



> Highlights

> Directors' report integrated report

> Consolidated non-financial statement

> Consolidated Financial Statements

RISK MANAGEMENT





NFS

TCFD

MANAGEMENT OF RISKS AND OPPORTUNITIES

As outlined in the previous section, Snam places the Enterprise Risk Management (ERM) function at the second level of the SCIGR, which corresponds to monitoring risks and the adequacy of controls. ERM reporting directly to the General Counsel, which performs a fundamental function in the context of integrated corporate risk management for all Group companies. The main objective of the ERM model, which works in line with the recommendations of the CoSO framework and the new 2020 Corporate Governance Code, as well as international best practices, is to identify risks using standardised, group-wide policies, so as to identify priority events and ensure their consolidation and reporting. The risk is defined as an effect of the uncertainty on the targets of the Strategic Plan and can be negative or positive in scope. The results of the risk and opportunity assessment and monitoring activities and the related mitigation measures are presented regularly to the Control,

Risk and Related-Party Transactions Committee, the Board of Statutory Auditors, the Supervisory Body and the Board of Directors of Snam. In this context, the ERM unit also carries out awareness-raising and training activities for executive and non-executive directors with regard to the applied risk management methodologies and the evolution of Snam's ERM model.

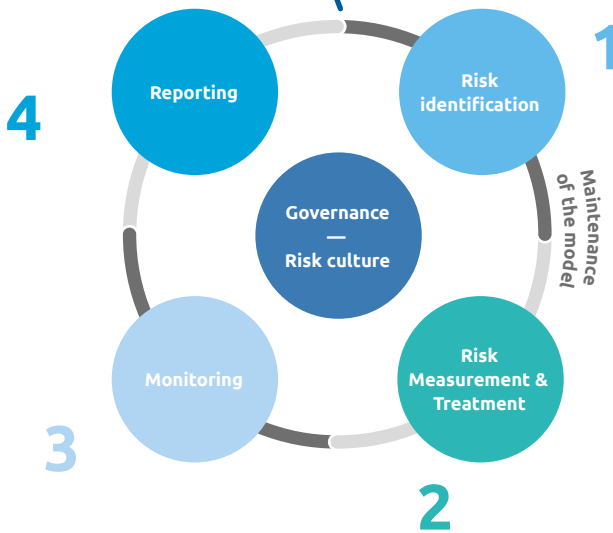
The results are also shared with: the Internal Audit department, which uses them when preparing audit plans; the Strategic Planning department, which assesses coherence with the risk assessments and analyses of the Strategic Plan; the Sustainability department, to support planning activities and to define strategies for managing ESG themes that are relevant to the Group.

Periodic reporting on the results of the risk identification, assessment and monitoring activities. The purpose of periodic reporting is to **report to the company's Top Management, the Control bodies and any other significant stakeholders** the information collected in the previous stages, namely: **main risks** to which the Company is exposed, **measures** identified, monitoring **indicators**, changes that may impact the business in the future, main **opportunities**.

Monitoring activity on the evolution of the single risks and opportunities (and/or of the entire risk register) on the basis of the **stage of progress of the management interventions/actions** associated with the risks/opportunities and the **trend of the risk indicators**.

Towards Net Zero strategy

Business plan



Identification of risk events related to business processes and external risk factors that could affect the achievement of company targets by **Staff** and **Business Managers**, responsible for the implementation of initiatives aimed at the effective oversight of risks, and **specific analyses of the operational processes of every Company and of the corporate Strategic Plan**. The events are periodically reviewed, also in the light of the growing significance of **new business development areas**, in order to ensure correct oversight of risks and opportunities related to them.

Assessment and prioritisation of each event in terms of probability of occurrence and impact, negative (risks) or positive (opportunities). The **probability** is determined on the basis of a scale from 1 (remote) to 4 (highly probable); the **impact**, measured on a scale from 1 (low) to 4 (significant), is assessed according to **qualitative**

(industrial/business, asset, reputational, legal, market, health and safety and environment) or **quantitative** (economic, financial) dimensions. The **prioritisation** of the risks, a combination of the assessment of probability and impact expressed by risk owners (first reports of the CEO) and risk specialists, is represented on

4 levels (low, medium, high and critical, for risks; light, moderate, good and excellent, for opportunities). Furthermore, the event management strategy (monitoring and management, mitigation, transfer) is defined and the actions or specific interventions are identified.



