



> Highlights

> Directors' report integrated report

> Consolidated non-financial statement

> Consolidated Financial Statements

# TOWARDS NET ZERO

HEALTH

PARTNERS

INSTRUCTION

[> Highlights](#)[> Directors' report integrated report](#)[> Consolidated non-financial statement](#)[> Consolidated Financial Statements](#)

## **NFS SUSTAINABLE VALUE CREATION: THE SNAM BUSINESS MODEL**

Snam's business model is based on sustainable growth, transparency, the enhancement of talent and diversity, and the protection and social development of local areas, also through the work of Fondazione Snam.

The Group bases its business model on its values, integrating new commitments relative to the energy transition with its traditional core business. This model pursues sustainable success through the creation of long-term value to benefit shareholders, while simultaneously considering the interests of other relevant stakeholders. The business plan and ESG coexist and are interconnected, with the goal of providing a concrete contribution to the achievement of the United Nations Sustainable Development Goals.

The repositioning of the company in recent years and the projects called for in the new plan create the conditions for the Group to take advantage of the opportunities provided by the energy transition, in part thanks to the skills acquired by Snam personnel and the increasing digitalisation of processes.

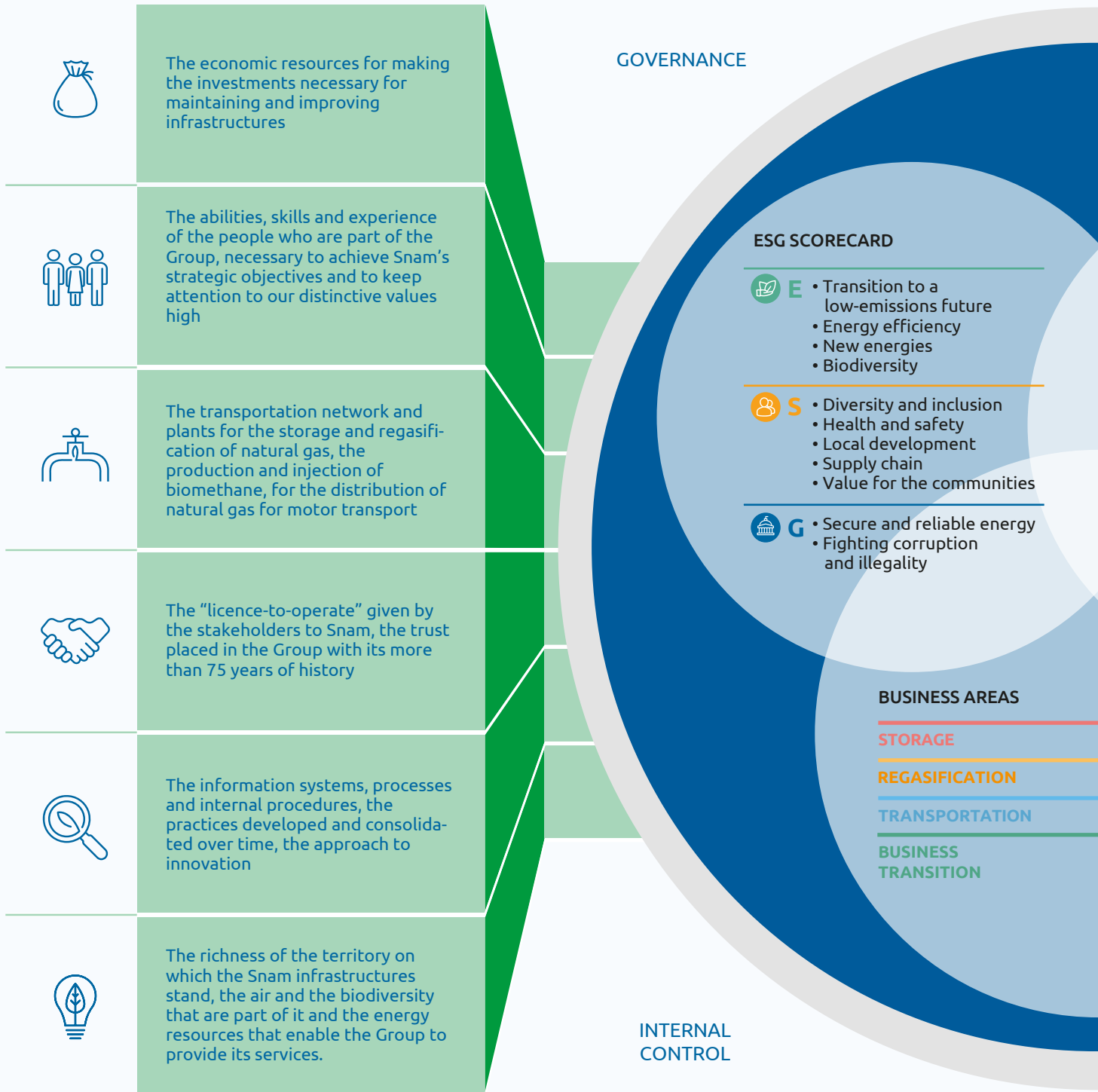


> Highlights

> Directors' report integrated report

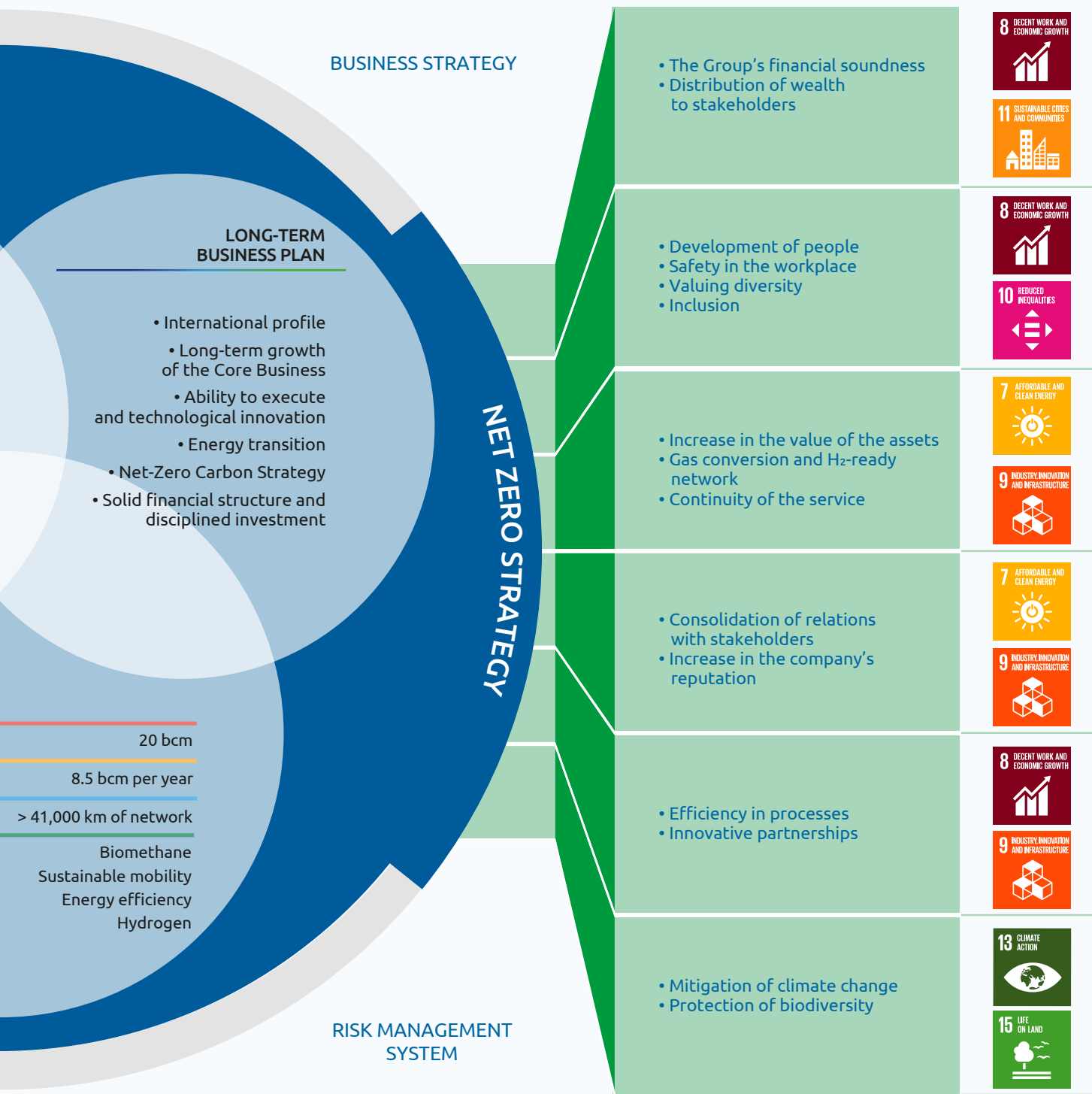
> Consolidated non-financial statement

> Consolidated Financial Statements



**WE CONNECT TO  
BUILD OPPORTUNITIES**

**WE PROMOTE  
SAFETY**



**WE SUPPORT A CHANGING WORLD**
**WE GIVE SHAPE TO THE FUTURE**


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

NFS

# 2020-2024 STRATEGIC PLAN

TCFD

In November 2020 Snam issued its new strategy, Towards Net Zero, which covers the time-period from 2020-2024. Towards Net Zero combines two hearts: **climate strategy and the evolution of its business**, summarised in **six main pillars**, which are illustrated in the subsequent sections. On one hand, Snam plans to reduce its Scope 1 and Scope 2 greenhouse gas emissions, while strengthening cooperation with suppliers and associated companies to reduce Scope 3 emissions and, on the other hand, intends to position itself as a facilitator of a low-carbon economy both domestically and internationally, thanks to its strong core business and new energy transition business.

