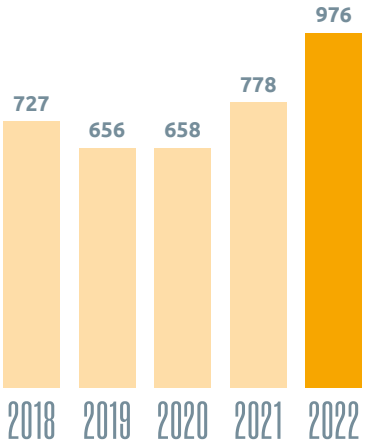
GHG EMISSIONS SCOPE 1, 2022, KTONCO$_{2eq}$



METHANE EMISSIONS, ktonCO$_{2eq}$



COMBUSTION EMISSIONS, ktonCO$_{2eq}$



Scope 1 - Emissions from the combustion process

Snam's energy mix is composed almost entirely of natural gas (96.4% of total requirement in 2022), used to operate the gas turbines employed in the compression plants that provide the pressure needed to transport the gas (thrust consumption) and in the storage concessions (storage consumption), which, overall, represent 83% of total consumption, a decrease compared to previous years due to the increased consumption by new businesses . In addition to natural gas, electricity (3%) and other fuels (diesel, petrol, LPG and heat) were consumed, which together account for 0.6% of energy consumption.

Overall, total gas transport consumption increased by 12% vs. 2021 and represents 61% of Snam's global consumption. There was also an increase in consumption for storage (+20% vs 2021), which is slightly lower than the higher amount of gas stored (+22%) because the ratio of gas consumed by turbochargers to gas stored has improved; this consumption accounts for 27% of Snam's total. With regard to the Panigaglia gas regasification plant, which accounts for 6% of Snam's global consumption, here has been a doubling of consumption (+103% compared to 2021), in line with the increase in regasified gas (+113% compared to 2021) and with the changes in gas flows induced by the different geopolitical scenario. The total energy consumption of the energy transition businesses stands at 6%.

To curb power plant energy consumption, Snam has implemented an **integrated power plant management system based on real-time data acquisition** and initiated a programme to replace gas turbines with electric motors, which is gradually coming to fruition.

Direct emissions from combustion, for most of the Company's plants, fall within the scope of the **European Union Emission Trading Scheme (EU ETS)**.

The EU ETS is a European system designed to encourage emission reductions by setting a cap on the total amount of certain greenhouse gas emissions that can be emitted by installations with specific characteristics. If a company emits more than the cap, it is obliged to buy emission allowances from the market. 2022 was the second year of application of the rules provided for in Italian Legislative Decree 47/20 for the fourth period 2021-2030 of application of Directive 2003/87/EC. Snam owns **23 installations subject to the EU ETS**, one of which came into operation during 2022.

Overall, carbon dioxide emissions from ETS installations were higher than the emission allowances allocated for free, which are progressively reduced each year. Against approximately 0.93 million tonnes of carbon dioxide emitted into the atmosphere by ETS sites, approximately 0.154 million allowances were allocated free of charge, while another 0.775 million tonnes were bought from the market.

Scope 1 - Natural gas and methane emissions

Snam's commitment to reducing natural gas and methane emissions concerns all its businesses, such as gas transport, storage and regasification, where emissions make up a significant part. The adherence to UNEP's OGMP 2.0 protocol has encouraged a series of systematic, lasting and significant actions for Snam's affiliated companies as well, since the reference framework provides for the involvement of both operated and non-operated businesses, already starting from a shareholding of more than 5%. With regard to methane emissions methane, for more than 25 years, Snam has been using an international methodology developed in collaboration with the GRI - US EPA (Gas Research Institute - US Environmental Protection Agency), integrated with a series of on-site measures carried out by various companies external already since the 90s. Over the last few years, the method of accounting for emissions has been updated by contracting out to a company a number of on-site measurement campaigns on representative plants and portions of the network, performed in accordance with UNI EN 15446[12].

Snam's natural gas emissions are:

- Fugitive
- Vent (including pneumatic ones, in accordance with the UN protocol)
- Unburned

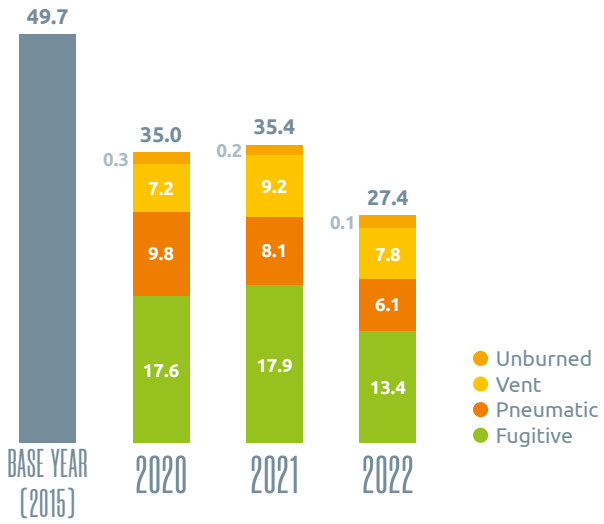
In 2022, natural gas emissions amounted to 27.4 million m³, significantly reduced compared to 2021 (-23%) and -45% compared to 2015.

Regarding the target for the recovery of natural gas emissions during maintenance activities, understood as the average of the last five years, the 2022 value was 57%, up from the 2021 figure of 52%.

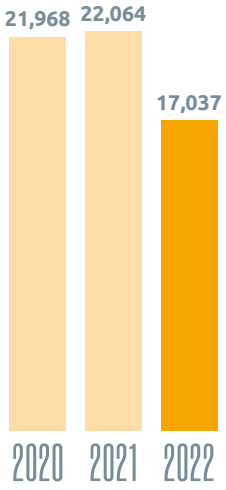
Thanks to the implementation of numerous best practices that include in-line gas recompression interventions, interventions with tapping machine, a technology that allows disconnection from pipelines in operation for new connections without interrupting the service, the implementation of **Leak Detection and Repair** and other initiatives to replace emission components, in 2022 Snam avoided the emission into the atmosphere of over 190,000 tonnes of CO_{2eq}. Confirming the efficacy of the actions undertaken, the methane emissions per kilometre of network of the gas transport activity decreased (-35% compared to 2021 and -51% compared to 2015).

12 Fugitive and diffuse emissions related to industrial sectors - Measurement of fugitive emissions of gaseous compounds from equipment and piping leaks.

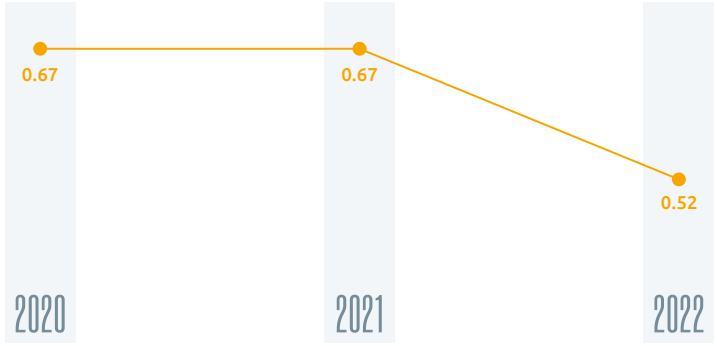
NATURAL GAS EMISSIONS, MILLION M³



CH_4 EMISSIONS, ton



CH_4 EMISSIONS PER KM OF NETWORK (ton/km)



OBJECTIVES AND PERFORMANCE

SDGs	KPI		Target	Performance 2022	
13 CLIMATE ACTION	Percentage of reduction in natural gas emissions (vs 2015)	CARBON NEUTRALITY ESG SCORECARD	-40% by 2022 -58% by 2026 -65% by 2030	-45%	✓
	Percentage of natural gas recovered from maintenance activities	ESG SCORECARD	>40% of the average of the last five years until 2026	57%	✓

ESG SCORECARD KPIs included in the ESG Scorecard

CARBON NEUTRALITY KPI included in the Carbon Neutrality strategy

✓ Target reached / in line

⚙ Target in progress

⊘ Target not reached

SNAM'S BEST PRACTICES TO REDUCE METHANE EMISSIONS

For several years now, Snam has implemented several best practices to reduce natural gas emissions. and consequently methane emissions, in accordance with its Carbon Neutrality strategy. In this context, during 2022, Snam reduced:

- **methane emissions** through the adoption of more advanced emission estimation methodologies, supported by point measurements in the field, to obtain more reliable and accurate information on the causes and extent of emissions, on which to define more appropriate operational actions. In order to improve the **emission accounting system**, initial tests were carried out to measure methane emissions at site level using top-down technology through drone-mounted instrumentation in order to reconcile quantified emissions at individual emission source level with this technique. This experiment was conducted in four compression and storage plants and four pressure reduction plants. Activity will also continue in the coming years at the main transport, storage and regasification facilities;

- **vent emissions** through the use of gas recompression systems that allow, during major works on the transport network, gas to be injected back into the network, avoiding its release into the atmosphere. A similar gas recovery system has been permanently installed in some compressor stations. The emission of about 6 million m³ of gas into the atmosphere was avoided in 2022, recovering more than 60% of the amount of gas that would have been emitted without mitigation measures, including gas recompression in the network and in the booster stations, lowering the discharge pressure when working on the network, and tapping machine operations, a technology that allows the disconnection of pipelines in operation for new connections without interrupting service. Snam also continued with the initiative at the LNG terminal, which will be completed in 2023 and which involves modifying the existing compressor to allow the gas to be re-compressed into the network even when the plant is running, and installing a back-up compressor;

- **pneumatic emissions**, replacing existing models with new low- or zero-emission equipment and, in some power plants, with air-fuelled instead of gas-fuelled actuation systems. In 2022, these emissions were reduced by about 2 mln m³ thanks to:

  - the **installation of new thermal power stations** with high efficiency to replace existing heaters (around 300), with the associated pneumatic equipment removed (five heaters replaced in 2022, and 84 since 2018). Replacement plans have been revised and the activity has been accelerated, with completion expected by 2030;

  - the **campaign to replace/remove high-emission control and command devices** on control valves acting as regulators in network pressure reduction systems, to be completed over a period of four years (2020- 2023). During 2022, 131 devices were replaced (267 since the start of activities), of the approximately 400 subject to the intervention,

- **fugitive emissions**, including through **Leak Detection And Repair (LDAR)** programmes, which consist of monitoring campaigns of plant components to detect methane leaks and schedule maintenance work. In particular, in 2022 Snam continued:

  - **LDAR** activities **with its own staff**, which helped to reduce fugitive emissions by approximately -2.2 million m³. Since the start of operations to date, this technique has already been implemented at about 75% of the plants in the transmission network, and continues to be carried out at the booster and storage plants and at the LNG terminal;

  - the replacement of **plant venting valves or the installation of double valves** in pressure reduction plants, adapting 160 plants (of which 90 in 2022 alone) out of 190 since the start of activities to date. The initiative is scheduled for completion by 2023;

  - the project to **replace valves with pneumatic actuators with valves with electric actuators** on unit vents and replacement of pressurising valves on turbocompressors in booster and storage units. During 2022, the project involved the Ripalta and Brugherio stations, with the replacement of pressurising valves, and the Melizzano and Gallese stations, with the replacement of vent and pressurising valves.