- Operational impact
- Specialist impact

The wide-ranging nature of its impact measurement is a distinctive feature of Snam’s ERM model. Indeed, every event is assessed in relation to eight types of impact, some of which are determined by risk owners (operational impacts: Economic, Industrial/Business, Asset), others by specialist departments (impacts: Financial, Legal/ Compliance/Governance, Reputational, HS/Environment, Market). Lastly, in addition to the Governance and Environment impacts, the Social impact has been defined in connection with the continuous and increasing integration of ESG aspects within the ERM framework and will be incorporated into the model in 2021. Thus, risk is assessed from different perspectives and risk prioritisation is defined by combining the measurement of the impacts and the probability related to them. The opportunities are identified in a similar way to risks, that is operational impacts are determined by risk owners and the other impacts by specialist departments. With particular reference to the specialised impact in terms of health, safety and the environment (HSE), the environment component makes it possible to incorporate aspects related to the environment and climate change associated with the identified risks and opportunities and, therefore, to determine their materiality based on the significance of their - positive or negative - contribution to managing climate change and environmental aspects related to the area in which Snam operates.

Risks identified via the ERM process are classified as financial, operational, legal and non-compliance, and strategic, including risks related to ESG issues that these may contain.

In 2020, the mapping of risks/ opportunities was updated through the RACI IT platform under the scope of the Integrated Risk Assurance and Compliance model, aimed at coordinating and integrating second-level control information flows with a synergistic approach, intended to achieve the maximum rationalisation and overall efficiency of the SCIGR. At the end of 2020, approximately 141 enterprise risks were mapped, 31 of them distributed across all corporate processes.


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

ELEMENTS OF RISK AND UNCERTAINTY

NFS

TCFD

This paragraph illustrates the main elements of uncertainty featured in the ordinary management of Snam's operations. The risks identified are broken down into financial and non-financial risks. The latter are classified in the following categories:

- Strategic
- Legal and non-compliance
- Operating

Moreover, the disclosure below takes into account the impacts of Covid-19, set out in a specific paragraph of this section. Financial risks are illustrated in Note 26, "Financial risk management", of the Notes to the consolidated financial statements.

RISKS AND UNCERTAINTIES ARISING FROM THE COVID-19 EMERGENCY

The evolution of the pandemic linked to the spread of SARS-CoV-19, if not adequately contained, may continue to have significant health, social and economic consequences worldwide.

Even with the lockdown measures in place, considerable risks remain, both from an economic and financial point of view and for people's health. In addition to the worsening global macroeconomic scenario and the risk of deterioration in the credit profile of a considerable number of countries (including Italy), the risk of slowdowns in many commercial activities persists due to negative impacts on supply chains, commodity prices, flows and capital demand.

There is also significant uncertainty in financial markets both nationally and internationally with potential impacts on the business environment.

Snam, which has taken protective measures since February 2020, has taken all the necessary initiatives to protect the safety of its people, both in compliance with the lock-down measures and by taking further precautions. In particular, the company has set up an inter-functional team to manage the situation, in constant contact with the Civil Protection, with two fundamental objectives: the health and safety of its people and the continuity of the essential energy security service for the country.

As early as February 2020, Snam already ordered, as a precautionary measure, smart-working for workers whose activities did not require physical presence in the workplace, without prejudice to the necessary supervision

of operational activities in the area and those relating to the dispatching of San Donato Milanese, the heart of Snam's infrastructure.

With the gradual resumption of Snam's activities, in line with the indications and provisions of the competent authorities, criteria and measures aimed at protecting the health and safety of workers in the workplace have been defined as a priority. These criteria and measures are updated according to the indications that are progressively communicated by the Institutions and Health Authorities, as well as according to the results of the monitoring of the measures adopted and the health status of the workers carried out by the competent figures. Starting from April, on-site work gradually resumed, with all the appropriate precautionary measures being adopted, and almost all the work fronts were gradually reinstated.

After a slow-down in the summer months, the infection curve began to rise again in various countries, particularly in Europe.