The objectives established by Snam its the new Strategic Plan represent ambitious challenges and include concrete short, medium and long-term actions that will contribute to achieving **carbon neutrality by 2040**.

The new Plan calls for investments of **7.4 billion euros by 2024**, around 1 billion euros more than the previous Plan, allocated to the various projects, in particular those intended to ensure adjustment of infrastructure to ensure it is hydrogen ready (50% of investments) and those for new energy transition business, for which investments have doubled. In addition to contributing to decarbonisation and energy transition goals, **around 40% of investments comply with the European Commission Taxonomy criteria**, which are close to being finalised.

## The six pillars of Towards Net Zero

### Net-Zero Carbon by 2040 and ESG leader



- Scope 1 and Scope 2 GHG emissions reduction plan
- Collaboration with suppliers and associates to achieve a gradual and significant reduction in their emissions
- New ESG Scorecard

### Long-term growth of the Core Business



- Upgrade of the network with a view to being Hydrogen ready and to inputs of growing percentages of hydrogen
- Conversion of compression stations to dual fuel to facilitate balancing of the network

### Ability to execute and technological innovation



- Construction of the most technologically advanced gas transportation company in the world
- Acquisition of technological advantage in relation to H<sub>2</sub> and H<sub>2</sub>O
- Taking advantage of core skills in similar sectors

### Energy transition



- Internalisation of skills and abilities
- Role of leader in growing markets
- Strengthening of core business assets

### International profile



- Asset portfolio increasingly geographically diversified
- Asset-light approach to enter countries with high potential
- Monetisation of our skills through Snam Global Solutions

### Solid financial structure and disciplined investments



- Maintenance of the current credit parameters
- Stable growth of revenue
- Consistency with the ESG strategy


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)


## NET ZERO CARBON IN 2040 AND ESG LEADER

The ultimate objective of the climate strategy included in the new Strategic Plan is to achieve carbon neutrality by 2040, working above all to reduce Scope 1<sup>3</sup> and Scope 2<sup>4</sup> emissions. Secondly, the strategy calls for establishing cooperative programmes with associated companies and suppliers to take action on Scope 3<sup>5</sup> emissions as well. Further, with the aim of furthering integrating environmental, social and governance issues, Snam has reorganised the sustainability KPIs monitored with an ESG Scorecard.

For more information, please see the dedicated sections on “Net Zero Carbon” and “ESG Scorecard” in this chapter.



## LONG-TERM GROWTH OF THE CORE BUSINESS

Activities called for under the Long-term growth of the core business are mainly intended to improve the Group's core business, taking into account the fundamental role that Snam infrastructure will play in decarbonisation. These projects aim to achieve:

- **infrastructure** that is increasingly **Hydrogen-ready** (H-ready);
- conversion of **power plants to dual fuel**;
- **long-term sustainable growth**.

The Company already benefits from **infrastructure that is 70% hydrogen ready** and intends to continue projects to prepare the network to accept ever increasing percentages of hydrogen. This activity is of fundamental importance for decarbonisation objectives, given that, based on the prospects for green gas development, hydrogen could potentially reach over 25% of the global energy mix by 2050. Additionally, during 2020 specific standards were defined to acquire only H-ready components for the network. Finally, the installation of the first **hybrid turbine able to operate with 10% hydrogen volume** is planned for 2021 in the Istrana power plant (prov. Treviso).

Snam also intends to begin **conversion of compression facilities to dual fuel**, accompanying gas turbochargers with electrocompressors, which will contribute not only to reducing greenhouse gas emissions but also support sector coupling<sup>6</sup>.

To maintain and support long-term sustainable growth, activities for the **gas conversion of Sardinia** will continue, a project already begun which calls for the creation of a virtual pipeline and the first sections of the network, as well as **maintenance and development of regulated business assets** (transportation,

<sup>3</sup> Scope 1 emissions are direct GHG emissions, including carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>) and refer to emissions caused by controlled operations or those held by the Company.

<sup>4</sup> Scope 2 emissions are indirect GHG emissions deriving from electricity, heat and steam imported and consumed by the Company.

<sup>5</sup> All indirect emissions (not included under Scope 2) that derive from the Company's value chain, including upstream and downstream emissions.

<sup>6</sup> The European Commission sees sector coupling as a strategy offering greater flexibility to the energy system, to help achieve decarbonisation in the most economical manner possible (DG ENER (2018) Request for services no. ENER/B2/2018-260 - Potentials of sector coupling for the EU natural gas sector - Assessing regulatory barriers.)


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

storage, regasification), and increasing storage capacity, while replacing around 1,200 km of the transportation network, and **investments to support carbon neutrality**, in particular by creating 245 CNG system connections, plus 50 for biomethane plants and another 100 connections to the network.



## ABILITY TO EXECUTE AND TECHNOLOGICAL INNOVATION

The third pillar includes three main objectives linked to issues of technological development and innovation for the Group, specifically:

- becoming **the most technologically advanced gas transportation company in the world**;
- strengthening its **position in the hydrogen value chain** in part through the use of innovative technologies;
- **taking advantage of core skills in adjacent sectors.**

As demonstrated by its success in carrying out the TAP project, Snam has an excellent capacity to manage infrastructure projects and will continue to develop and make use of this ability, supported by large investments in innovation and digitalisation.

Approximately 500 million euros will be used for remote control projects, the adoption of Internet of Things (IoT)<sup>7</sup> systems, in cooperation with Microsoft, as well as for cloud and edge computing<sup>8</sup>, with the aim of becoming the **most technologically advanced** gas transportation company in the world. IoT and machine learning systems will be fundamental in transmitting, analysing and historicising data in real time, with a capacity at least 100 times greater than that currently available to the Group.

Of particular importance is the kick-off in 2021 of the first future district, the Bologna "Flagship" District, which will be provided with technology able to monitor the Group assets in terms of operating efficiency, security, integrity, and reliability. This includes an evolution from the traditional approach of leak detection and repair (LDAR) to a tool developed in house by Snam, which supports predictive maintenance for the network and offers centralised control over methane emissions. The **LDAR** will also play a fundamental role in the achievement of the Strategic Plan decarbonisation goals, because it makes it possible to manage and reduce methane leaks, consequently reducing emissions of the same.

Additionally, through the acquisition of a significant minority interest in **De Nora** (a global innovator in sustainable energies and water treatment technology, as well as a global technological leader in alkaline electrodes) and the partnership with **ITM** (specialised in membrane electrolyzers), the Group has set itself the objective of **monitoring new technologies and beginning new experiments with hydrogen**. In a wider context, to become a technological leader Snam will

<sup>7</sup> Internet of Things means extending the internet to the world of things and concrete places, allowing them to send and receive data.

<sup>8</sup> Cloud and edge computing are decentralised and distributed IT infrastructure, consisting of micro-data centres, located near the user, which provide remote internet services from smaller distances than those covered by cloud computing


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

also invest in **making full use of its core skills** in similar sectors, to fully take advantage as much as possible of the knowledge and professional expertise it has already acquired over the year in sectors where these can be newly applied.



## ENERGY TRANSITION

Energy transition business represents an important lever for achieving decarbonisation objectives, not only for Snam but for the entire national system. Over the years, the Company has been able to create a **wide and diversified platform of activities** consisting of four fundamental sectors: biomethane, sustainable mobility, energy efficiency and hydrogen. Snam has invested increasing amounts in these areas, going from an initial sum of 200 million euros 2018 to 720 million euros in the 2020-2024 Plan, with an expected contribution of around 150 million euros for annual EBITDA in 2024. Further, thanks to biomethane production, energy efficiency initiatives and sustainable mobility projects, Snam **will prevent the emission of over 600,000 tonnes of CO<sub>2eq</sub>**.