Figure: Methane emission measurement tests using drone-mounted instrumentation

SCOPE 2 – INDIRECT EMISSIONS FROM ENERGY CONSUMPTION

Scope 2 indirect CO_{2eq} emissions, i.e. those from energy consumption, are determined using two approaches:

- **Market based (MB)**, which attributes a zero CO_{2eq} emission factor to energy consumption deriving from certified renewable sources. The MB approach highlights the commitment to reducing Scope 2 emissions from the use of energy produced from renewable sources;
- **Location based (LB)**, which instead considers an average emission factor of the national electricity grid.

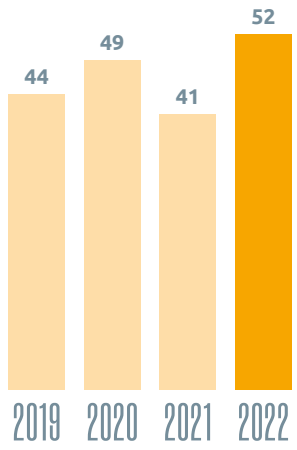
Indirect CO_{2eq} emissions from energy consumption derived from the procurement of electricity and heat generated by third parties, which the Company uses for its own activities.

In 2022, the electricity consumption of around 146,000 MWh increased considerably compared to 2021 (+32%) as a result of the increased operations of GNL Italia, Snam Rete Gas and Stogit, and to a predominant extent from new business, particularly the Bioenerys sites.

This energy increase is not reflected in a similar increase in CO_{2eq} Market-Based emissions, as the company has pursued its commitment to increasingly use electricity from renewable sources. In 2022, the share of green electricity use stood at 52% of the total consumed, a marked increase compared to 2021 when this share was 41%. As a result, the increase in emissions was limited to only six percentage points, from 30.8 thousand tonnes CO_{2eq} in 2021 to 32.8 thousand tonnes CO_{2eq} in 2022.

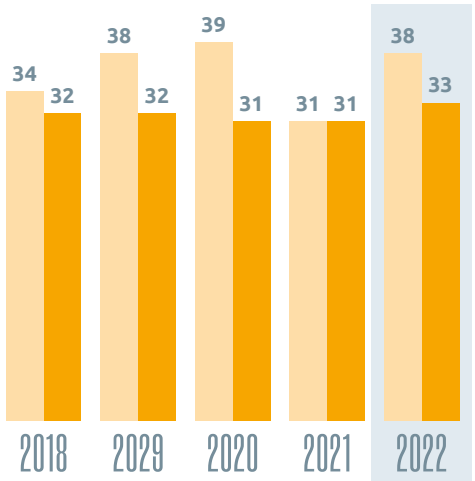
The new sites that have switched to electricity from renewable sources are the Malborghetto and Montesano plants, all Snam headquarter offices in San Donato Milanese and Crema, the Greenture plants (former Snam4Mobility) and some of Bioenerys (former Snam4Environment). 2022 also saw an increase in the amount of green electricity produced by the installed photovoltaic panels. As a result of these actions, approximately 20,000 tonnes of CO_{2eq} were avoided.

GREEN ELECTRICITY PURCHASED / TOTAL ELECTRICITY PURCHASED, %



Note: the KPI also includes energy produced by Snam since 2022. The values for 2020 and 2021 are unchanged. Considering only the share of purchased green electricity, the percentage for 2022 would be 51%.

GHG EMISSIONS SCOPE 2, 2018-2022, ktonCO$_{2eq}$



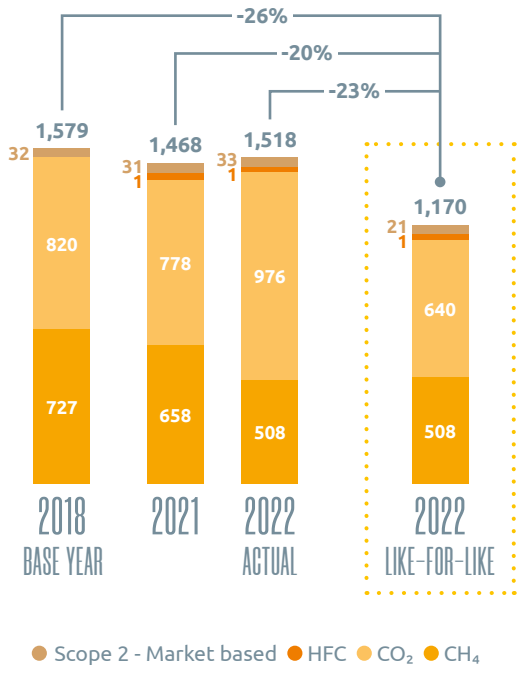
LIKE-FOR-LIKE ANALYSIS ON GHG SCOPE 1 AND 2 EMISSIONS

The Scope 1 and 2 emissions reported by Snam in 2022 are affected by the profound geopolitical changes and impacts on gas flows. In order to verify emissions trends and assess the results of Snam's commitment to the variables actually in control, and to offer transparency to its stakeholders, a scenario has been defined that neutralises the effect linked to the change in the geopolitical context, named 'Like-for-Like,' which envisages:

- Company perimeter limited to regulated business (SRG, STG, LNG) fixed and substantially aligned with that of the Carbon Neutrality strategy
- Gas volumes transported, dual fuel installation and remaining decarbonisation activities as actually achieved in 2022, in line with historical gas flow directions

In fact, the result of this analysis shows that in the absence of the exogenous and uncontrollable conditions that occurred during the year (the reversal of gas flows), Snam's Scope 1 and 2 emissions in 2022 would have been approximately equal to 1,170 ktonnes CO_{2eq} and a decrease of 20% compared to 2021 and 26% compared to 2018.

GHG EMISSIONS SCOPE 1 AND SCOPE 2 ktonCO$_{2EQ}$



To accompany this analysis, the Company verified the trend of emissions through some additional intensity KPIs, comparing their value in 2022 with the 2021 values.

Scope 1&2
(kton CO_{2eq} / billion € RAB)

Scope 1&2
(ton CO_{2eq} / gas injected in bln m^3* average distance travelled in average km (national network)

Emissioni di CH_4
(ton CH_4 / km national grid)

SCOPE 3 – OTHER INDIRECT EMISSIONS

Indirect Scope 3 emissions are those emissions that originate from the value chain and are therefore not directly attributable to the scope of the Company.

Snam's Scope 3 emissions are calculated according to the **GHG Protocol** and have been reported for years in the CDP Climate Change Questionnaire (formerly the Carbon Disclosure Project). As part of the Scope 3 target-setting project, Snam revised its calculation methods and thus refined the data from previous years.

Snam's value chain emissions can be classified into the following macro-categories:

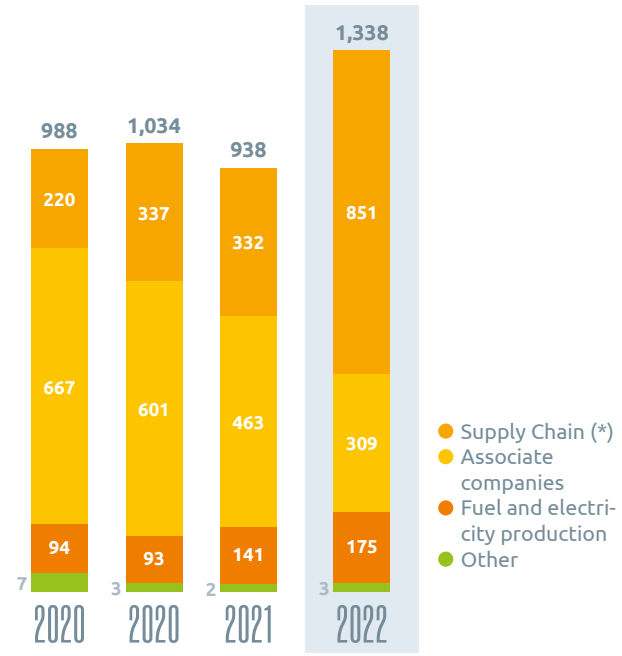
- **Emissions from Snam's associate companies** (GHG Protocol category): Investments);
- **Emissions from the supply chain**, which include emissions from suppliers working for Snam (GHG Protocol categories: Purchased goods and services, Capital goods, Upstream transportation and distribution, Waste generated in operations and Upstream leased assets);
- **Emissions from fuel extraction and electricity generation and transport** that are not included in Scope 1 and 2 (GHG Protocol category): Fuel-and-energy-related activities not included in Scope 1 or 2);
- Other, which includes **business travel** and employee **commuting** (GHG Protocol categories: Business Travels; Employee commuting).

During 2022, GHG Scope 3 emissions amounted to approximately 1.34 million tonnes CO_{2eq} with an increase of around 43% compared to 2021. The growth is mainly due to indirect emissions from the supply chain, as the value recorded for ordered goods in 2022 increased from 1.79 billion euros to 3.05 billion euros compared to the previous year. In fact:

- there was a 65% growth in expenditure on the energy infrastructure,
- the contribution of the non-regulated business increased considerably, to 965 million euros, and from an emission point of view makes up 35% of the total supply chain emissions,
- ordered goods include expenses for ancillary services arising from the installation of the FSRU in Piombino.

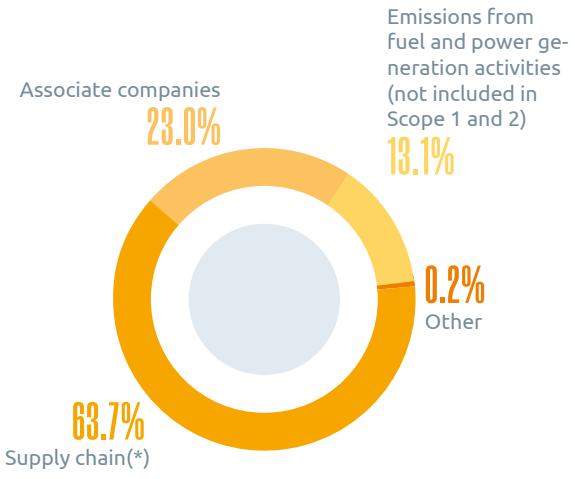
On the other hand, emissions from associate companies decreased from 0.46 to 0.31 million tonnes CO_{2eq}; compared to 2019, the reduction was 54%.

GHG EMISSIONS SCOPE 3, ktonCO$_{2eq}$



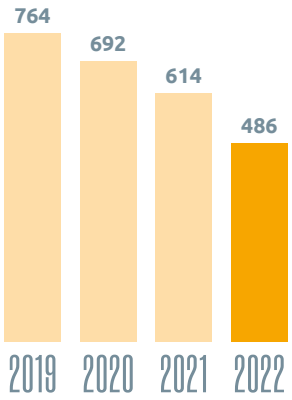
Note: the figures for the three-year period 2019-2021 for the item 'investee companies' have been recalculated in accordance with the new GWP of 29.8.