Therefore, at present the company is not able to reliably calculate the impact of Covid-19 on the targets for 2021 and future years.

However, based on the information available today, the company expects a limited impact relative to its targets in 2021. Any additional further impacts on economic/financial performance and on the Group's equity situation, as well as on business development plans, will be evaluated in the light of the evolution and duration of the pandemic.


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

The same considerations apply in respect of any potential effects on the development initiatives and suppliers or customers deriving from the slow-down to business and the current macroeconomic context consequent to the international reach of the pandemic, that cannot yet be

assessed. The same for the assets held by the Snam Group outside Italy, in particular in France, Austria, Greece, Albania and the United Kingdom.

RISKS AND UNCERTAINTIES ARISING FROM SNAM'S ORDINARY OPERATIONS

The descriptions of the risk categories are provided below. For each risk category, events related to the ESG (Environmental, Social and Governance) areas that are relevant to Snam are illustrated in table form, with an indication of the main management methods adopted by the Group.

The indication of the capital assets on which the identified risks may have an impact also provides a better understanding of how the risks may impact the Group's ability to preserve and create value over time.

Strategic risks

Regulatory and legislative risk

Regulatory and legislative risk for Snam is linked to the regulation of activities in the gas sector. The decisions of the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) and the National Regulatory Authorities of the countries in which the foreign subsidiaries operate, European and national regulations and, more generally, the change in the regulatory reference framework, could have a significant impact on the operations, results and financial stability of the Company.

It is not possible to foresee the effect that future changes in legislative and fiscal policies could have on Snam's business and on the industrial sector in which it operates.

Considering the specific nature of its business and the context in which Snam operates, changes to the regulatory context regarding the criteria for determining reference tariffs are particularly significant.

Macroeconomic and geo-political risk

Because of the specific nature of the business in which Snam operates, there are also **risks associated to political, social and economic instability in natural gas supplier countries**, mainly related to the gas transportation sector. A large part of the natural gas transported in the Italian national transportation network is imported or moved through countries in the MENA area (Middle East and North Africa, particularly Algeria, Tunisia, Libya and, in terms of the TANAP-TAP, Turkey along with the states bordering the Eastern Mediterranean) and in the former Soviet bloc (Russian Federation, Ukraine, Azerbaijan and Georgia), nations subject to political, social and economic instability which could evolve into potential crisis scenarios in the future.

socio-political and ethno-sectarian tensions; disorder and unrest; inadequate legislation on insolvency and creditor protection; limits on investment and the import and export of goods and services; introduction of and increases in taxes and excises; forced renegotiation of contracts; nationalisation of assets; changes in trade policies and monetary restrictions.

If a shipper using the transportation service via Snam's networks cannot procure the transportation of natural gas from/or through the aforementioned countries because of said adverse conditions, or in any way suffers from said adverse conditions, to an extent such so as to determine or incentivise the consequential inability to fulfil contractual obligations towards Snam, this could have negative effects on the Snam Group's operations, results, balance sheet and cash flow.

In particular, the import and transit of natural gas from/ and through these countries are subject to an extensive set of risks, including: terrorism and common crime, changes in political-institutional balances; armed conflict,

In addition, Snam is exposed to macro-economic risks


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

deriving from relocation or tension on financial markets or situations deriving from exogenous phenomena, which

Risk of climate change

The achievement of global climate objectives will lead to significant investments in decarbonisation of the energy sector over the next thirty years. In recent years, Snam has repositioned itself to benefit from new mega-trends of the energy transition, thanks to infrastructure that will be crucial for achieving decarbonisation targets, to its presence in energy transition business, to international growth and thanks to a disciplined approach to investments.

Thus Snam is committed to achieving carbon neutrality by 2040, with an intermediate target of reducing Scope 1 and 2 emissions by 50% by 2030 compared to 2018, in line with the target of containing global warming to within 1.5°C set by the Paris Agreement adopted during the Climate Change Conference (COP 21). This objective is also consistent with the UNEP (UN Environment Programme) objectives of reducing CO₂ emissions, with which a protocol has been signed.