The importance of these businesses in Snam's strategy translates not only economically through investments in the Plan, but can also be seen in the amendments to the Snam Articles of Association, initially proposed in December 2020 and finalised in February 2021. In fact, the Group has added **a clear reference to its purpose, "Energy to inspire the world" and to new businesses**, to reflect Snam's commitment to supporting the energy transition by making use of resources and energy sources compatible with protecting the environment and progressive decarbonisation, as well as adding the pursuit of sustainable success among the purposes of the company's business.

All energy transition business is guided by three main objectives:

- **internalising the skills and knowledge** of other leader companies through cooperation, partnership and agreements
- taking on **a leadership role in growing markets**
- **strengthening core business assets.**

### Biomethane

Since 2017, Snam has invested in biomethane as an alternative energy solution, also through **Snam 4 Environment**, which specialises in biomethane production infrastructure (from organic, agricultural, agro-industrial and animal waste) and in promoting green business, playing a fundamental role in the development of biomethane in Italy.

Snam has called for investments of around 220 million euros by 2024 for biomethane, to create infrastructure and plants with installed capacity of 64 MW, 22 MW more than in the previous plan, as well as to develop a platform to support the growth of the circular economy and industrialisation of agricultural production.

Additionally, some of the investments will be destined for companies active in biomethane production, to **internalise their skills and take advantage of further opportunities for growth**. An example here is the acquisition of 50%


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

of Iniziative Biometano, a company which operates in Italy managing biogas and biomethane plants powered with biomass coming from agriculture.

## Sustainable mobility

Increased use of natural gas and biomethane in the transportation sector, replacing classic fuels such as diesel and petrol, demonstrates the importance of gas relative to sustainable mobility. **Snam 4 Mobility** is the platform created by the Group to provide integrated services in the natural gas “smart green” mobility sector. The Plan calls for investments of around 150 million euros between 2020 and 2024, with the aim of **creating more than 150 new refueling stations by 2024** and extending offerings for heavy vehicles, in parts thanks to the start up of a **new micro-liquefaction plant**, combined with the adaptation of the Panigaglia terminal in Liguria to load tankers for transportation use. Additionally, Snam 4 Mobility will work to develop infrastructure to distribute hydrogen through land transportation: in coming years, **five hydrogen refueling stations will be created in Italy**. Finally, the other main task for Snam 4 Mobility will be promoting the conversion of an ever-increasing number of vehicles from UFG to LNG.

## Energy efficiency

Energy efficiency work represents another important factor in the decarbonisation strategy, to which Snam will dedicate around 200 million euros through **Snam 4 Efficiency** to support energy efficiency in residential, industrial, tertiary and public administration sectors, facilitated by national fiscal incentives, known as “ecobonus” and “sismabonus”. In 2020, Snam 4 Efficiency acquired 100% of **TEP Energy Solution**, specialised in **energy efficiency solutions and carbon footprint assessments for condominiums, companies and public administrations**. Finally, with an eye to internalising additional skills relevant to the sector, in October 2020 Snam finalised the acquisition of 70% of **Mieci S.p.A.** and **Evolve S.p.A.**, thereby establishing a platform with the goal of significantly increasing its presence and market share in the energy efficiency sector. In this sense, in January 2021 CDP acquired a 30% stake in Snam 4 Efficiency share capital, followed by a name change to **Renovit**, resulting in the development of a new platform to promote energy efficiency in condominiums, companies and public administrations and to support sustainable development and the energy transition in Italy.

## Hydrogen

For Snam, hydrogen represents a winning opportunity for decarbonisation, the reason that a large part of the investments in the new Plan are destined for infrastructure H-readiness, and around 150 million euros in 2024 for activities developed by the **Hydrogen** business unit.

The new Strategic Plan also calls for cooperation with Ferrovie dello Stato Italiane and Alstom for the **initial conversions of railway sections from diesel to hydrogen**. The agreement already calls for the conversion of around 13 sections with a total length of approximately 700 km, with the installation of the


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

first fuel cells with a capacity of 45 MW. Snam will also install the fuel cells for its own activities, with a capacity of 5.2 MW.

Finally, through cooperation with other important players in the sector, Snam has been awarded three grants for *Fuel Cells and Hydrogen Joint Undertaking*, which allow access to funds and pilot projects at the European level, while creating partnerships for final implementation.



## INTERNATIONAL PROFILE

The strategic agreements signed with major sector operators throughout the main continental energy corridors and the changes made to redefine its own role within the European infrastructure system have characterised Snam's **international operations** since 2012 and have contributed to transforming the Company from a local asset operator to a strategic partner in the international gas market.

At the international level, Snam's new Strategic Plan call for:

- **growing and diversifying its geographic portfolio;**
- adopting an **asset-light approach** in countries with high growth potential;
- **monetising its know how and skills through Snam Global Solution.**

Through its investees, the Group plans to **take advantage of further opportunities for the energy transition** and to **benefit from growing gas demand in certain key geographic areas, also opting for new uses of gas to replace more polluting fuels**, such as coal and oil. In this light, the Group will not only serve as a facilitator for the energy transition, but above all will serve as an advocate and guide towards decarbonisation, taking advantage of its own know-how and that of Snam Global Solution. In fact, in non-European countries, such as **China** and **India**, where the use of fossil fuels such as coal is still widespread, gas plays a central role in the process of decarbonisation. Additionally, in countries demonstrating interest in decarbonising transportation, Snam Global Solution can offer the Group's experience in CNG and LNG together with the technological skills it has acquired thanks to the Cubogas products.

For the Indian market, in 2020 Snam signed agreements with three major operators (Adani Gas Limited, Greenko and Indian Oil) **for sustainable mobility and hydrogen** and is paying close attention to the decarbonisation process begun by the Indian government, also through additional development of gas infrastructure.

Finally, another main objective for Snam is to **develop services in areas which offer interesting growth opportunities**, for example the **United Arab Emirates**, where agreements were signed with Abu Dhabi National Oil Company (ADNOC) to invest in the country's energy infrastructure. Entry as the sole industrial operator in the consortium that obtained 49% of ADNOC will allow for the development of dialogue with regards to possible cooperative projects for hydrogen and the energy transition.


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)


## SOLID FINANCIAL STRUCTURE AND DISCIPLINED INVESTMENTS

The sixth pillar of the Strategic Plan involves the Group's financial structure and establishes three objectives that Snam is committed to achieving by 2024:

- Maintenance of the **ratio guidelines currently implemented by the rating agencies;**
- **risk adjusted returns exceeding those for Italian regulated assets;**
- investments that are **consistent with the ESG strategy.**

Snam plans to strengthen the efficiency plan launched in the second half of 2016, with over 70 million euros in savings expected by 2022, which has already led to an approximately 20% decline in costs relative to the core area, making it possible to start energy transition business without penalising Group performance.

The plan objectives will be achieved in part thanks to a disciplined approach to the use of capital, supported by a commitment to take advantage of opportunities offered by growth in the sustainable finance market. Activities to **optimise the financial structure** implemented over the last five years have led to a reduction in the average cost of gross debt, which fell from 2.4% in 2016 to an average of 1.2% through the time horizon of the plan (compared to 1.4% in the previous plan), thanks to actions implemented to take full advantage of current favourable market conditions and improve the interest rate and credit spread scenario. Further possible savings could derive from treasury optimisation, as well as further diversifying sources and increasing sustainable finance instruments.

During the Plan, Snam also plans to maintain the ratio between net debt and RAB<sup>9</sup> below 60%; an adjusted Funds from Operation to Net Debt (FFO/Net Debt) ratio above 14% on average over the course of the plan; to maintain a mix between fixed and variable rate debt of 3/4, in line with the previous plan; 3.2 billion euros in syndicate credit facilities, not use at 31 December 2020, and maturing between 2024 and 2025.

With respect to activities associated with **sustainable finance**, Snam intends to increase the percentage of funding available from 40% to 60% over the course of the plan, mainly issuing bonds for which the proceeds are invested in projects ranging from reducing emissions, to increasing use of renewable energies and which make a concrete contribution to achieving the Sustainable Development Goals.

<sup>9</sup> "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.



> Highlights

> Directors' report integrated report

> Consolidated non-financial statement

> Consolidated Financial Statements

For some time now Snam has followed a virtuous path aimed at the continuous development of the sustainable finance market, made concrete in part through participation on dedicated Task Forces and Forums. Additionally, to map and take advantage of the alignment of its own activities with sustainability principles, Snam carried out an initial project aimed at identifying how the investments found in the 2020-2024 Plan align with the SDGs and Taxonomy criteria.

More information can be found in the subsequent section, "Sustainable finance and SDG investments".