GHG EMISSIONS SCOPE 3, %



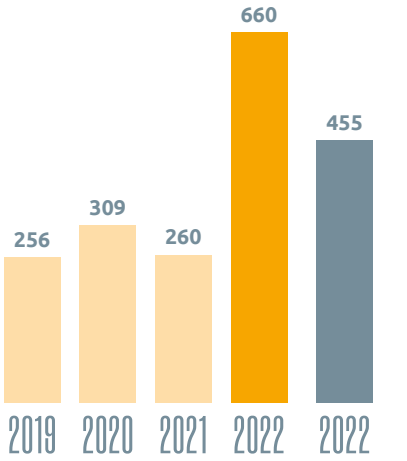
(*) Includes categories, (1) Purchase of goods and services, (2) Capital goods, (3) Upstream transport and distribution, (4) Waste generated in operations, (5) Upstream leased assets.

SUBSIDIARIES, FUEL AND ENERGY PRODUCTION AND TRANSMISSION, BUSINESS TRAVEL, EMPLOYEE COMMUTING (ktonCO$_{2eq}$)



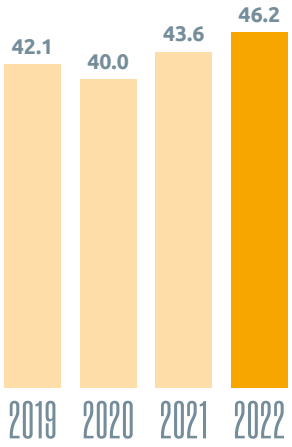
for emissions from associate companies, fuel extraction and electricity production and transportation, business travel and employee commuting

INTENSITY OF SUPPLY CHAIN EMISSIONS (ktonCO$_{2eq}$/M€ CapEx)

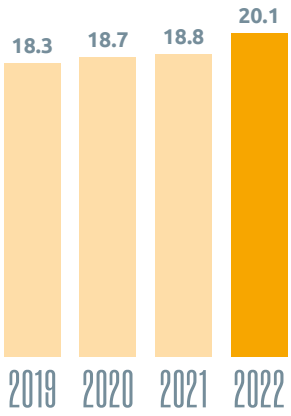


supply chain emissions, calculated as the emissions of suppliers parametrised against millions of euros of CapEx

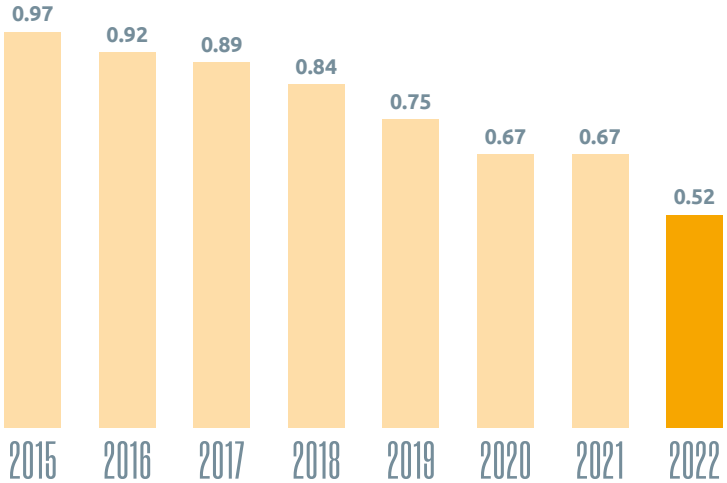
GHG SCOPE 1 + 2 INTENSITY INDEX VS NETWORK LENGTH (tonCO$_{2eq}$/km)



GHG SCOPE 1 + 2 INTENSITY INDEX VS TRANSPORTED GAS (tonCO$_{2eq}$/mld m^3)



TOTAL METHANE INTENSITY INDEX VS NETWORK LENGTH (tonCH$_4$/km)



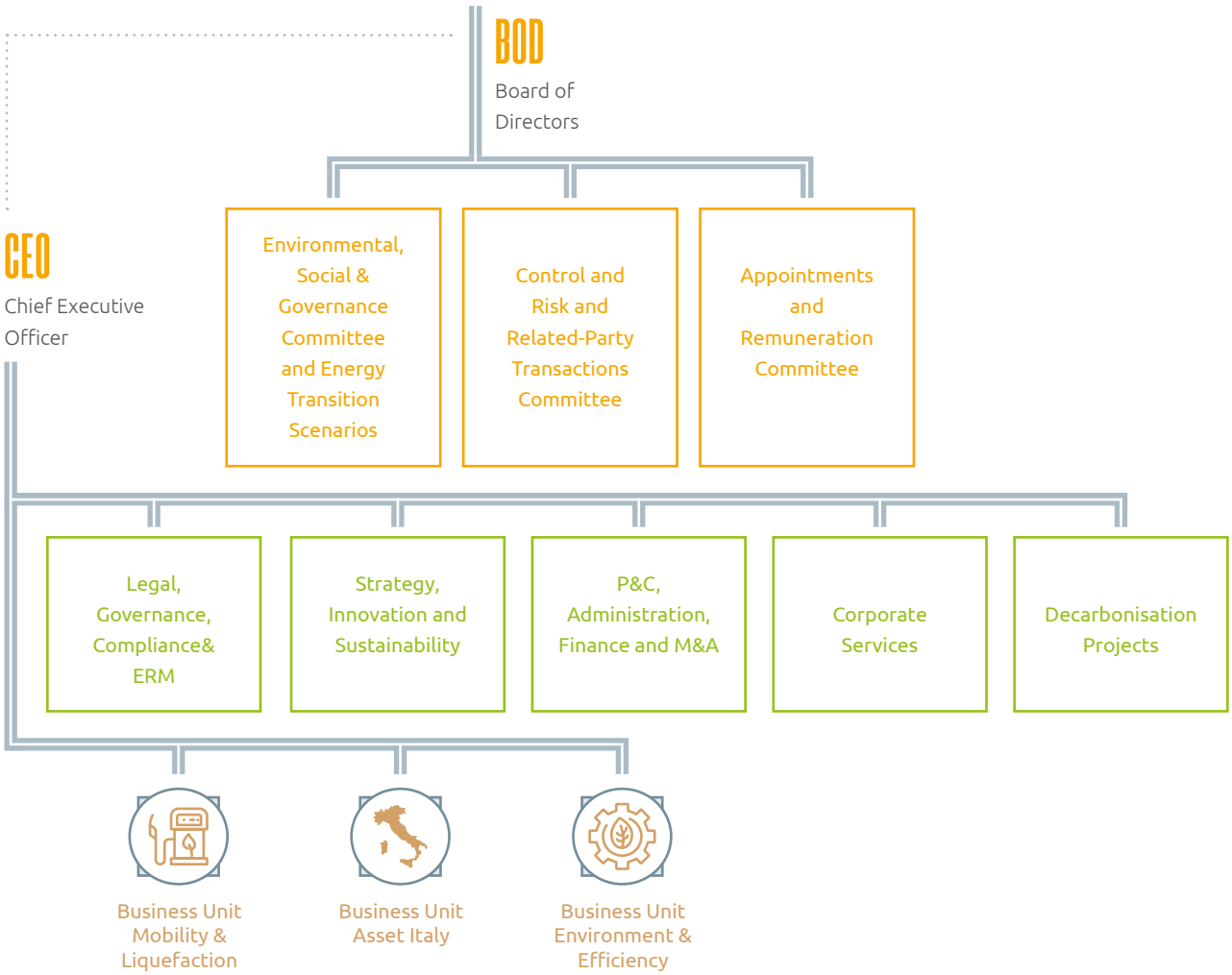
GOVERNANCE TO MANAGE OF CLIMATE CHANGE

Snam's purpose 'Energy to inspire the world' underpins the Group's commitment to combating climate change and guides the company's activities and strategic choices, aimed at achieving energy transition, decarbonisation, sustainable success and the creation of long-term value not only for shareholders, but also for all stakeholders.

With the implementation of the recommendations of the new **Corporate Governance Code** in 2021, the focus on sustainability issues by the Board of Directors has become even more important, with a view to making strategic choices and sustainability issues increasingly integrated. This commitment has also been confirmed among the objectives of the Snam Board of Directors, elected by the Shareholders' Meeting on 27 April 2022, which intends to work closely with company management to foster the energy transition, ensure energy security and drive the decarbonisation of the economy.

Also for 2022, Snam has been awarded as one of the best Italian companies in the I**ntegrated Governance Index** developed by ETicaNews, the index that assesses corporate governance and the integration of ESG factors into corporate strategies.

THE GOVERNANCE SYSTEM FOR CLIMATE CHANGE MANAGEMENT



The Board of Directors plays a central role in the pursuit of the company's sustainable success, and in this context defines strategies and objectives of the company and the group upon the proposal of the CEO and monitors their implementation.

In its role of overseeing the climate change strategy, which includes the assessment of relevant risks, the planning of sustainability goals and disclosure, the Board of Directors in particular periodically reviews and approves:

- **climate change and energy transition targets**, which are an integral part of the corporate strategies included in the annually approved Strategic Plan, and the more detailed indicators created for the timely monitoring of the progress of sustainability and decarbonisation actions (e.g., Scope 1&2 and Scope 3 emissions, progress against announced targets, avoided emissions, alignment of investments with the EU taxonomy and SDGs);

- the company's **Strategic Plan**, which was **also drawn up based on the analysis** of relevant issues for **long-term value generation and long-term energy transition scenarios with the support of the Environmental, Social & Governance and Energy Transition Scenarios Committee**;

- with the support of the Control and Risk and Related Party Transactions Committee in coordination with the Environmental, Social & Governance and Energy Transition Scenarios Committee, periodically examines and approves the Group's **strategic risks**, including those related to **climate change and energy transition**, and the effectiveness of the controls to enable the identification, measurement, management and monitoring of the main business risks, including ESG risks;

- the **Long-Term Incentive Plan** that also includes ESG targets, including a KPI related to the reduction of natural gas emissions consistent with the Strategic Plan guidelines;

- institutional reporting including the Half-Yearly and Annual Financial Report (including the Consolidated Non-Financial Statement - NFS), the Sustainability Report and the Climate Change Report;

The Board of Directors also:

- receives timely information flows from the Environmental, Social & Governance and Energy Transition Scenarios Committee regarding the in-depth studies that the latter carries out on energy transition issues concerning, specifically, the use of resources and energy sources that are compatible with environmental protection and progressive decarbonisation, examining in particular the initiatives undertaken by the company to address the issues posed by climate change, monitoring the roadmap to achieve the goal of carbon neutrality (Scope 1 and 2) for the entire Snam group by 2040, and takes note of the information provided by the Committees and in particular by the Environmental, Social & Governance and Energy Transition Scenarios Committee, pursuant to its Regulations, as part of the information provided to the Board following each Committee meeting.