With regard to the **risks associated with the emissions market**, in field of the application of the European Union directives concerning the sale of permits relating to carbon dioxide emissions and the rules on controlling emissions of certain atmospheric pollutants, with the start of the fourth regulatory period (2021-2030) of the European Emissions Trading System (EU - ETS), the updating of the sector regulations has confirmed a constant reduction of the quotas on emissions released free of charge. The allowances will be assigned to each plant on a gradually decreasing basis, so they will no longer be constant, and will also depend on the actual functionality of the plants. The allowances assigned free of charge to Group plants no longer suffice to comply with the regulatory conformity obligations relative to ETS mechanisms, hence Snam will procure the additional allowances required on the market.

By Resolution 114/209/R/gas of 28 March 2019, the ARERA defined the regulatory criteria for the fifth regulatory period (2020-2023) of the natural gas transportation and metering service, providing, among other things, for

Commodity risk associated with changes in the price of gas

Through resolution no. 114/2019/R/gas, under the scope of the process for revising the criteria for calculating the

could have an impact on liquidity and access to financial markets.

the recognition of costs related to the Emission Trading System (ETS). Resolutions No. 419/2019/R/gas and No. 474/2019/R/gas also introduced the recognition of ETS-related costs for the storage service (regulatory period 2020-2025) and the regasification service (2020-2023).

The climate change scenarios could cause a change in the choice of energy mixes in various European countries and in the behaviour of the population and could have an impact on the demand for natural gas (and volumes transported), which, on the one hand, could benefit from its greater sustainability compared with other fossil fuels in the short/medium and represent a bridge toward the complete decarbonisation of certain sectors, while on the other policies and individual choices could lead to a gradual decrease in consumption with a resulting impact on the use of infrastructure. Additionally, the tightening of decarbonisation targets could influence the development of the use of alternatives to gas, thereby favouring a greater penetration of low-carbon renewable gases (green hydrogen, blue hydrogen, biomethane, synthetic methane) and the growth of new businesses.

Climate change could also increase the severity of extreme weather events (floods, droughts, extreme temperature fluctuations), worsening natural and hydro-geological conditions in some areas with a possible impact on the quality and continuity of the service provided by Snam as well as on Italian and European gas demand. With reference to the effects of the change in the gas demand on the balance sheet, income statement and financial position of the Snam Group, see next paragraph "Market risk".

Lastly, Snam has signed the Methane Guiding Principles, which commit the company to further reducing methane emissions deriving from its activities in natural gas infrastructure. In adhering to these principles, Snam has also committed to encouraging other players across the entire gas supply chain – from the producer to end consumer – to pursue the same objective.

revenues recognised for the natural gas transportation and metering service for the fifth regulatory period


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

(2020-2023), the criteria for recognising Unaccounted For Gas (UFG) were also defined. On the basis of these criteria, from 2020, the recognition of quantities of fuel gas, network leaks and UFG will take place in monetary terms instead of recognition in kind by shippers. However, the change in the price of natural gas will continue not to represent a significant risk factor for Snam, since there is a hedging mechanism for the risk associated with differences between the price recognised for fuel gas, network leaks and UFG volumes and the effective procurement price. With reference to the quantities recognised, said resolution confirmed the current criterion relative to fuel gas and network leaks, whereas for UFG, the level admitted will be updated once a year and will equal the average of the quantities effectively recorded in the last four years available.

In July 2020, with resolution no. 291/2020/R/gas, it concluded its investigation, recognising an additional volume of UFG for the years 2018-2019 totalling 182 million cubic metres, equal to a total value of about 42 million euros, which will be recognised, net of the amount already received on account for the year 2018, by the CSEA. In addition, it started a procedure, which concluded at the end of 2020 with the publication on 22 December

Market risk

With reference to the **risk associated with gas demand**, based on the tariff system currently applied by ARERA to natural gas transportation activities, Snam's revenue, via the directly controlled transport companies, is partly correlated to volumes withdrawn. The ARERA, however, confirmed for the fifth regulatory period (2020-2023), with resolution no. 114/2019/R/gas, the guarantee mechanism with respect to the share of revenues related to volumes withdrawn already introduced in the fourth regulatory period on transported volumes. This mechanism provides for the reconciliation of major or minor revenues, exceeding $\pm 4\%$ of the reference revenues related to the volumes withdrawn. Under this mechanism, approximately 99.5% of total revenues from transportation activities are guaranteed.