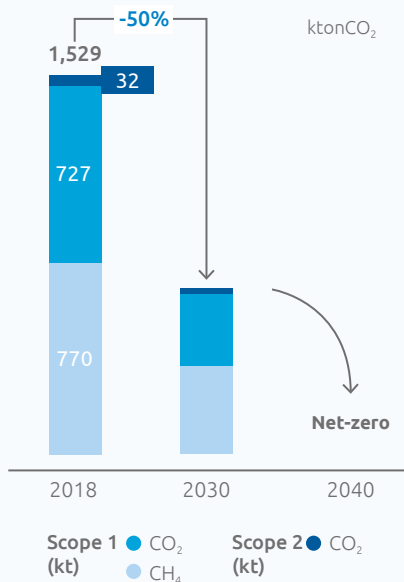




# SNAM'S NET ZERO CARBON STRATEGY

NFS

TCFD



With its Towards Net Zero strategy, Snam put its commitment to decarbonisation at the centre of the 2020-2024 Plan integrating sustainability and ESG issues in an even more significant manner within its strategic choices.

Snam has established ambitious and challenging goals, which will put the Group in a leadership position in achieving carbon neutrality by 2040, in advance with respect to European and domestic objectives and in line with the targets for limiting global warming to 1.5°C, as called for in the Paris Agreement signed in 2015.

In this area, objectives are aimed at reducing:

- Scope 1 direct emissions** through specific actions involving CO<sub>2</sub> (carbon dioxide) and CH<sub>4</sub> (methane) emissions. More specifically, Snam intends to install electrocompressors on 8 compression units, as well as gas turbochargers, increasing the energy efficiency of its assets to reduce CO<sub>2</sub> emissions. Use of the Leak Detection and Repair (LDAR), replacing pneumatic systems and gas recompression, will be fundamental in reducing methane emissions;
- Scope 2 Indirect CO<sub>2</sub> emissions**, relative to which Snam plans to increase consumption of electricity derived from certified renewable sources;

Relative to **other indirect CO<sub>2</sub> emissions (Scope 3)**, Snam plans to strengthen cooperation with its suppliers and associated companies to progressively and significantly reduce emissions throughout the value chain.

## SCOPE 1 AND SCOPE 2 EMISSIONS

Snam has set itself an even more challenging target for **reducing Scope 1 and Scope 2 emissions**, going from -40% to **-50% in 2030** (with respect to 2018), to achieve **carbon neutrality by 2040**.

Over half of these reductions will be achieved through the project to convert stations to dual-fuel: by 2040, **Snam will convert 8 of its stations**, specifically Malborghetto, Messina, Poggio Renatico, Fiume Trieste, Minerbio, Settala and Sergnano by 2030, and the power station of Ripalta by 2040.

The remaining part of the Plan reductions are linked to the Group's commitment to **reduce methane emissions by 45% by 2025, compared to 2015 amounts**, a target in line with the requests made by *Oil and Gas Methane Partnership*<sup>10</sup> (OGMP) 2.0, to which it adhered in November 2020.

<sup>10</sup> The OGMP is an initiative created by the UN Environment Programme (UNEP), which encourages companies to reduce the methane emissions caused by their business.


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

## Snam and the Task Force on Climate-Related Financial Disclosure (TCFD)

Snam's commitment to act as a major player in the energy transition is made concrete realized through more transparent reporting focussing on the issue of fighting climate change. Since 2018, the Company has published a stand-alone document in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD). The recommendations indicated by the Task Force are structured around four thematic areas, representing the fundamental elements of an organisation:

- **Governance:** describes an organisation's governance model in relation to climate-related issues.
- **Strategy:** describes 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:** describes how the organisation identifies, measures, and manages climate-related risks.
- **Metrics and Targets:** describes the metrics and objectives used to measure and manage relevant climate-related risks and opportunities.

The Group's climate objectives are in line with the goals set to contain global warming to within 1.5°C, as established in the Paris Agreement, and call for a 45% reduction in methane emissions by 2025, compared to 2015, a target which is in line with the requests of the Oil and Gas Methane Partnership (OGMP) 2.0.

In defining the Group's objectives, Snam considered scenarios developed in cooperation with Terna

(Document Describing the 2019 Scenarios), preparatory to the creation of transmission and transportation network development plans in the electricity and gas sectors nationally. This study develops joint Snam-Terna energy scenarios showing how technological development together with collaboration and synergies between the electricity and gas industries could be the key for reaching the global emission reduction targets. The scenarios put forward highlight how the European decarbonisation objectives will lead to the increasing use of green gases, such as hydrogen, biomethane and synthetic methane, partly replacing natural gas, not only in thermoelectric power plants, but also in end uses: civil, industrial and transportation.

The Group's strategic and financial planning is closely interconnected with considerations on developments in the reference sector and the role Snam will play in guiding the energy sector's decarbonisation process. More details on the Group's strategy and its resilience with respect to climate change can be found in the document "**Financial Disclosure on Climate Change 2020**", prepared in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures.

Further considerations on Group governance, its risk management process, the risks and opportunities identified, and performance can be found in the relative sections of this document.

To achieve the objective of carbon neutrality by 2040, once the necessary greenhouse gas emission reduction initiatives have been implemented, the Group will compensate for its residual greenhouse gas emissions by supporting **offsetting projects**<sup>11</sup>.

<sup>11</sup> Offsets are discrete reductions in greenhouse gases (GHG) used to compensate for GHG emissions occurring elsewhere. Offsets are calculated with respect to a baseline which represents a hypothetical situation with regards to emissions in the absence of the mitigation (offsetting) project. (The Greenhouse Gas Protocol, *A Corporate Accounting and Reporting Standard – Revised Edition*, 2004)



## SCOPE 3 EMISSIONS

Relative to other Scope 3 indirect emissions, that is all emissions associated with the company's activities coming from sources which the Company does not control or own, throughout the entire value chain, the Group plans to strengthen its cooperation with suppliers and associated companies, to achieve progressive and significant reductions. The Group intends to involve suppliers and them and make them more responsible through the following actions:

- mapping their greenhouse gas emissions;
- requesting that the most important suppliers in terms of procurement complete the **CDP Supply Chain Questionnaire**;
- involving them in awareness-raising projects.

For associated companies, Snam intends to serve as a guide and advocate to improve their carbon footprints through:

- workshops and training programmes to share best practices;
- awareness raising projects aimed at encouraging the reduction of methane leaks, pneumatic emissions and the adoption of electric energy from renewable sources.

### Snam and the CDP Foundation create Arbolia to create new forests in Italian cities

In addition to the emissions avoided thanks to new business projects, **Arbolia**, the new benefit company established by Snam and CDP Foundation, will guarantee absorption of CO<sub>2</sub> thanks to the planting of new trees in Italian cities.

Through Arbolia, the two companies intend to create "a greener, cleaner, healthier and more beautiful Italy", improving ecosystems, promoting biodiversity, making cities more resilient and creating occasions for social and economic development with additional positive effects on air quality and, consequently, quality of life.

The solutions proposed by Arbolia can be summarised in four main points:

- **afforestation and reforestation with trees and bushes** for businesses and citizens in urban and suburban areas, serving as public areas and made available to public administrations and private individuals;
- **care and maintenance for the trees during the first two years** mainly through irrigation, grass cutting and replacement of trees or bushes which did not take root, with respect for biodiversity;

- **carbon footprint analysis services with TEP Energy Solution** intended for companies and public administrations, for use in certification, incentives and offsetting processes associated with forestation activities and CO<sub>2</sub> absorption;
- **direct dialogue with institutional stakeholders and companies** to offer them opportunities to create roots in the local area by creating shared values and promoting virtuous sustainable behaviour.

Thanks to Arbolia, Snam will contribute to the achievement of some important **Sustainable Development Goals**, in particular **SDG 11** to make cities more liveable and sustainable, **SDG 13**, linked to climate protection and **SDG 15** to restore the earth's ecosystem.

Arbolia's first project was developed in December 2020 in Parma, where over two thousand trees were planted in an area of around 20 thousand square metres. The environmental impacts of this initial project are already significant, total absorption of CO<sub>2</sub> per year is estimated at 178 tonnes and 483 kg of fine particles per year.


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

## ESG SCORECARD

The growing importance of non-financial aspects in determining company strategies, the consideration given to ESG issues by investors and the interest all stakeholders have in the company's operating methods have always driven Snam to work to measure the impact its business has on the areas in which it works. In fact, Snam monitors over 140 KPIs relative to ESG aspects, many of which supported by multi-year targets. With the aim of redefining its own priorities for the future, modelling the company culture and improving its non-financial reporting, the Company has further strengthened the process used to define its targets.

Through the **ESG Scorecard**, Snam has again strengthened its business model with an eye to achieving the sustainable development goals of Agenda 2030, creating a scorecard of objectives for 2021-2023, focussed on thirteen ESG areas of import to both the company and the stakeholders. These are three-year objectives and the scorecard will be monitored and reviewed annually. Through this tool, the Group intends to provide the utmost transparency relative to the most important environmental, social and governance aspects, with a process that involves all the relevant functions of the Company and its subsidiaries with an eye to continuous improvement and constant dialogue with stakeholders and the market.