THE BOARD OF DIRECTORS

BOD
Board of Directors

FUNCTIONS
Definition of sustainability policies
Oversight of climate change risks and opportunities and the proper management of these issues

Definition and control of climate change strategies (risks, sustainability planning and reporting)

CEO
Chief Executive Officer

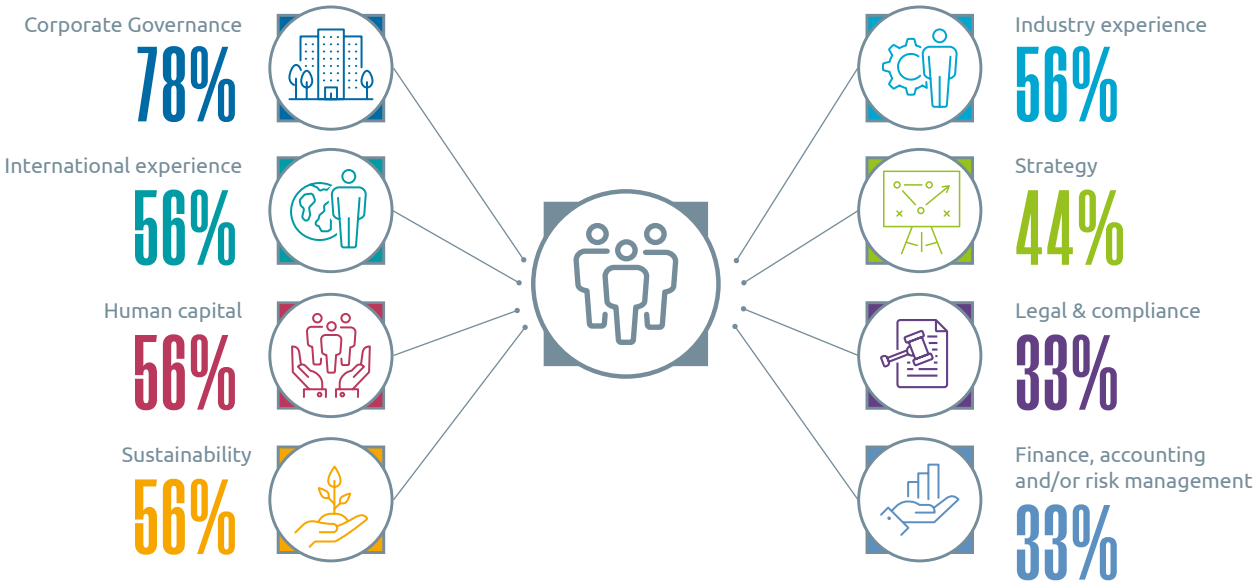
FUNCTIONS
Establishment and coordination of the Internal Control and Risk Management System

Integrating sustainability into governance also involves periodic communication between the Board of Directors, committees and management, which is essential to ensure that Snam's top management is constantly informed of the guidelines and the risks and opportunities associated with climate change.

The Board of Directors has set up three Internal Committees - Appointments and Remuneration Committee; Control and Risk and Related Party Transactions Committee; Environmental, Social & Governance and Energy Transition Scenarios Committee - which play investigative, propositional and advisory roles that enable the Board of Directors - through the formulation of proposals, recommendations and even opinions by the same - to make decisions on an informed and in-depth basis.

Interaction and full cooperation between the Internal Board Committees also takes place through the examination of issues of common interest addressed at joint meetings. During the financial year, numerous meetings were held jointly on issues of cross-cutting interest between the Environmental, Social & Governance and Energy Transition Scenarios Committee and the Nomination and Remuneration Committee, as well as between the Environmental, Social & Governance and Energy Transition Scenarios Committee and the Control and Risk and Related Party Transactions Committee. This enables effective coordination between the committees, as well as the timely exchange of information and active discussion on common issues.

Snam's Board of Directors is composed of nine directors, four of whom are women, and will remain in office for up to three financial years, expiring on the date of the Shareholders' Meeting to be called in 2025 to approve the Financial Statements as at 31 December 2024. With regard to the professionalism and skills possessed by the Directors, the Board of Directors has adopted a Board skill matrix through which the Board's existing skills and possible areas for improvement are assessed according to objective criteria, through board induction initiatives that allow for the further development of Directors' skills and the acquisition of specific sector expertise.



THE BOARD INDUCTION

Although Snam's Directors have significant experience in the field of sustainability, the dynamism and relevance to the sector of ESG issues, and in particular those relating to climate change, make it necessary to update them periodically.

The Board Induction sessions, organised after the appointment and throughout the term of office, are aimed at providing adequate knowledge of the business sector in which the Group operates, taking into account the dynamics of the company and the evolution of the corporate structure. ESG sessions are organised with a view to keeping Snam's Board of Directors and Board of Statutory Auditors informed about climate change aspects and initiatives. These sessions focus, among other things, on issues related to sustainability and their integration into corporate strategy and business decisions.

Eight Board Induction sessions were held in 2022, dedicating an entire session to Energy transition business and ESG policies.

The Board Retreat organised in 2022 was a significant opportunity for Board members to learn more about energy scenarios, the role of Snam and other key players in achieving the global net zero greenhouse gas emission targets by 2050. The members of the Board of Directors were able to constructively discuss the elements necessary to achieve this goal, especially topics such as large-scale production of renewables, green hydrogen and biomethane, electricity storage and carbon capture and storage technology.

COMMITTEES

Environmental, Social & Governance Committee and Energy Transition Scenarios

FUNCTIONS

Examine

- long-term **energy transition scenarios** for the preparation of the strategic plan;
- **energy transition issues** (more specifically, concerning the use of resources and energy sources compatible with environmental protection and progressive decarbonisation, examining in particular the initiatives undertaken by the Company to address climate change issues and related reporting), technological innovation and the circular economy;
- **sustainable finance initiatives**, monitoring the Company's positioning with respect to financial markets on sustainability issues, as well as the Company's placement in ethical sustainability indices;
- **policies for integrating environmental, social and governance issues into the business model**, also through the analysis of the related KPIs;
- the guidelines, objectives and consequent **sustainability processes** and the **sustainability report** submitted annually to the BoD;
- the correct use of the standards adopted for the purpose of preparing non-financial disclosures and the document to be submitted to the Board of Directors for approval, including and in coordination with the Control and Risk and Related-Party Transactions Committee, the **reporting of risks related to ESG** factors in the medium to long term;
- proposals and/or opinions concerning the definition and calculation of **performance targets that include indicators relating to ESG factors**, in coordination with the Nomination and Remuneration Committee;
- the **profit and non-profit strategy** and its implementation, also in relation to individual projects, consistent with the Foundation's activities, through the non-profit plan submitted annually to the Board.

Furthermore, at the request of the Council, it gives an opinion on other ESG issues and energy transition scenarios.

Control and Risk and Related-Party Transactions Committee

FUNCTIONS

- It assesses the suitability of **periodic financial and non-financial information** in fairly representing the Company's business model, strategies, the impact of its activities and the performance achieved, coordinating with the ESG and Energy Transition Scenarios Committee
- periodically examines the main **risks and opportunities, including those resulting from climate change**;
- Supports the Board of Directors in the definition of the **guidelines for the internal control and management of medium and long term risks**, so that the main risks are correctly identified, measured, managed and monitored (including risks that may be relevant in terms of sustainability, in coordination with the ESG Committee);
- Supports the Board of Directors in determining the degree of compatibility of these risks with management that is consistent with the strategic objectives.

Appointments and Remuneration Committee

FUNCTIONS

- Examines the guidelines issued by the CEO and, with a view to promoting the **creation of sustainable value in the long term**: (i) general criteria for the remuneration of Key Managers; (ii) general guidelines for the remuneration of other executives of Snam and its subsidiaries; (iii) annual and long-term incentive plans, including share-based plans;
- periodically assesses the **adequacy, overall consistency and concrete application of the Remuneration Policy**, verifying in particular the actual achievement of performance targets related to the variable component of remuneration;
- proposes the definition of **performance objectives**, (coordinating with the Environmental, Social & Governance and Energy Transition Scenarios Committee as regards the identification of those that include indicators relating to ESG factors), the final accounting of company results and the definition of claw back clauses connected to the implementation of the incentive plans.

For more information on the composition of the Board of Directors and Board Committees, as well as on the ownership structure and the structure of the corporate governance system adopted by Snam, refer to the Report on Corporate Governance and Ownership Structure 2022.

THE ROLE OF MANAGEMENT

Given the relevance of issues related to the energy transition within the company's strategy, Snam's managers have specific skills not only in the area in which they operate, but also in climate change, confirming the integration of these aspects into the corporate governance model. These figures act as support to the CEO, to whom they report directly.

In addition, in support of the collaboration, dialogue and listening nature of the Company, since 2018 the various corporate areas and functions, including ERM, Health, Safety, Environment and Quality, CSR & Communications, Corporate Strategy and Business Unit Asset Italia, have been meeting periodically to discuss and consequently harmonize their actions in pursuit of the objectives related to climate change.

CEO
CHIEF EXECUTIVE OFFICER

The **AD**, identified by the Board of Directors as the subject responsible for the internal control and risk management system, with the task of planning, implementing and managing this system, has set up an organisational structure that integrates climate change issues and risks into all phases of the business cycle.

Business unit Mobility & Liquefaction

The **Chief Mobility Officer** oversees the definition of strategies, guidelines and objectives for the development activities of the mobility business. Furthermore, in collaboration with the Environment & Efficiency and Hydrogen Business Units, the application of biomethane and hydrogen in the mobility sector will maximise synergies with existing activities and investments.

Business Unit Asset Italy

The **Chief Industrial Asset** oversees the definition of the industrial strategies, guidelines and objectives of the gas transportation, storage and regasification business, in line with the strategic guidelines and protocols defined by Snam, including those relating to energy transition. It participates actively in sharing the objectives related to climate change during periodic meetings with other functions.

Business Unit Environment & Efficiency

The **Executive Vice President** oversees the definition of strategies, guidelines, objectives and development of the biomethane and energy efficiency businesses. The latter promotes the origination of potential business initiatives in line with the Company's strategy, the evolution of the markets of interest and the expected economic results.

Legal, Governance, Compliance & ERM

The **Enterprise Risk Management (ERM)** function, which is supervised by the General Counsel, defines a risk management model that makes it possible to identify and assess risks, using standardized policies at the Group level, in order to plan risk mitigation actions and implement a (biannual) reporting system. Climate-related issues are integrated into the overall Enterprise Risk Management process.

Strategy, Innovation and Sustainability

The **Senior Vice President** of the Strategy function is responsible for defining energy and gas demand scenarios and their coverage supporting all the activities of defining the Strategic Plan and the Ten-Year Plan and infrastructure development initiatives, evaluating the contribution of the gas infrastructure within the energy system to foster the decarbonisation process, analysing potential technological discontinuities and the evolution of the role of infrastructure related to sector coupling, and analysing consistency with reference scenarios. The technology functions oversee the roadmap of digital (ICT) and industrial process (OT) technologies, defining the best technology options and implementing projects to reduce emissions and climate impact. The Climate Policies Design function is responsible for developing Snam's Climate Policies' positions in line with the corporate strategy and in coordination with the relevant corporate functions.The Senior Vice President of Sustainability & Social Impact is responsible for defining the sustainability model, ESG strategy and decarbonisation and emission reduction targets.

P&C, Administration, Finance and M&A

The **Chief Financial Officer**, oversees the strategic planning process, the process of economic evaluation of investments and merger & acquisition transactions, and financial planning activities. Carries out feasibility studies also through analysis of the best national and international practice, in relation to potential sustainable finance initiatives.