Based on the tariff system currently applied by the ARERA to natural gas storage activities, Snam's revenues, via Stogit, related to infrastructure usage. However, the ARERA has introduced a mechanism to guarantee reference revenue that allows companies to cover a significant portion of revenues recorded. Until the fourth regulatory period (2015-2019), the minimum guaranteed

2020 of the 569/2020/R/gas resolution, to refine the UFG recognition criteria for the fifth regulatory period (2020-2023), aimed at strengthening the consistency of the mechanism's operation and its stability, providing that the incentive of the mechanism is in any case determined on the basis of predefined unit fees proportionate to the remuneration of the metering service, rather than the price of gas. This change results in a substantial reduction risk compared to the potential impacts of the original provision.

Specifically, the Authority, while keeping the current criterion for recognising and valuing UFG quantities for tariff purposes and the functioning of the neutrality mechanism set forth in the IBT (Integrated Balance Text), which regulate the balance of gas systems within the Nation grid, in terms of recognised value, introduced an incentive mechanism based on the difference between the recognised UFG and the actual amount for the same year.

Generally speaking, the change in the regulatory framework with regard to the recognition of natural gas quantities to cover fuel gas, network leaks and UFG could have negative effects on the Snam Group's operations, result balance sheet and cash flow.

level of recognised revenues was approximately 97%, while for the fifth regulatory period (2020-2025) resolution no. 419/2019/R/gas extended the level of guarantee to all recognised revenues (100%). The same resolution also introduced an enhanced incentive mechanism (defined by subsequent resolution no. 232/2020/R/gas) with voluntary participation that provides for an increase in profit-sharing of revenues from short-term services from 50% to 75% against a reduction in the portion of recognised revenue subject to a hedging factor.

Finally, with reference to the tariff regulation criteria for the LNG regasification service for the fifth regulatory period (2020-2023), resolution no. 474/2019/R/gas confirmed the mechanism to cover reference revenues at a guaranteed minimum level of 64%.





In general, the change to the regulatory framework in force could have negative effects on the Snam Group's operations, results, balance sheet and cash flow.

Abroad, protection from market risk is offered by the French and Greek regulatory authorities (Terēga') and


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

(DESFA), from the TAP and Austria long-term contracts (different expiry dates for TAG and Gas Connect from 2023) and for the ADNOC Gas Pipeline (20 years tariff-based). In Austria and the United Kingdom (Interconnector UK) regulation does not guarantee hedging for the volume risk.

Strategic Risks

Description	Related material topics	Mitigation actions	Impact on capital
REGULATORY AND LEGISLATIVE RISK			
Regulatory framework in Italy and in the countries of interest with penalising parameters, specifically as regards the criteria for determining tariffs	<ul style="list-style-type: none"> Relations with authorities and quality of services 	<p>Maintaining a continuous and constructive dialogue with the regulator that contributes to the definition of a clear, transparent and stable framework to encourage the sustainable development of the gas system</p> <hr/> <p>Monitoring consultation processes in a direct and/or indirect manner</p> <hr/> <p>Preparation and transmission of documents containing company positions and/or proposals regarding the definition of the regulatory framework</p>	 
Significant change in legislation and/or case law		<p>Continuous regulatory oversight with monitoring of the evolution of laws and rulings, analysis of new developments, and the dissemination of information and insights to business and commercial departments</p>	
MACROECONOMIC AND GEOPOLITICAL RISK			
Political, social and economic instability in natural gas supply countries	<ul style="list-style-type: none"> Relations with authorities and quality of services 	<p>Continuous monitoring of the political, social and macroeconomic framework</p> <hr/> <p>Maintaining relationships with the Authorities and Institutions responsible for managing crises in high-risk markets</p> <hr/> <p>Monitoring consultation processes in a direct and/or indirect manner</p> <hr/> <p>Preparation and transmission of documents containing company positions and/or proposals regarding the definition of the regulatory framework</p> <hr/> <p>Continuous regulatory oversight with monitoring of the evolution of laws and rulings, analysis of new developments, and the dissemination of information and insights to business and commercial departments</p>	 
Significant change in legislation and/or case law			