### Environment

The holistic approach adopted by Snam with regards to the environment leads the company to commit itself, beyond the fight against climate change, to protecting habitats and biodiversity, adopting the best practices to protect and support the areas in which its infrastructure is found.

Its environmental commitments can be seen in its goal to reduce natural gas leaks, as well as in all the targets relative to energy efficiency, development of new business, green innovation and protection of biodiversity.



### Social

Employees, local communities and suppliers are stakeholders which are increasingly central to Snam's strategy, because only with their participation is it possible to achieve the challenging strategic objectives the Group has set itself for the coming years. Also in the light of the Covid-19 emergency, the Company has strengthened activities already in place for years, intended to spread a culture that defends individuals in their complexity, protecting mental and physical health and promoting diversity and development in an inclusive environment, as well as activities to improve the quality of life in local communities and to sustainably manage its supply chain. These commitments can be seen in the structure corporate welfare system that meets the needs of Snam employees and their families, in corporate volunteering and community engagement initiatives, carried out in part through cooperation with Fondazione Snam, and in the support offered to the Italian economy and small and medium enterprises (SME), through specific involvement of local suppliers.



### Governance

Legality, integrity, reliability of services and efficiency in network management are the key words that serve as the basis for the actions and projects implemented by Snam, which is committed to creating targets that make its business transparent, responsible and valuable. These objectives take the form of specific actions intended to guarantee infrastructure reliability and service quality are at high levels, to bring ESG issues to decision-making processes and induction sessions for the Board of Directors, and to carry out careful reputation checks to evaluate risks associated with the supply chain, fighting against any active or passive corruption identified.



> Highlights

> Directors' report integrated report

> Consolidated non-financial statement

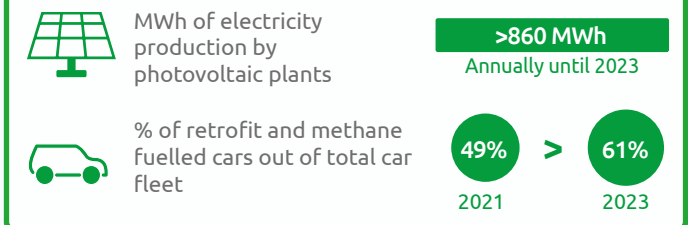
> Consolidated Financial Statements

# ESG SCORECARD 2021-2023

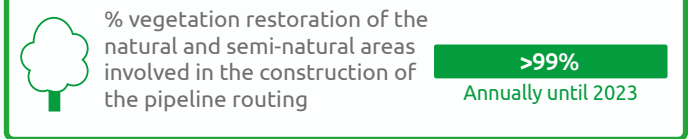


- Environment
- Social
- Governance (including economic aspects)

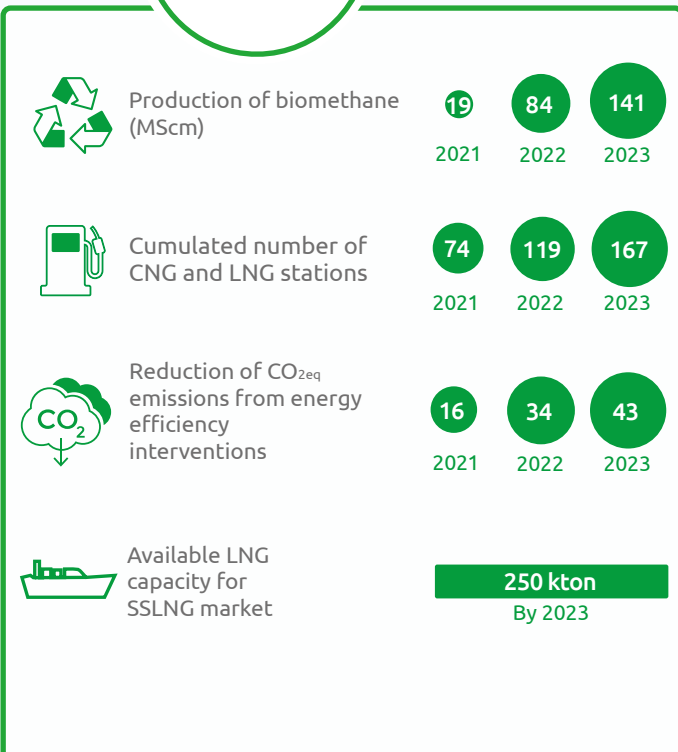
## ENERGY SAVINGS OF OPERATIONAL MANAGEMENT



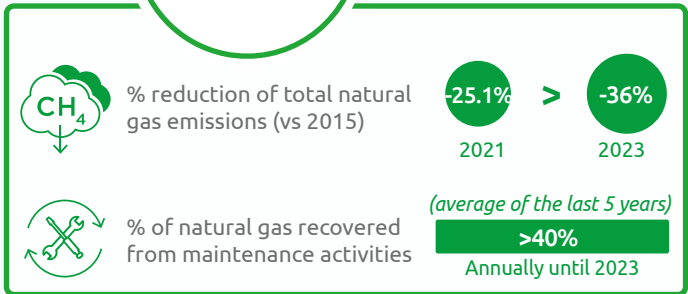
## LAND PROTECTION AND BIODIVERSITY



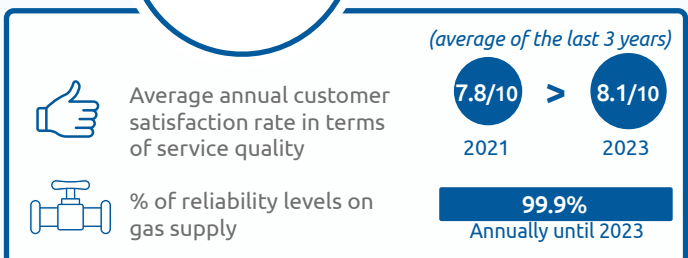
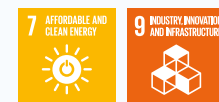
## NEW BUSINESSES - GREEN INNOVATION



## NATURAL GAS EMISSIONS



## INFRASTRUCTURE RELIABILITY

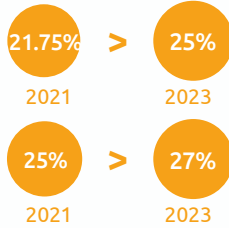


## GENDER DIVERSITY



% of women in executive and middle-management roles

% of women in succession planning (first and second line and key positions)



## SAFETY



IpFG (Combined Frequency and Severity Index)

< AVERAGE last 5 years  
Annually until 2023



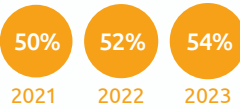
No. of HS reports / No. of total audits performed (external and internal)

< AVERAGE last 5 years  
Annually until 2023

## WELFARE



% of participation in welfare activities



## EMPLOYEE ENGAGEMENT



% employee engagement index



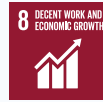
## ENGAGEMENT OF LOCAL COMMUNITIES



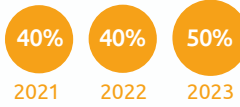
% of employees hours dedicated to Fondazione Snam's initiatives supporting local communities



## RESPONSIBLE SUPPLIERS



% spent on local suppliers (SMEs in Italy) on total procurement



Increase of third sector suppliers in Vendor List



## GOVERNANCE



% of BoD time dedicated to ESG issues in meetings and induction sessions

**AT LEAST 40%**  
Annually until 2023

## ANTI-CORRUPTION



% of third parties on which a reputational check has been carried out

**100%**  
Annually until 2023



## NFS SUSTAINABLE FINANCE AND SDG INVESTMENTS

In recent years, sustainable finance and its related instruments has taken on an increasingly significant role within the global financial landscape. This has given Snam the opportunity to **enhance its own role and work as a sustainable company**, guaranteeing broad access to financial markets at competitive costs, with positive effects on its economic and statement of financial position and reputation. In addition, with the aim of aligning the financing strategy with its sustainability targets and expanding its investor base, in 2018 Snam had already finalised the transformation into syndicated credit lines of 3.2 billion euros into **Sustainable Loans**, introducing environmental, social and governance (ESG) objectives. These objectives were met in 2019 and 2020, meaning Snam could benefit from a reduced interest rate on its Sustainable Loan.

For the 2020-2024 Plan, the Group aims at **increasing the weight of sustainable finance up to 60% of the funding available within the scope of the plan**. To promote this increase, the Euro Commercial Paper programme was renewed and increased from 2 to 2.5 billion euros, involving it in the ESGs that are in line with the Sustainable Loan (obtaining, for the instrument, an ESG rating of EE, assigned by the ESG Ratings company, Standard Ethics).