Corporate Services

The **HSEQ** function oversees **energy management** and the thematic side of **climate change**, with the goal of continuous improving the correct management of natural gas emissions, including through participation in the various international working parties and task forces (IGU, Marcogaz, GIE, GERG, etc.), also being involved in implementing the requirements of the energy efficiency directive in Italian legislation.

Decarbonization Projects

The **Decarbonisation Projects** function is responsible for the development and implementation of all decarbonisation projects. In particular, it oversees the definition of strategies, objectives, technological choices and the development of activities in the hydrogen, CCS and renewables sectors in accordance with the guidelines and strategic directions defined by Snam and in support of the decarbonisation process of the national energy and production system.

Integrating sustainability into corporate governance also involves periodic communication between the Board of Directors, committees and management, which is essential to ensure that Snam's top management is constantly informed of the guidelines and the risks and opportunities associated with climate change. In particular, the following moments for meeting and sharing occur during the year:

- **Business review:** : quarterly meeting between the CEO and senior executives for monitoring the progress of the strategic targets and lines;
- **Management meeting:** monthly update meetings between the CEO and the heads of all front lines and main functions on the latest business news;
- **HSE review:** half-yearly meetings to inform the CEO of the results achieved for the environment, health and safety;
- **Risk review:** biannual meetings on the process of identifying and assessing risks and opportunities, including those deriving from climate change.

SNAM'S REMUNERATION POLICY

Snam is committed to ensuring a remuneration system that complies with European and national legislation, which guarantees constant alignment with international best practices and promotes the Company's development in line with its Strategic Plan.

Snam's remuneration system, overseen by the Appointments and Remuneration Committee, is aimed at recognising the responsibilities assigned to it, the results it achieves and the quality of the professional contribution provided by the Company management department and complies with the principles of people promotion and equal opportunities, established in the Code of Ethics and present, for some time, in Snam's organisational culture.

Essentially, three remuneration instruments provided for in the Policy: fixed remuneration, short-term variable incentive (AMI - Annual Monetary Incentive) and long-term variable incentive (LTEI - Long-Term Equity Incentive).

FIXED REMUNERATION	ANNUAL MONETARY INCENTIVE (AMI)	LONG-TERM EQUITY INCENTIVE (LTEI)
Includes all annual fixed components (Gross Annual Salary, directors' fees, remuneration for special offices,...)	Monetary plan defined on the basis of short-term objectives **KPI**: Adjusted EBITDA, Investments, New business milestones, Strategic projects, **Sustainability**	Share-based plan with annual assignment and three-year vesting period **KPI**: Added Value, Adjusted net profit, **Sustainability**

In the 2022 Remuneration Policy[13], sustainability is confirmed as a relevant factor since the following performance targets are considered: the weighted injury frequency and severity index, inclusion in the DJSI FTSE4GOOD, CDP Climate Change, Sustainalytics, the increase of sustainable financing, the reduction of natural gas emissions and a more equal representation in terms of gender diversity in the management structure. In particular, it provides that **20% of the short- and long-term variable incentive** is linked to sustainability KPIs, as described below:

SHORT-TERM VARIABLE INCENTIVE

Target	Description	Importance
IpFG Weighted occupational accident frequency and severity index for employees and contractors	This index is made up of the frequency index, measured in terms of the number of accidents per million hours worked during the year, and the severity index, measured in terms of days of absence in relation to the number of hours worked	10%
ESG indices and ratings Inclusion and presence of Snam in sustainability equity indices and ESG ratings	This target provides for the inclusion and maintenance of Snam in the main sustainability equity indices, such as the Dow Jones Sustainability Index, FTSE4Good, and in ESG ratings, such as CDP Climate Change and Sustainalytics	5%
Sustainable Finance – Committed Funding	Target to increase (in €m) sustainable funding	5%

LONG-TERM VARIABLE INCENTIVE

Target	Description	Importance
Reduction of natural gas emissions	Target that considers the reduction of natural gas emissions, in line with the main reference standard, the UNEP's OGMP	10%
Gender diversity	Target that considers fair representation, in terms of gender diversity in Snam's management team, calculated in terms of the percentage of women in managerial and executive roles out of all Group managers and executives	10%

Performance Management is a process of assigning and assessing objectives linked to sustainability issues and behavioural aspects consistent with those defined in the corporate strategy, for all those who contribute to results on a daily basis. With the support of an ad hoc training activity organised for the territory, the perimeter was extended during 2021 to include the BUAIT (Business Unit Asset Italy) population of technicians and employees and part of the New Businesses. With the fifth performance cycle in 2022, the number of evaluation forms for the entire Snam population has risen to around 3,000.

13 The Snam 2023 Remuneration Policy for Directors, Auditors and Managers with strategic responsibilities will be approved during the shareholders' Meeting of 04 May 2023.

THE ERM MODEL AND THE RISKS AND OPPORTUNITIES RELATED TO CLIMATE CHANGE

The energy and climate scenarios that form the backdrop to Snam's activities involve a series of risks and opportunities that must be identified, assessed and managed effectively and promptly. The assessment of the risk factors that may affect the business is an essential condition to be able to continue to operate in the long term in a sustainable manner, namely directing strategies and monitoring changes in the boundary conditions of the same.

The risks and opportunities identified by Snam are taken into account in the definition of corporate strategy, with particular reference to objectives in the area of energy transition and decarbonisation, as well as the reduction of greenhouse gas and methane emissions.

THE ERM MODEL FOR CENTRALISED RISK MANAGEMENT

Snam adopts an **Enterprise Risk Management Model** (known as the ERM model), which extends to all Group companies and enables the **integrated management of business risks**. The model operates in line with the indications of the CoSO[14] Framework, the Corporate Governance Code and international best practices, and enables the **identification, assessment** and **monitoring** of current and prospective risks and opportunities associated with Snam's corporate strategy.

14 Committee of Sponsoring Organizations of the Treadway Commission.

IDENTIFICATION

Identification of risk/opportunity events relating to corporate processes that could affect the achievement of corporate objectives by Staff and Business Managers, who are responsible for the implementation of initiatives aimed at the effective control of risks, supported by the ERM function also on the basis of specific context analyses and the corporate Strategic Plan and thus also ensuring the alignment of portfolio events with the same Plan.

ASSESSMENT AND PRIORITISATION

Assessment and prioritisation of each event through the use of prioritisation matrices in which the probability of occurrence of the event and its negative impact (risks) or positive impact (opportunities) are represented. The probability of an event is determined on a scale of 1 (remote) to 4 (highly likely). The impact of the event is assessed according to different dimensions, which can be qualitative (industrial/business, asset, reputational, legal/compliance, market, health and safety, environment, social and governance) or quantitative (economic, financial), also measured on a scale from 1 (low) to 4 (significant). Prioritisation of risks and opportunities takes into account the different points of view of the risk owners (first reports of the CEO of Snam/Managing Director of the subsidiaries) and risk specialists, combining the impact and probability measures obtained according to 4 priority classes (low, medium-high and critical for risks; slight, fair, good and best for opportunities).

REPORTING

Monitoring and reporting through periodic mapping of risks and opportunities. The periodic reporting activity guarantees, also through the definition and monitoring of specific indicators (key indicators), correct information at the various company levels, the availability and representation of information relating to the risk management and monitoring activities under its responsibility. Specific reporting flows are activated towards the CEO, the Chief Financial Officer (CFO), the Financial Reporting Manager, the Internal Audit Manager and the control bodies.

MANAGEMENT

Definition of the management strategy (mitigation, monitoring, or transfer of risk) and any specific actions for all risks, for which, if necessary, the relevant implementation time frame is also identified. In particular, mitigation interventions are aimed at reducing the probability of occurrence and/or the impacts of the risk considered, while monitoring actions are aimed at monitoring the level of criticality of the risk. Risk transfer is aimed at transferring, partially or completely, the impacts inherent in a risk to a third party outside the Snam group.

The risk assessment/monitoring campaigns envisaged by the ERM Model and conducted with a balanced Top Down and Bottom Up approach are repeated periodically and involve risk specialists and risk owners, who are called upon to identify and assess risks according to ERM Model probability and impact metrics.

With the numerous acquisitions and Snam's entry into the **energy transition business**, the ERM model has been enriched with **new risk/opportunity assessment metrics at the individual entity level** (i.e., individual company or line of business) with the aim of grasping its specificities and complementing the current 'enterprise' view (i.e., at group level).

The wide-ranging nature of its impact measurement is a distinctive feature of Snam's ERM model. In fact, each risk event is evaluated on **ten types of impact**. Some of these are determined by risk owners/specialists (operational impacts: Economic/Financial, Industrial/Business, Assets), others by risk specialists or referents of specialist functions (specialist impacts: Legal/Compliance, Health and Safety, Environment, Social, Governance, Reputational and Market).

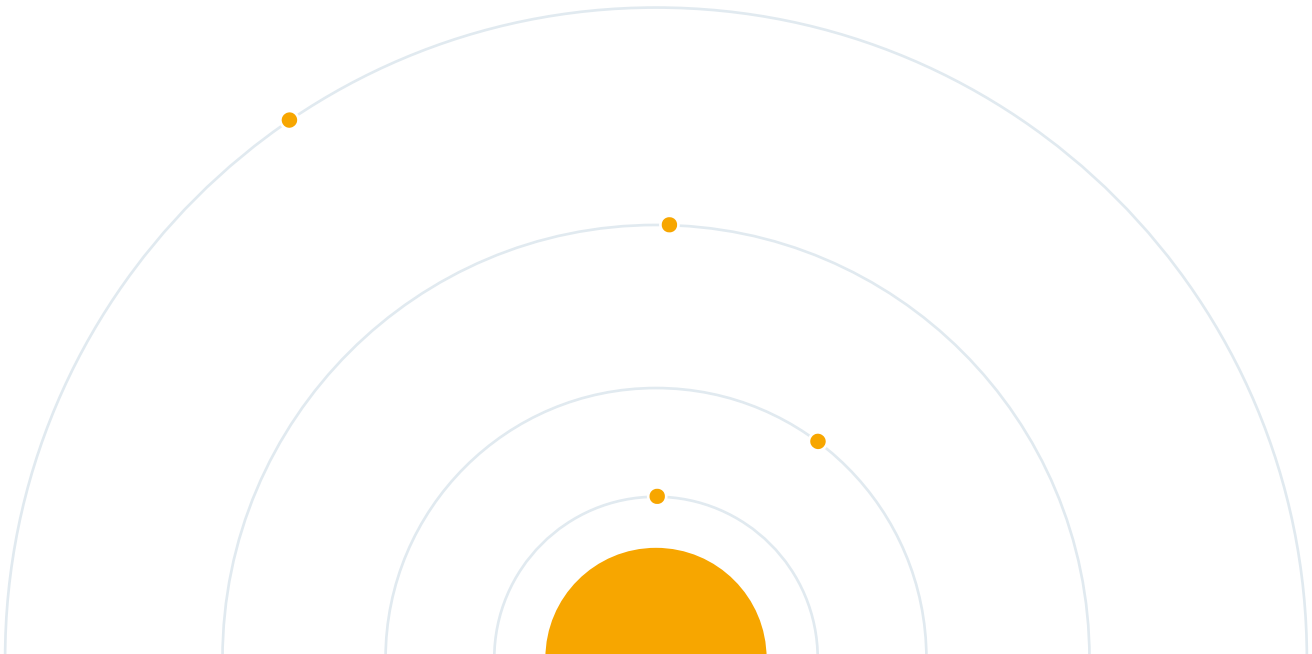
In particular, the assessment of Environmental, Social and Governance impacts (together with HS impacts) allows the incorporation of ESG factors in the assessment of risks (and opportunities). In fact, through the application of the corresponding metrics, each event in the ERM portfolio is assessed and classified according to an ESG logic capable of distinguishing the nature and magnitude of potential impacts in the three areas considered.