> Highlights



> Directors' report integrated report

> Consolidated non-financial statement





> Consolidated Financial Statements

Strategic Risks

Description	Related material topics	Mitigation actions	Impact on capital
TCFD CLIMATE CHANGE RISKS - TRANSITION RISKS			
<p>Political and legal risks Tightening of the emerging regulatory framework</p>	<ul style="list-style-type: none"> Green Business Innovation Relations with authorities and quality of services 	<p>Regular monitoring of energy consumption and updating consumption forecasts for plants subject to ETS</p> <hr/> <p>Transfer of quotas between Snam companies to increase the energy efficiency of plants</p> <hr/> <p>Identification of ambitious emission reduction targets (-50% by 2030 vs 2018 per CO₂ and -45% by 2025 vs 2015 for CH₄), culminating in the achievement of carbon neutrality by 2040</p> <hr/> <p>Development and improvement of the efficiency of gas infrastructures, in order to foster the use of natural gas and biomethane to replace more polluting fossil fuels and promote renewable gases, such as hydrogen, to support the energy transition</p>	
<p>Technological risks Diffusion of new technologies favouring the use of intermittent energy sources and failure to adapt to new technological standards</p>	<ul style="list-style-type: none"> Green Business Innovation Development of human capital 	<p>Development of new business related to the energy transition (biomethane, hydrogen, sustainable mobility and energy efficiency)</p> <hr/> <p>Development and bringing in-house competencies in alternative technologies to gas, through acquisitions also</p> <hr/> <p>Development of partnerships to favour the development of operators along the hydrogen value chain and promote hydrogen as a fundamental energy source for decarbonisation, via advocacy and awareness-raising activities, both in Italy and abroad</p>	
<p>Market risks Reduction in demand for natural gas</p>	<ul style="list-style-type: none"> Climate change Green Business Innovation 	<p>Development of new business related to the energy transition (biomethane, hydrogen, sustainable mobility and energy efficiency)</p> <hr/> <p>Support to the diffusion of more efficient gas technologies (gas heat pumps and high- efficiency cogeneration heating pumps)</p> <hr/> <p>Participation in Italian and European working tables in the field of energy transition and climate neutrality</p> <hr/> <p>Awareness-raising activities around public opinion on natural gas as a key source to ensure energy security and enable the phasing out of coal in electricity generation</p> <hr/> <p>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</p> <hr/> <p>Monitoring of international, European and national public financing programmes in the infrastructure, energy and sustainable transportation fields</p>	

 	> Highlights	> Directors' report integrated report
	> Consolidated non-financial statement	> Consolidated Financial Statements

Strategic Risks

Description	Related material topics	Mitigation actions	Impact on capital
<p>Reputational risks Negative public perception of companies working in the fossil fuel sector</p>	<ul style="list-style-type: none"> Climate Change 	<p>Representation with institutional stakeholders in order to promote gas infrastructure as a tool for the development of renewable gas</p> <hr/> <p>Interaction and promotion/advocacy with industry stakeholders and the financial world in coordination with other gas chain operators and associations also</p> <hr/> <p>Participation in European working tables in the field of energy transition and climate neutrality</p> <hr/> <p>Participation in national, European and international initiatives aimed at strengthening the commitment to reduce methane emissions</p> <hr/> <p>Identification of ambitious emission reduction targets (-50% by 2030 vs 2018 per CO₂ and -45% by 2025 vs 2015 for CH₄), culminating in the achievement of carbon neutrality by 2040</p> <hr/> <p>Participation in the TCFD, the publication of an ad hoc document and the publication of the Sustainability Report</p>	 
<p>TCFD CLIMATE CHANGE RISKS - PHYSICAL RISKS</p>			
<p>Acute risks Increase in the severity of extreme weather events, impacting service continuity and quality</p>	<ul style="list-style-type: none"> Reliability of infrastructures, business continuity and cyber security Innovation 	<p>Bringing the recovery plan business continuity management system in line with international best practices</p> <hr/> <p>Technologically-advanced tools for monitoring/controlling the state of the infrastructure/plants and the territories concerned</p> <hr/> <p>Systematic and continuous maintenance and control</p> <hr/> <p>Timely implementation of Emergency Response Procedures</p> <hr/> <p>Design and construction of 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</p>	 
<p>Chronic risks Temperature increase resulting in lower gas demand</p>	<ul style="list-style-type: none"> Innovation 	<p>Development of new business related to the energy transition (biomethane, hydrogen, sustainable mobility and energy efficiency)</p>	