In recognition of the Group efforts, Snam joined the **Nasdaq Sustainable Bond Network**, a sustainable finance platform managed by Nasdaq, that unites investors, issuers, investment banks and specialist organisations. During 2020, Snam also increased its meetings and relations with **socially responsible investors** who are becoming increasingly important within the financial market. There is a total of 245 investors classified as ESGs within Snam's shareholding, representing 34.1% of the total number of Snam's institutional shareholders at September 2020 (Nasdaq analysis), and 13.8% of the overall number.

Since 2018, Snam has been a member of the **Corporate Forum on Sustainable Finance (CFSF)**. In November 2020, the Forum confirmed the role of sustainable finance as a crucial support in projects with a positive social and environmental impact, but it also highlighted certain challenges for sustainable finance:

- 1 further integration of the sustainability policies with the company's financial strategies;
- 2 working in synergy with the investors to stimulate the development of a more sustainable economy through innovative financial instruments;
- 3 increasing the company's presence in international and Italian forums that contribute to the development of sustainable financial markets;
- 4 actively participating in the definition of regulatory standards and frameworks that govern the sustainable financial instruments;
- 5 collaborating with rating companies to more deeply incorporate the ESG criteria into the assessment of the long-term financial sustainability of companies;
- 6 building on expertise and promote best practices that realise the impact of the strategies applied.

The complementary activities and sustainable financial instruments implemented by Snam over the years contribute to a common objective: **making the Company more transparent, attracting a wider range of investors and highlighting its constant and growing involvement in ESG issues and efforts to achieve SDGs**.


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)











## CLIMATE ACTION AND TRANSITION BONDS ISSUED BY SNAM

In 2019, Snam was one of the first companies in the world to issue a **Climate Action Bond**, with a reference framework dating back to 2018. The aim of the Climate Action Bond was to better align its financial strategy with the Group's sustainability targets, consolidate Snam's role in energy transition within Europe, raise the awareness of investors around their own ESG initiatives and investments and diversify the investor base. The funds obtained with the Climate Action Bond were used to finance and, in part,

refinance the **Eligible Projects** defined in the Climate Action Bond Framework and reported in the table below. The projects cover a broad spectrum of initiatives aimed at reducing emissions or using renewable energy, energy efficiency and protecting the local area and biodiversity.

The bond issued was also certified by **DNV GL** that confirmed the bond's alignment with the suitable categories defined in the framework.

### Eligible Projects of the Climate Action Bond

Eligible Category	Description	SDGs
<b>Carbon &amp; Emission Reduction Projects</b>	Infrastructure, equipment, technology, systems and processes that show a reduction in the use/loss of energy and a reduction in emissions of the industrial structures.	  
<b>Renewable Energy Projects</b>	Development of new biomethane plants and updating of existing biogas plants, in Italy and abroad.	  
<b>Energy Efficiency Projects</b>	Energy efficiency projects for Snam's corporate structures or the supply chain.	  
<b>Green Construction Projects</b>	Development and maintenance of conservation areas, protection of the natural capital and development and maintenance of green areas/buildings.	

In 2020, Snam reconfirmed that it was fully committed to further integrating the Group's sustainability objectives with the company's financial strategy by implementing and issuing two **Transition Bonds**. The first was issued in June for 500 million euros, for a duration of ten years, and the second, issued in Europe, was the first to be issued by a gas transportation utility. The second Transition Bond was issued in November for 600 million euros for a duration of eight years, the longest bond issue with a coupon of 0% issued by an Italian issuer.

The **Eligible Categories** perimeter, already identified in the Climate Action Bond Framework, now includes the new category "Retrofit of gas transmission network", or any activity on the gas network aimed at improving the integration of hydrogen and other low-carbon gases, as defined in the Transition Bond Framework published in June 2020.

This last category was inserted with the intention to align Snam's initiatives with the mitigation criteria identified by the **Taxonomy of the European Commission** on sustainable finance.















In March 2021, as part of the Environmental Finance Bond Awards, Snam's Transition Bond Framework, published in June 2020, was recognised in the Award for Innovation - Use of Proceeds (Green Bond) category, demonstrating the market's recognition of the company's commitment to sustainable finance.

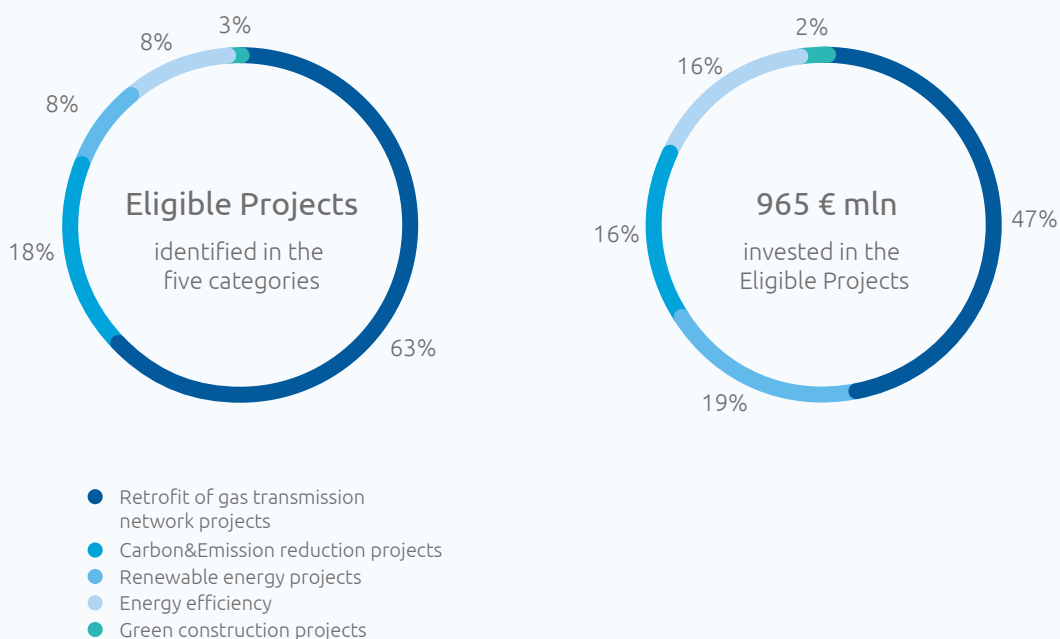
The Transition Bond further expands Snam’s investor base and also establishes the rules around the issue of bond loans aimed at financing environmental sustainability investments, in line with the key role, attributed to renewable gases, of achieving the long-term decarbonisation goals, and with the role that can be assumed by the existing infrastructure facilitating this transition.

The table below reports the list of **Eligible Projects** envisaged by Snam’s Transition Bond.

**Eligible Projects of the Transition Bond**

Eligible Category	Description	SDGs
<b>Carbon &amp; Emission Reduction Projects</b>	Infrastructure, equipment, technology, systems and processes that show a reduction in the use/loss of energy and a reduction in emissions of the industrial structures.	  
<b>Renewable Energy Projects</b>	Acquisition and development of new biomethane plants and updating of existing biogas plants, in Italy and abroad.	  
<b>Energy Efficiency Projects</b>	Energy efficiency projects for Snam’s corporate structures or the supply chain.	  
<b>Green Construction Projects</b>	Development and maintenance of conservation areas, protection of the natural capital and development and maintenance of green areas/buildings.	
<b>Retrofit of gas transmission network</b>	Activities and projects carried out for the purpose of adapting Snam’s gas network and making it ready to transport a growing percentage of hydrogen and/or other low-carbon gases, in keeping with what is indicated in the <b>European Taxonomy</b> .	 

At 31 December 2020, Snam financed eligible projects worth approximately 965 million euros<sup>12</sup> (vs 235 million euros in 2019), equal to approximately 60% of the bond issues concluded by 2020. As shown in the two graphs below, around 47% of the total amount financed was allocated to the fifth category of the current Framework (i.e., Retrofit of gas transmission network), which included more than 60% of all the eligible projects.



12 For more details, you can refer to the “Climate Action and Transition bonds Report” available at the following link: [www.snam.it/export/sites/snam-rp/it/investor-relations/debito\\_credit\\_rating/file/Snam\\_Climate\\_Action\\_and\\_Transition\\_bonds\\_Report\\_2021.pdf](http://www.snam.it/export/sites/snam-rp/it/investor-relations/debito_credit_rating/file/Snam_Climate_Action_and_Transition_bonds_Report_2021.pdf)



> Highlights

> Directors' report integrated report

> Consolidated non-financial statement

> Consolidated Financial Statements

## TEP Energy Solutions and the Nearly Zero Energy buildings

In 2020, TEP Energy Solution implemented the complete restructuring of two residential buildings in Ponte di Legno (BS), hence developing its first “Nearly Zero-Energy Buildings”: buildings that consume very little energy and that are able to generate the amount of energy required directly on-site from renewable sources thanks to the sustainable technologies and materials used to build them.