In addition, the ERM model experimented with a first dual materiality approach by considering external impacts in the **Environmental** and **Social** metrics. These impacts can be measured and evaluated, allowing the distinction of risks from the perspective of 'financial materiality' (outside-in) and 'impact materiality' (inside-out).

Over time, the **ERM model** has progressively integrated **ESG aspects** into the assessment of risks and opportunities. In this regard, in 2021 Snam introduced specific metrics on Environment, **Social and Governance impacts**. In particular, 'E' considers **environmental** and **climate change** impacts; 'S' considers possible **impacts on human and labour rights**, as well as **on local communities**; 'G' intercepts possible consequences on **governance capacity and the pursuit of sustainable success**.

In addition, **HS impact on health and safety** considers possible consequences on people such as possible accidents, injuries or serious events for risks and improvement of working conditions and environments for opportunities.

The ERM process also aims to disseminate a corporate culture of risk, in order to promote consistency in the assessments made by the various risk owners and risk specialists, and to enable informed choices to be made.



The risks identified through the ERM process are classified as: **financial, operational, legal and compliance and strategic**, which, in turn also include the **risks related to climate change**. The risk assessment phase concerning the physical impacts of climate change on Snam's infrastructure was carried out while considering regional differences and the specificities that distinguish the company's various activities/types of infrastructure (context-specific). With respect to these, both physical and transitional risks, identified as 'ESG-related', are assessed while considering the time horizons shown in the table below and the expected lifetime of the assets:

- **Short-term (0-1 year)**: in the short-term, Snam creates value by pursuing its business in the manner established by the rules and procedures, with particular focus on risk management and operational efficiency. The main point of reference is the **annual budget.**

- **Medium-term (1-5 years)**: In the medium term, the ability to carry out investment programmes, thereby ensuring a flow of resources and that favourable economic conditions are maintained, is also important. The main point of reference is the **Strategic Plan**, which covers a period of up to five years.

- **Long-term (5-10 years)**: In the long-term, it is vital that the investment decisions and strategic choices made have interpreted trends in the best way possible. The main point of reference is the **Ten-year** transportation network development plan submitted to the Authority, which covers a period of 10 years.

In addition, the risk assessment process on physical and transition risks also considers downstream and upstream activities.

Consistent with the recommendations of CoSo, WBSCD and TCFD, Snam has decided to apply the definition of **ESG-related and climate-related risks** within its Model across its risk portfolio. The link to ESG factors is therefore not reserved for a specific, specifically created risk category, but is expressed transversally across all risk categories by a characterisation of individual events linked to the valorisation of impacts in the Environmental and/or Social and/or Governance spheres.

The table below highlights **five ESG-related risks with strategic relevance**, for illustrative purposes. In particular the following are depicted for each risk: the area of impact, the business to which it belongs (gas infrastructure or energy transition), the quantification of the economic impact and the balance sheet items affected.

Classification TCFD

	RISK	IMPACT AREA	BUSINESS AREA	RISK CLASS	TYPE OF RISK	POTENTIAL FINANCIAL IMPACT
1	**Revision of European directives disincentivising the intra-sectoral use of fossil fuels** and relative **stricter greenhouse gas emission reduction targets**	Reduction in gas demand resulting in a reduction in variable transport revenues (i.e., commodity revenues) as a function of transported volumes	REGULATED	TRANSITION	POLITICAL-LEGAL	Approximately 9 million euros / year
2	**Growth in the magnitude and frequency of extreme weather phenomena (physical risks)** such as **droughts, floods, storms**	Damage to pipelines and systems that may cause malfunctions or service interruptions. Higher costs for insurance, operational and community communication premiums	REGULATED	PHYSICAL	ACUTE PHYSICAL	Negligible
3	**Revision of EU regulations on CO_2 emissions** from the **European Emission Trading Scheme (ETS)**	Potential fines for incorrect/non-return of quotas or growth in quota acquisition costs. It should be noted that the regulatory recognition of the purchase costs of CO_2 quotas guarantees substantial neutrality in both economic and financial terms.	REGULATED	TRANSITION	POLITICAL-LEGAL	Negligible
4	**Revision of the sustainable finance framework** following changes to the European Taxonomy for Sustainable Energy Activities	**Reduced access to sustainable finance instruments** with an impact in the cost of debt (issuance of bonds at market conditions vs issuance at lower spreads in sustainable finance systems)	REGULATED	TRANSITION	POLITICAL-LEGAL	< 5 million euros / year
5	**Growth in the negative perception** of both **fossil fuel companies (industry-wide) and Snam itself as a result of insufficient commitment to sustainability and the energy transition**	**Higher cost of debt** due to lower access to sustainable finance instruments (which means higher spread) and **higher cost of equity** due to a worsened perception of risks associated with long-term corporate sustainability	REGULATED	TRANSITION	POLITICAL-LEGAL	< 5 million euros / year

For further information on risks impacting the 2022-2026 Plan, please refer to the chapter 'Strategy and Risk Management, Risk and Opportunity Management' in the 2022 Annual Report.

Following the assessment cycles, Snam's ERM function applies a **prioritisation and clustering** process to identify the risks and opportunities that have emerged and their impact on the business. At the end of each assessment cycle, the results are shared with Top Management, the Risk and Control and Related Party Transactions Committee, the ESG Committee, the Board of Statutory Auditors, the Supervisory Body and the Snam Board of Directors. On an annual basis, the Board of Directors is also updated on these issues. The ERM Function also promotes the sharing of the results of the assessment process with the Sustainability and Social Impact Function (SUSOIM), in order to incorporate these considerations into the planning and definition of strategies for the management of ESG issues that are relevant to the Group. The results are also shared with the Internal Audit department, which uses them when preparing the audit plan; the Strategic Planning department, which assesses coherence with the risk assessments and analyses of the Strategic Plan; the Sustainability department, to support planning activities and to define strategies for managing ESG topics that are relevant to the Group.

Maintenance of the ERM Model is carried out continuously and independently of the process phases, with the aim of continuously having an effective Model that is consistent with the technological and methodological process of risk management. Continuing on from the previous year, again in 2022, the mapping of risks/ opportunities was updated through the **RACI** IT platform under the scope of the **Integrated Risk Assurance and Compliance**[15] model, aimed at integrating second-level control information flows with a synergistic approach, intended to achieve the maximum rationalisation and overall efficiency of the ICRMS.

15 For more details, see the section 'Risk Assurance & Integrated Compliance' in the chapter 'Governance and Organisation' of the 2022 Annual Report.

RISKS RELATED TO CLIMATE CHANGE

After identifying the events that may, even potentially, affect the achievement of the company's targets, the importance of each event is determined through the use of a **prioritisation matrix**, which indicates the **probability of occurrence** of the event and its **impacts** (negative or positive). Each risk is assessed according to different qualitative and quantitative impact aspects, some **operational** (industrial/business, economic/financial, assets), assessed by risk owners/risk specialists, and other **specialistic** (legal/compliance, governance, health and safety, environment, social, reputation and market), assessed by specialist functions.

Risk prioritisation is therefore defined by combining measurements of impacts and probability related to them.

TRANSITION RISKS - POLITICAL AND LEGAL RISKS

Time horizon: S Short term; M Medium term; L Long term

TIGHTENING OF THE EMERGING REGULATORY FRAMEWORK

Description	Revision of EU regulations on CO_2 emissions from the European Emission Trading Scheme (ETS)	Penalising revision of EU regulations concerning the natural gas business and strengthening those concerning GHG emissions (e.g., disincentives for the use of fossil fuels, incentives for intermittent renewable sources), with a resulting reduction in demand for natural gas	New frameworks/guidelines that could influence Snam's reporting or behaviour in both the natural gas and energy transition businesses
Probability	Unlikely		
Impacts in the value chain	Operation	Products and services	Products and services
Time horizon	M		
Management actions	• Periodic monitoring of energy consumption and updating of consumption forecasts relating to systems subject to the ETS in order to monitor and correctly estimate quota requirements; • Programme for converting gas turbines in compressor and storage plants to dual fuel.	• Identification of ambitious emission reduction targets (-50% by 2030 vs 2018 for Scope 1+2 CO_{2eq} emissions, -55% by 2025 and -65% by 2030 vs 2015 for natural gas), culminating in the achievement of carbon neutrality by 2040; • SnamTEC Project to reduce the environmental impact of Snam's activities by promoting innovation and contributing to decarbonisation; • Development and improvement of the efficiency of gas infrastructures in a multi-purpose approach, in order to foster the use of natural gas and biomethane to replace more polluting fossil fuels and promote green gases, such as to support the energy transition and enable the transportation and storage of CO_2.	• Continuous monitoring of regulatory developments and best practices related to reporting, also through participation in European and international working groups.

TRANSITION RISKS - TECHNOLOGICAL RISKS

Time horizon: S Short term; M Medium term; L Long term

DISSEMINATION OF NEW TECHNOLOGIES FAVOURING THE USE OF ENERGY SOURCES ALTERNATIVE TO GAS AND FAILURE TO ADAPT TO NEW TECHNOLOGICAL STANDARDS

Description	Reduction in natural gas demand from consumers and customers	Lack of expertise in technologies alternative to gas	Delay and difficulties in launching the green hydrogen value chain and consequent reduced production capacity and/or demand
Probability	Likely		
Impacts in the value chain	Products and services	Operation	Products and services
Time horizon	L		
Management actions	• Consolidation of the energy transition platform, focusing on the development of biomethane, decarbonisation projects (hydrogen and CCS) and energy efficiency; • Supporting the use of CNG/LNG in mobility.	• Development of competencies in green and low-carbon technologies to gas, also through acquisitions; • Monitoring and studying decarbonisation technologies that can be complementary to Snam's core business.	• Partnership agreements to foster the development of decarbonisation and hydrogen value chain sectors, including through advocacy and awareness-raising activities both at home and abroad; • Enabling hybrid technologies (e.g., dual-fuel power plants) to promote the transport of green gas mixes (biomethane + hydrogen).

TRANSITION RISKS - MARKET RISKS

Time horizon: S Short term; M Medium term; L Long term

REDUCTION IN GAS DEMAND

Description	Increased penetration of intermittent renewables to the detriment of natural gas, alternative uses of gas and the development of energy transition businesses (biomethane, decarbonisation and energy efficiency projects)
Probability	Likely
Impacts in the value chain	Products and services
Time horizon	L
Management actions	• Development of new businesses related to green gases (biomethane and hydrogen), the implementation of gas use to support the energy transition, the development of carbon capture and storage (CCS) technologies and the efficient use of energy (energy efficiency); • Investments in multi-purpose infrastructures (e.g. hydrogen backbone, H2 tests in depleted gas field, development of storage and CCS expertise); • Support for the diffusion of more efficient gas technologies (gas heat pumps and high- efficiency cogeneration heating pumps); • Taking part in Italian, European and international round table discussions, including association ones, as part of energy transition and climate neutrality; • Awareness-raising activities on public opinion on natural gas as a key source to ensure energy security and enable the phasing out of coal in electricity generation; • Monitoring of European and national legislative initiatives within the natural gas field and representation for the company's interests with regards to the various institutional stakeholders; • Positioning activities and taking part in industry studies; • Monitoring of international, European and national public financing programmes in the infrastructure, energy and sustainable transportation fields; • Participation in internationally integrated projects on green and low - carbon gases (biomethane and green and blue hydrogen) along the entire value chain to foster their further development.

TRANSITION RISKS - REPUTATIONAL RISKS

Time horizon — S Short term — M Medium term — L Long term

NEGATIVE PERCEPTION OF THE COMPANIES THAT OPERATE IN THE FOSSIL FUEL SECTOR BY PUBLIC OPINION

Description	Establishment of organised groups that disagree with the new works that could cause a delay or the non-acceptance, by the Institutions, of the construction of the works by the Institutions. Stakeholders' increased concern or negative feedback
Probability	Likely
Impacts in the value chain	Products and services
Time horizon	M
Management actions	• Representative actions with institutional stakeholders in order to promote the centralisation of gas infrastructure as a tool for transporting green gases (e.g., biomethane and green hydrogen) to support the fight against climate change; • Interaction and promotion/advocacy with relevant stakeholders, the institutional world and the financial world, also in coordination with associations and other operators in the gas chain; • Taking part in Italian, European and international round table discussions, including association ones, as part of energy transition and climate neutrality; • Adherence to national, European and international initiatives aimed at strengthening the commitment to reduce methane emissions, such as the Oil & Gas Methane Partnership OGMP 2.0 Protocol of the UNEP; • Identification of ambitious emission reduction targets (-50% by 2030 vs 2018 for Scope 1+2 CO_{2eq} emissions, -55% by 2025 and -65% by 2030 vs 2015 for natural gas), culminating in the achievement of carbon neutrality by 2040; • Adherence to the TCFD and disclosure of performance to combat climate change through the publication of the Sustainability Report and Climate Change Report, both sustainability-related documents.

PHYSICAL RISKS - ACUTE RISKS

Time horizon — S Short term — M Medium term — L Long term

INCREASE IN THE SEVERITY OF EXTREME WEATHER EVENTS, IMPACTING SERVICE CONTINUITY AND QUALITY

Description	Damage to pipes and plants, which could cause malfunctions or unexpected interruptions to the service with the possibility of being unable to adequately meet gas demand as a result
Probability	Very likely
Impacts in the value chain	Operation
Time horizon	S
Management actions	• Bringing the recovery plan business continuity management system in line with international best practices; • Technologically advanced tools for monitoring/controlling the state of infrastructures, also in view of their useful life, and the environmental context in which they are located; • Systematic and continuous maintenance and control actions with the implementation of the pipeline replacement plan based on analyses of specific technical parameters; • Timely implementation of Emergency Response Procedures; • Continuity of investments in gas storage to provide additional flexibility in case of supply disruptions or more aggressive gas demand peaks; • Design and construction of transportation infrastructure based on the most recent technical and safety regulations and the carrying out of dedicated studies (geomorphological, hydraulic, environmental risk, etc.) during the design phase.

PHYSICAL RISKS - CHRONIC RISKS

Time horizon S Short term M Medium term L Long term

TEMPERATURE INCREASE RESULTING IN LOWER GAS DEMAND

Description	Lower demand for gas for heating buildings in winter periods and consequent need for storage or identification of alternative uses
Probability	Likely
Impacts in the value chain	Products and services Lower energy/gas use by the end consumer (Downstream)
Time horizon	L
Management actions	• Consolidation of new businesses related to green gases (biomethane and hydrogen), the implementation of gas use to support the energy transition, the development of carbon capture and storage (CCS) technologies and the efficient use of energy (energy efficiency) through the use of gas technologies such as micro-CHP; • Continued technology scouting in areas critical to the energy transition and decarbonisation of our infrastructure.

OPPORTUNITIES RELATED TO CLIMATE CHANGE

The opportunities related to climate change are identified through a similar methodology to the one described for the risks. Also in this case there is an assessment of the impacts (industrial/business, economic/financial, asset, health and safety, environmental, social, governance, reputational and market) related to each opportunity and specific actions are identified to seize the advantages that these opportunities may present.

RESOURCE EFFICIENCY

Time horizon — S Short term — M Medium term — L Long term

REDUCTION OF INTERNAL ENERGY CONSUMPTION

Description	Reduction of energy consumption thanks to more efficient operating processes, with consequent reduction of the GHG emissions and of the cost related to the purchase of the relative CO_2 quotas
Probability	Very likely
Impacts in the value chain	R&D investments Operation
Time horizon	M
Actions and strategies to capitalise on opportunity	• Identification of ambitious emission reduction targets (-50% by 2030 vs 2018 for Scope 1+2 CO_{2eq} emissions, -55% by 2025 and -65% by 2030 vs 2015 for natural gas), culminating in the achievement of carbon neutrality by 2040; • Increased activities and investments to meet decarbonisation targets; • Programme for converting gas turbines in compressor and storage plants to dual fuel.

ENERGY SOURCES

Time horizon — S Short term — M Medium term — L Long term

USE OF ENERGY SOURCES AND/OR TECHNOLOGIES WITH LOW GHG EMISSIONS

Description	Reduction of GHG emissions due to the use of green energy sources and consequent reduction of costs related to the purchase of CO_2 quotas
Probability	Likely
Impacts in the value chain	Operation
Time horizon	M
Actions and strategies to capitalise on opportunity	• Identification of objectives for increasing the production of renewable energy (e.g. installation photovoltaic systems), for purchasing green electricity and for installing low-emission technologies (e.g. new high-efficiency heat generators, trigeneration plants, etc.); • Identification of a new target for the use of at least 55% green electricity by 2030.

PRODUCTS AND SERVICES

Time horizon: S Short term; M Medium term; L Long term

DEVELOPMENT OR EXPANSION OF BUSINESS SERVING THE ENERGY TRANSITION

Description	**Biomethane** Development of biomethane production, especially from agricultural waste, acting as an industrial developer and leveraging funds allocated in the Biomethane Decree (based on the NRRP) to upgrade existing biomethane and biogas plants **Hydrogen** Development of demand for hydrogen through participation in projects that leverage economic support from the NRRP, Horizon Europe and Innovation Fund funds and will contribute to the enhancement of the Group's competencies to implement large-scale projects. Installation of hydrogen refuelling stations. **CCS** Collaboration with sister companies Storegga and dCarbonX to acquire knowledge and expertise in CCS technologies to support the decarbonisation of hard-to-abate sectors in Italy. In fact, CCS is considered a necessary technology to achieve global decarbonisation goals. As the leading European operator, Snam is uniquely positioned to transfer this experience to CO_2 transport and storage **Energy efficiency** Development of project pipeline for Public Administration, residential sector and industrial customers	Improvement of the reputation of the business and a better perception of it by stakeholders	Increased demand for natural gas caused by the progressive reduction in the consumption of coal and oil and extreme climatic phenomena
Probability	Likely		
Impacts in the value chain	Products and services Operation	Products and services Operation	Operation
Time horizon	L		

Actions and strategies to capitalise on opportunity	• Planning of investments for 1 billion euros in businesses for energy transition:
	  • 550 million euros in biomethane infrastructure to reach a capacity of more than 100 MW by 2026;
	  • 100 million euros in hydrogen, also with the support of NRRP funds, to help prepare the national ecosystem for the use of hydrogen;
	  • 120 million euros in investments over the Plan period in CCS technologies focusing on the decarbonisation of hard-to-abate sectors in northern Italy;
	  • 200 million euros in energy efficiency to consolidate its position as a national player.
		• Promotion of Snam's business related to the energy transition.	• Support for the phasing out coal and promoting the use of gas as an alternative fuel to more pollutant fossil fuels.

MARKETS

Time horizon — S Short term — M Medium term — L Long term

ACCESS TO NEW FOREIGN MARKETS

Description	Increase in the supply of natural gas against an increase in demand due to the progressive reduction in the consumption of coal and oil with possible developments abroad	Development of new businesses and services for energy transition in countries that can benefit from it	Implementation of international agreements to meet new demands for flexibility and diversification of supply sources
Probability	Probabile		
Impacts in the value chain	Products and services	Products and services Operation	Products and services
Time horizon	L		
Actions and strategies to capitalise on opportunity	• Pursuit of service sales of activities through Snam Global Solution, leveraging on the expertise gained in the various Group companies, also on the subject of energy transition (India, China, Middle East, North Africa, Balkans); • Signing strategic agreements with important sector operators within the main continental energy corridors; • Redevelopment of Snam's role within the international infrastructure system (e.g., partnership with Eni for the management of the TTPC and TMPC pipelines linking Algeria to Italy and acquisition of shares in EMG, the owner of the offshore pipeline linking Israel to Egypt); • Participation in national and international working groups in order to take a leading role in advocacy and awareness-raising activities for decarbonisation in Italy and abroad, using our expertise.		

ATTRACTING NEW INVESTORS

Description	Expansion of shareholder base due to growing interest of SRI investors in the Company's share capital	Access to capital on favourable terms thanks to funding linked to sustainable development objectives and SRI investors
Probability	Likely	
Impacts in the value chain	Capital Operation	
Time horizon	M	
Actions and strategies to capitalise on opportunity	• Participation in the assessment of the main international sustainability rating agencies (CDP, Sustainalytics and ISS ESG) and in the assessment of the main ESG indices (DJSI, MSCI, FTSE4good), thereby increasing the company's visibility among SRI investors and, more generally, among the entire financial community; • Issuance of bonds related to emissions reduction and climate resilience projects (Transition bonds and Sustainable-Linked Bonds); • Snam's regular participation in roadshows/seminars with the aim of meeting institutional investors around the world, including SRI investors; • Setting a target in the ESG Scorecard related to sustainable finance of increasing the weight of sustainable finance in total funding to 80% by 2026; • Publication of a Sustainable Finance Framework for the issuance of instruments to finance projects aligned with the Delegated Acts of the European Taxonomy and corporate activity in general; • Alignment of activities related to European Taxonomy.	

RESILIENCE

Time horizon S Short term M Medium term L Long term

BUSINESS DIVERSIFICATION

Description	Market development of energy transition businesses
Probability	Likely
Impacts in the value chain	Products and services Operation
Time horizon	M
Actions and strategies to capitalise on opportunity	• Development of new businesses related to green gases (biomethane and hydrogen), the implementation of gas use to support the energy transition, the development of carbon capture and storage (CCS) technologies and the efficient use of energy (energy efficiency) in Italy and abroad; • Investments in CO_2 transport and storage networks as a multi-purpose infrastructure company; • Participation in working tables to take the lead in advocacy and awareness-raising activities to promote the use of hydrogen and Carbon Capture Transport and Storage systems at national and international level • Actions and investments aimed at developing hydrogen as an additional source to support the energy transition (e.g., inclusion of a 10% hydrogen blend in a section of the national network, testing of a 30% hydrogen blend, position papers, dedicated studies and strategic positioning); • Modernisation of infrastructure in an H2-ready perspective, already 99% ready, and the definition of standards for the acquisition of only H2-ready components for the grid.