The intervention is part of a TEP commitment to support the requalification of urban centres and the economic and social development of territories, with the help of local businesses. The project, involving 80 residential units and worth a total of 15 million euros, will allow for the recovery of a structurally compromised area in Valcamonica, a winter and summer tourist destination. The buildings, dating back to the first half of the 1970s, will be rebuilt in compliance with the new seismic

regulations and will undergo further improvements, including: acoustic isolation, eliminating architectural barriers to improve accessibility, renovating surrounding areas and reducing impact on the landscape.

Post-intervention, the buildings will be classified under energy class A4, the highest according to the current regulations in force. For energy saving, external thermal insulation and integrated photovoltaic plants will be installed and the buildings will be connected to the city's district heating network. The interventions will benefit from Sismabonus and Ecobonus tax incentives that will considerably reduce investment costs.

This project was made possible thanks to the CasaMia programme created by TEP to promote the energy efficiency of residential buildings and help protect them from seismic events through tax incentives.


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

## THE CFO TASKFORCE AND INVESTMENTS IN SUPPORT OF SDGS




In 2009, Snam had already made it clear that it was committed to a sustainable business development model, to observing and protecting human and working rights and to protecting the environment by complying with the UN Global Compact, the largest-scale worldwide voluntary initiative on sustainability issues.

For Snam, this commitment also involves the integration and alignment of financial planning procedures with the SDGs, an objective further strengthened through active participation in the **UN Global Compact CFO Taskforce**, of which Snam is a founding member. The initiative involves different actors in the business sector: investors, banks, financial institutions and credit rating agencies to make the

market more efficient, broader and fluid and to promote the flow of capital to activities that contribute significantly to these goals.

In September 2020, the Taskforce launched **the first principles integrated and supported by the United Nations for investment and finance**, developed to guide companies to align their sustainability commitments with corporate financial strategies to generate a significant impact on SDGs. As a member of the CFO Taskforce, Snam is committed to adopting these guidelines, implementing specific KPIs and sharing experiences to help create a transparent and efficient SDG financial market.

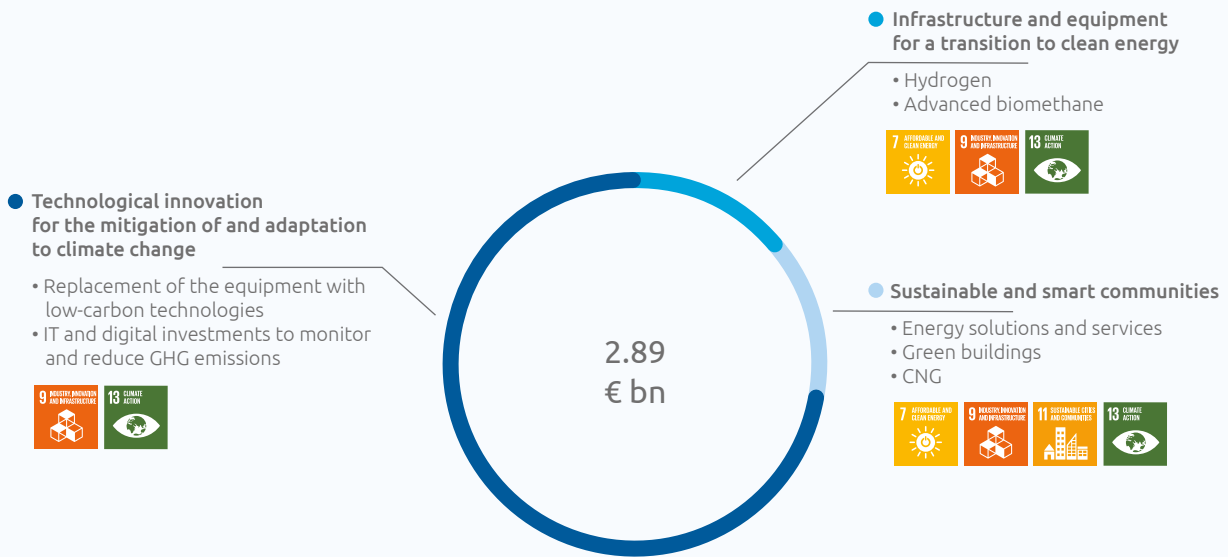
### Snam's actions for the SDGs

Description	SDGs
Increasing the production of energy from renewable resources, including biomethane, and improving the energy efficiency of Snam's operations, avoiding or reducing the impact on the environment, the landscape and the cultural heritage. Snam will achieve this goal through <b>Snam 4 Environment</b> and <b>Snam 4 Efficiency</b> : the former is specialised in the biomethane production infrastructure and in the promotion of green activities, while the second is one the main Italian operator in energy efficiency services for the residential, industrial, and public administration sectors. Both leverage on the technical competencies acquired thanks to businesses which are leaders in the sector, in particular Renerwaste and Iniziative Biometano for the biomethane business and TEP, Miecì, and Evolve for the energy efficiency business.	
Building a more resilient and sustainable infrastructure through investments aimed at making the infrastructure Hydrogen ready and at converting the compression stations into dual fuel, and at digitalising the business, allowing Snam to become the most technologically advanced gas transport company in the world and to guarantee ever increasing security and sustainability of its operational activities.	
Snam has created <b>Snam 4 Mobility</b> , a company dedicated to promoting sustainable mobility using CNG, LNG and renewable gases (bio-CNG and bio-LNG), which has the objective of strengthening the infrastructure for sustainable mobility (CNG/LNG refuelling stations), of expanding the offering for heavy vehicles and of creating the first hydrogen stations in the national territory.	
With the goals of playing a crucial role in the energy transition and with a long-term vision aligned to the purpose "Energy to inspire the world" and to the European objectives, Snam will be one of the first businesses in the Oil & Gas sector to achieve the carbon neutrality by 2040, giving a concrete contribute to decarbonisation of the system through the development of green gas and, in particular, of hydrogen. Snam has created the business unit <b>Hydrogen</b> with the goal of acting in the forefront in a sector with great growth opportunities, the hydrogen one, through collaborations, strategic partnerships, and the launch of new pilot projects.	

In the table, there is a reference to Snam 4 Efficiency, which has been substituted by Renovit in 2021.

At the same time as approving the 2020-2024 Plan, the Group carried out an analysis to confirm the **alignment** between the **SDGs** and the **investments included in the strategic Plan**. This analysis highlighted the SDGs that the Plan would impact most significantly, showing alignment between the investments and the Group's priority ESGs. In particular, while contributing transversally to many of the United Nations SDGs, the 2020-2024 Plan will have an **effective and significant impact on SDGs 7, 13, 9 and 11** (in order of priority).

### Breakdown of the investments aligned with the SDGs in the 2020-2024 Plan



### Snam's strategies to align with the European Taxonomy system

The EU Taxonomy is a classification system integrated throughout Europe and aimed at creating a common language that investors and businesses can use when investing in economic activities with a **substantial positive impact on the climate and the environment**. The Taxonomy links the Paris Agreement with investment practices, clearly defining the types of activities that are consistent with the transition towards a low-emissions economy and adapting to climate change, as well as other environmental targets. This instrument aims to drive the flow of capital to activities able to contribute to a zero greenhouse gas emissions economy by 2050.

The implementation process is still underway: by 2021, we can expect the approval of Delegated Acts that define the technical criteria relative to the first two of six environmental targets established in the Taxonomy - "climate change adaptation" and "climate change mitigation".

To demonstrate its commitment to align with the EU Taxonomy, when defining its investment choices in its strategic Plan, Snam analysed the sum of the investments envisaged (approx. total of 7.4 billion euros in the period 2020-2024) that demonstrated **around 40% alignment** with the technical criteria of the most recent version of the Delegated Acts.

The importance of a growing alignment with the EU Taxonomy is also relevant to Snam's use of sustainable financial instruments under conditions that benefit its investments, with the intention to expand its green investor base at the same time.

Snam is actively monitoring the Taxonomy evolution process with the aim to implement the disclosure indications envisaged.


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

## INNOVATION FOR BUSINESS DEVELOPMENT

Snam's short, medium and long-term goals require huge efforts and investments in innovations, to ensure it always finds the best technical and management solution. To this end, the Group will invest around **2 billion euros** with the aim to enhance its innovative capacity to transform and manage its assets and seize opportunities offered by energy system developments.

These resources will contribute to the evolution of research and development initiatives, digitalisation and innovation to increase the Group's ability to transmit and analyse data in real time. The most important experiment that highlights the benefits of digitalisation on the energy system will be represented by the first "future" district in 2021, also known as the **Bologna 'Flagship' District**. The experiment will make use of the most advanced technologies to measure results in relation to its operational effectiveness, security, integrity and the reliability of assets, to highlight the benefits of digitalisation on the energy system.