THE RESILIENCE OF SNAM'S STRATEGY

Snam carried out an initial exercise to assess the resilience of its strategy against different climate scenarios. In particular, it considered a Plan scenario to 2026 and the scenarios developed in cooperation with Terna: the Late Transition and the Policy Scenario, which includes Fit for 55, Global Ambition Italia and Distributed Energy Italia described in the section 'Snam's scenarios' in the chapter 'The Context and Reference Scenarios' of this document. Although all the scenarios consider a temperature rise of less than 1.5°C, they predict different developments in the coming years, affecting the Group's development strategy. These scenarios were considered in order to assess the main risks/opportunities identified by the ERM model with reference to sustainability (e.g., gas demand reduction, policies that may favour the development of green gas, the impact of the scenarios on decarbonisation policies).

The results of the analysis show that Snam's strategy is resilient, considering that most risks and opportunities have a probability and economic impact substantially in line with what is expected in the current scenario. The reduction in gas supply/demand could have a very high probability of occurrence depending on the evolution of the energy transition (whether it will head towards the adoption of green molecules or electrification); however, the expected economic impact is low considering the existing regulatory framework. Moreover, in the light of current trends, the development of green and/or low-carbon gas-friendly environmental policies is highly likely by 2040, leading to an acceleration in new investments associated with the regulated service for new activities and other unregulated services, in particular energy efficiency and biomethane.

PERFORMANCE INDICATORS

Snam's main targets and metrics related to the decarbonisation strategy are shown below.

MAIN OPERATING DATA

	m.u.	2019	2020	2021	2022	KPI
Energy consumption	TJ	12,152	12,154	14,157	**17,641**	
Electricity consumption	MWh	117,378	128,752	110,912	**146,097**	
Use of green electricity	MWh	51,791	62,916	45,105	**75,625**	
Percentage green electricity consumed on the total electricity	%	44%	49%	41%	**52%**	**KPI 2030:** to reach 55%
GHG Scope 1, 2 and 3 emissions (*)	Mton CO_{2eq}	2.41	2.37	2.41	**2.86**	
GHG Scope 1 and 2 emissions (*)	Mton CO_{2eq}	1.42	1.34	1.47	**1.52**	
Mix reduction - Scope 1 and 2 vs. 2018	%	-10%	-15%	-7%	**-4%**	**KPI 2030:** -50% vs. 2018
GHG emissions Scope 1 (*)	Mton CO_{2eq}	1.39	1.31	1.44	**1.48**	
- of which CO_2 from combustion	Mton CO_{2eq}	0.66	0.66	0.78	**0.98**	
- of which CO_{2eq} from methane (*) (**)	Mton CO_{2eq}	0.73	0.65	0.66	**0.51**	
- of which CO_{2eq} from vent methane	Mton CO_{2eq}	0.14	0.13	0.17	**0.14**	
- of whichCO_{2eq} from fugitive methane	Mton CO_{2eq}	0.39	0.33	0.33	**0.25**	
- of whichCO_{2eq} from pneumatic methane	Mton CO_{2eq}	0.19	0.18	0.15	**0.11**	
- of which CO_{2eq} from unburned methane	Mton CO_{2eq}	0.005	0.005	0.005	**0.002**	
- of which CO_{2eq} from HFC	Mton CO_{2eq}	0.0015	0.0011	0.0010	**0.0011**	
GHG Scope 2 emissions – Market based	Mton CO_{2eq}	0.0324	0.0313	0.0308	**0.0328**	

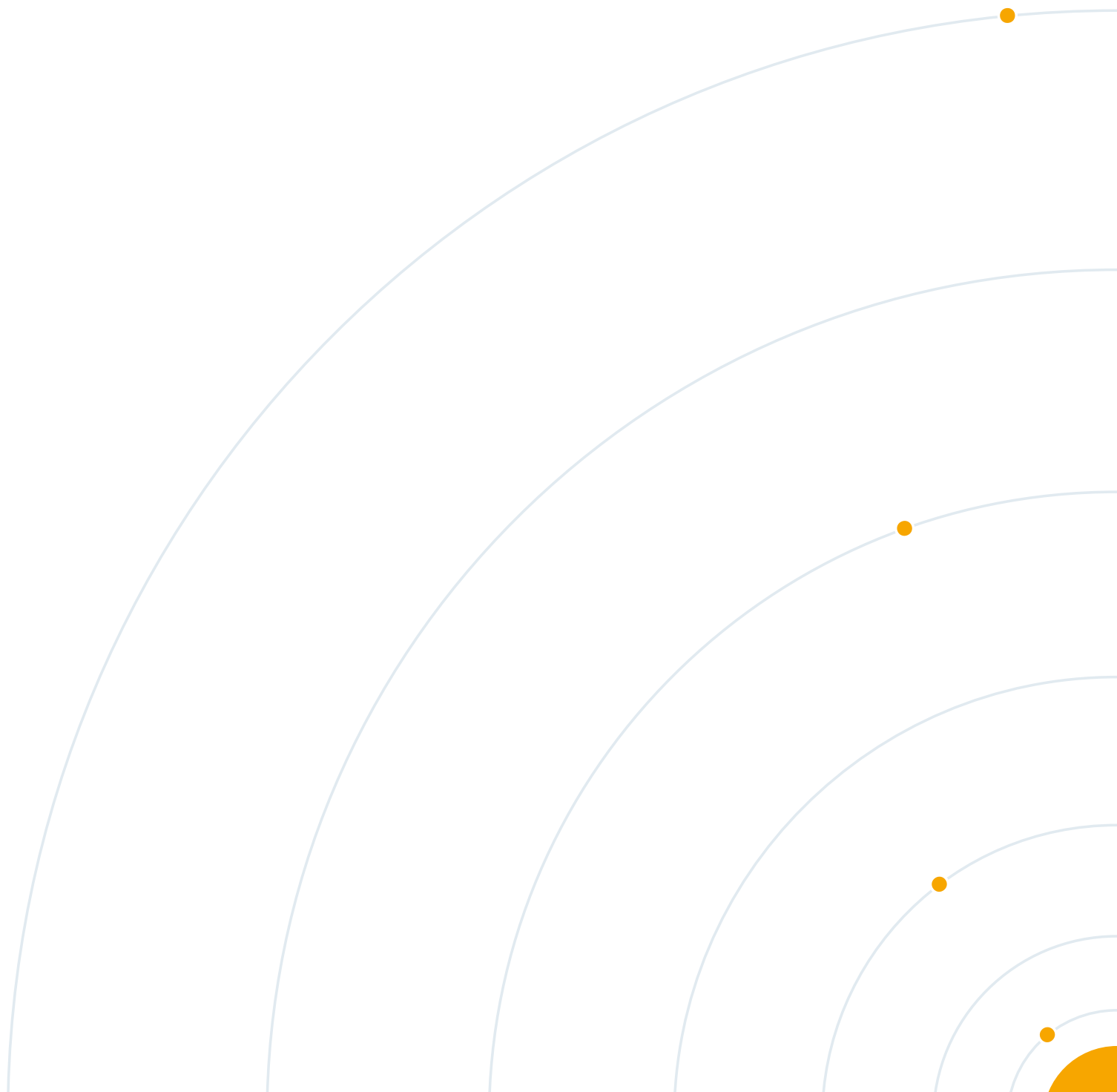
	m.u.	2019	2020	2021	2022	KPI
GHG Scope 3 emissions (*)	Mton CO_{2eq}	0.988	1.034	0.938	**1.338**	
Total natural gas emissions	mln m^3	39.2	35.0	35.4	**27.4**	
Percentage of reduction vs. 2015	%	-21%	-30%	-29%	**-45%**	**KPI 2025**: -55% vs. 2015 (KPI more challenging vs. OGMP 2.0) **KPI 2030**: -65% vs. 2015
Natural gas recovered from maintenance (recovered emissions/ potential point emissions)	%	44%	49%	52%	**57%**	**KPI 2023**: recover at least 40% as an average over the last 5 years
Gas injected into the network	mld m^3	75.37	69.97	75.77	**75.4**	
Natural gas emissions/gas injected into the network (**) (*)	(%)	0.038	0.041	0.037	**0.024**	
Emissions of natural gas stored / gas stored (*)	(%)	0.033	0.035	0.044	**0.036**	
GHG Intensity Index - Scope 1 and 2 vs. network length (*)	tonCO_{2eq} / km	43.5	41.2	44.8	**46.2**	
GHG Intensity Index - Scope 1 and 2 vs. transported gas	tonCO_{2eq} / mld m^3	18.9	19.2	19.4	**20.1**	
Total Methane Intensity Index vs. network length	tonCH_4 / km	0.75	0.67	0.67	**0.52**	

(*) Data for years 2019, 2020 and 2021 are restated in accordance to new GWP.
(**) Data include vent, pneumatic, fugitive and umburned emissions.

TCFD RECOMMENDATIONS CORRESPONDENCE TABLE

TCFD RECOMMENDATIONS	DISCLOSURE
GOVERNANCE **Disclose the organization's governance around climate-related risks and opportunities**	
a) Describe the board's oversight of climate-related risks and opportunities.	"Governance to manage climate change - The Board of Directors"
b) Describe management's role in assessing and managing climate-related risks and opportunities.	"Governance to manage climate change - The role of management"
STRATEGY **Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.**	
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	"The ERM model and the risks and opportunities related to climate change - Risks related to climate change" "The ERM model and the risks and opportunities related to climate change - Opportunities related to climate change"
b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	"The ERM model and the risks and opportunities related to climate change - Risks related to climate change" "The ERM model and the risks and opportunities related to climate change - Opportunities related to climate change"
c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	"The context and reference scenarios" "Snam's strategy - Towards carbon neutrality" "The ERM model and climate change risks and opportunities" "Acting for tomorrow: Snam's committment to fight climate change"
RISK MANAGEMENT **Disclose how the organization identifies, assesses, and manages climate-related risks.**	
a) Describe the organization's processes for identifying and assessing climate-related risks.	"The ERM model and the risks and opportunities related to climate change - The ERM model for centralized risk management"

TCFD RECOMMENDATIONS	DISCLOSURE
b) Describe the organization's processes for managing climate-related risks.	"The ERM model and the risks and opportunities related to climate change - The ERM model for centralized risk management"
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	"The ERM model and the risks and opportunities related to climate change - The ERM model for centralized risk management"
METRICS AND TARGETS **Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.**	
a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	"Acting for tomorrow: Snam's commitment to fight climate change" "Performance indicators"
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	"Acting for tomorrow: Snam's commitment to fight climate change" "Performance indicators"
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	"Acting for tomorrow: Snam's commitment to fight climate change" "Performance indicators"



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