Snam's innovation efforts are most prominent in three strategic areas:

- **energy efficiency and reducing emissions within the core business;**
- **digitalisation of the core business;**
- **investment in energy transition.**

### ENERGY EFFICIENCY AND REDUCING EMISSIONS WITHIN THE CORE BUSINESS

Snam invests in activities aimed at energy efficiency and reducing emissions within its core business to maintain a high performance levels and, at the same time, contribute to the fight against climate change. In 2020, Snam:

- implemented an **Asset Control Room** project to improve and innovate asset management and operating;
- continued the experiment on the **Leak Detection and Repair (LDAR)** system, and also completed a related pilot project, aimed at identifying and localising gas leaks along the gas transportation network;
- completed the new **Supervisory Control and Data Acquisition (SCADA)** for the network area (monitored and remote) and the Snam Rete Gas plants.

### DIGITALISATION OF THE CORE BUSINESS

The new Plan includes technological innovation and digital transformation investments worth 500 million euros. To this end, in 2020, Snam:

- introduced a **Digital Asset Model** aimed at representing a digital version of Snam's assets, providing the opportunity to interpret data identified by sensors on-site, in a similar context to the real one. This model will allow for



## Alliance for Sustainability: for the promotion of sustainable and digital growth throughout Italy

In 2020, Snam adopted the **Alliance for Sustainability** initiative, a project carried out in collaboration with **growITup**, an Open Innovation platform created by Cariplo Factory in partnership with Microsoft Italia, with the aim to promote sustainable growth of Italy through digital platforms, in line with the European plans to relaunch the economy.

Alliance for Sustainability involves **strategic collaboration with large corporations, the world of academia and start-ups** to develop new projects, through **open innovation**, able to address climate change and the most pressing environmental challenges and spread green culture, leveraging on **new technological trends** and contributing to the **sustainable development of Italy**.

The Alliance work plan involves meetings with each of the participating companies where environmental requirements are mapped out using **Design Thinking** methods. During a round table discussion, the areas identified will be outlined along with common objectives and synergies between the different companies, in collaboration with start-ups based on environmental issues that will present their solutions. Finally, the **Digital Hackathon** will be carried out, where the ideas proposed, and requirements identified will be brought together through definitive solutions.

new asset management logic to be adopted, including remote management, network alignment simulations, operator support in augmented and virtual reality, as well as reduce the risk of accidents and optimise on-site activities, resulting in reduced emissions;

- an agreement protocol was signed with the aim to integrate and seize opportunities offered by **Cloud and Edge Computing, Artificial Intelligence and Internet of Things (IoT)**. The **Cloud Foundation Programme** will lead to the transformation of Snam's technical architectures through an hybrid and integrated model known as **Hybrid Cloud**, bringing benefits including an increased resilience of services and business continuity, flexibility, quicker activation of new services, scalability of technological infrastructures and innovation acceleration;
- the **videoconference systems renewal process** was completed for all the meeting rooms on the Campus and at Italian regional sites, ensuring full coverage of all the meeting rooms across Italy to date, with nearly 200 areas equipped with the latest generation videoconferencing systems. After **digitalising corporate spaces, Surface HUB2** systems, also known as interactive Microsoft white boards, were installed in around 100 management offices in the first months of 2021;
- continued the **Gas Transportation Network Asset Maintenance System (Smart Gas)** project, a corporate initiative aimed at improving the effectiveness of technical and operational processes related to asset maintenance activities, was continued. In October 2020, the Smart LNG go live was implemented for the maintenance unit, while the project for the prevention and protection implementation and service unit is still being developed. The dematerialisation of the archives in the regional units continued through the eDoc document system, which will be fully integrated into SMART GAS;
- the **Smartness Matrix** was continued, originally initiated as a means to analyse, in a structured way, the requirements of the acquisition processes and the management of data relating to the control and operation of the transportation, storage, and regasification assets, to increase their effectiveness levels and identify the best supporting technologies of the whole remote-controlled process;
- research into plant system solutions were continued for the creation of the **SmartPipeline**, with the identification and installation of new digital functional and diagnostic instruments used to make the gas transportation network even smarter. This project was also extended to the **SmartPlant** initiative launched in 2020;
- the **IoT Foundation** programme was continued with the aim to modernise technological components to support systems that monitor and control, in real time, the Group's network and plants;
- an initial project to support the control room was developed, based on the use of **Artificial Intelligence (AI) algorithms**.



## MANAGING CYBERSECURITY TO GUARANTEE IT SECURITY

Business development, investments in digitalisation and the implementation of innovative solutions all require constant maintenance of cybernetic security systems, also known as **cybersecurity**. Snam's approach to cybersecurity is **integrated** and based on a defined framework that complies with the standard principles on the subject: constant attention to the regulatory obligations and reference standards ensure that the Company complies with **ISO/IEC 27001** provisions (Information Security Management Systems) and **ISO 22301** (Business Continuity Management Systems).

In the cybersecurity system, all the domains are managed under the same operations system, through a **Cybersecurity Incident Management** model applied by the **Security Incident Response Team** that prevents, monitors and addresses remediation interventions and timely escalation plans to mitigate the most modern cyber threats that could compromise the confidentiality, integrity and availability of information.

In 2020, despite the changes to normal work practices due to the Covid-19 pandemic, the Security Incident Response Team was able to operate without interruptions, guaranteeing high levels of cyber security. All of this was possible thanks to the experience gained during recent years in relation to remote working, leading to risk analyses and the adoption of security solutions suitable for safeguarding corporate interests, also while implementing this way of working.

The **human factor** is also an important element which contributes to cybersecurity: therefore, Snam promotes employee awareness raising actions through, for example, "White Phishing" campaigns or simulating fraudulent emails, aimed at identifying the company's most vulnerable areas.

Cybersecurity is not only an internal issue, it also involves customers and the entire supply chain. Snam established an **Ethics and Integrity Agreement** with the latter that includes cybersecurity issues, with particular focus on the transparency of incidents and defence procedures in case of problems.

## ENERGY TRANSITION INVESTMENTS

In 2020, with the view to use corporate infrastructure to promote and facilitate energy transition, Snam continued and initiated various research aimed at adapting its **network for the transportation of mixed natural gas and hydrogen (H2)**. In particular, the Group:

- initiated **tests**, in collaboration with suppliers, **on gas turbines for compression plants** to validate the supply with mixed natural gas and hydrogen with 10% variable hydrogen;
- issued **internal regulations** to create a hydrogen-ready infrastructure by building new pipelines and adjusting the existing ones;
- joined **research groups**, specifically the European Gas Research Group, and collaborated with other European natural gas transportation companies to


[> Highlights](#)
[> Directors' report integrated report](#)
[> Consolidated non-financial statement](#)
[> Consolidated Financial Statements](#)

detect and measure the natural gas emissions from the gas transportation system, evaluating the state of the art and, consequently, selecting the most useful instruments in defining a testing programme for carrying out measurements on-site;

- participated in **Joint Industry Projects** to research the effects of hydrogen on gas measurement systems, also through specific tests carried out;
- continued the **Power 2 Gas** initiative, a process through which the electricity produced by renewable sources that is surplus to immediate consumption is transformed into hydrogen to be injected directly into the network or used for the production of synthetic methane (SINGAS). To this end, a feasibility study was carried out and basic engineering activities were instituted for the creation of a P2H pilot plant;
- the **Absorbed Natural Gas (ANG)** initiative was continued for the storage of natural gas in tanks containing a porous sorbent, allowing for larger quantities of natural gas to be stored than would be stored in an empty tank of the same volume;
- the Group joined the **European Pipeline Research Group (EPRG)**, an association that carries out research on pipelines used by the most important companies in the European gas transportation and pipeline manufacturing sectors. EPRG manages projects, divided into **Design, Material and Corrosion**, aimed at constantly improving the knowledge and management of the integrity of gas pipelines during their life cycle (pipe manufacturing, pipeline construction and operation). During 2020, EPRG initiated a series of projects to research the behaviour of **steel**, used in existing pipelines, **when introduced to hydrogen blends**.

## Digital management of the pandemic

To address the pandemic, Snam implemented a series of interventions to expand, on large scale, and consolidate the new ways of working that were already used, for some time, by the company, such as smart working.

Smart working involves connecting to company resources remotely and adopting secure technological solutions that guarantee this connection, and using platforms to carry out calls, message exchanges and, most importantly, virtual meetings that involve multiple users. Of all these aspects, the most complicated was the mass distribution of the required technological equipment to users. A total of **889 smart working kits** (monitor and keyboard) and **147 headsets, 300 smartphones and 605 data SIM cards** were distributed, **178 Pcs were assigned/replaced and 479 tokens** were provided for remote access to the Snam network.