> Highlights

> Directors' report integrated report








> Consolidated non-financial statement

> Consolidated Financial Statements

The table below provides a focused look at the main categories of climate change-related opportunities identified by the Group, which are represented in line with TCFD recommendations.

Description	Actions and strategies to capitalise on opportunity	Impact on capital
 Resource efficiency		
Reduction of internal energy consumption	Identification of ambitious emission reduction targets (-50% by 2030 vs 2018 per CO ₂ and -45% by 2025 vs 2015 for CH ₄), culminating in the achievement of carbon neutrality by 2040 Increased activity and investment to meet decarbonisation targets Conversion of 8 compressor stations to dual fuel plants by replacing gas turbochargers with electric compressors	 
 Energy sources		
Use of energy sources and/or technologies with low GHG emissions	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	 
Development or expansion of business serving the energy transition	Planned investments for 720 million euros in business serving the energy transition (biomethane, hydrogen, sustainable mobility and energy efficiency) Acquisition of new companies in the field of energy transition (energy efficiency, biomethane) and the development of existing business (sustainable mobility) Strategic partnerships with technological companies to support the hydrogen business (e.g. De Nora) Other hydrogen partnerships (e.g. ITM Power) Promotion of Snam's business related to the energy transition Support for the coal phasing-out process and promoting the use of gas as an alternative fuel to the most polluting fossil sources Increase in the Investment Plan for the gas conversion of new regions in which subsidiaries related to the phasing out of coal/oil (e.g. DESFA and Terēga) operate Development of the gas conversion project in Sardinia, aimed at replacing fuels that have a greater impact on the climate "LNG Offshore OLT terminal" Project located between Livorno and Pisa, in Tuscany, via an acquisition agreement with the Iren Group	


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

Description	Actions and strategies to capitalise on opportunity	Impact on capital
TCFD Markets		
Access to new foreign markets	<p>Analysis and possible pursuit of extraordinary investment transactions in companies operating in Snam's core business (transportation, storage and regasification) in emerging markets where the demand for natural gas is bolstered by the need to replace the use of coal and other more polluting fossil sources (China and India)</p>	 
	<p>Pursuit of service sales activities through Snam Global Solution, leveraging the expertise gained in the various Group companies, also on the issue of the energy transition too (India, China, the Middle East, North Africa, the Balkans, and Central and North America)</p>	
	<p>Signing strategic agreements with important sector operators within the main continental energy corridors</p>	
	<p>Requalification of Snam's role within the European infrastructure system (acquisition of DESFA in Greece)</p>	
	<p>Project in the United Arab Emirates in collaboration with some of the most important international investment funds launched in agreement with ADNOC (Abu Dhabi National Oil Company) to invest in the energy infrastructure of the United Arab Emirates</p>	
	<p>Participation in working groups in order to take a leading role in advocacy and awareness-raising activities for decarbonisation in Italy and abroad, using our expertise</p>	
Attracting new investors	<p>Participation in the assessment of the main international sustainability rating agencies and in the assessments of the main ESG indices, thereby increasing the company's visibility among SRI investors and, more generally, among the entire financial community</p>	 
	<p>Issuance of bonds linked to emission reduction and climate change resilience projects (Transition Bonds)</p>	
	<p>Snam's regular participation in roadshows with the aim of meeting institutional investors around the world, including SRI investors</p>	
	<p>Sustainable finance activities: development of market standards/regulations (e.g. alignment with Taxonomy); constant interaction with investors through participation in seminars/roadshows; preparation of a framework to distribute Transition Bonds</p>	
TCFD Resilience		
Business diversification	<p>Development of new business related to renewable gases (biomethane and hydrogen), to the implementation of the use of gas to support energy transition (Small-scale LNG, CNG) and to the efficient use of energy (energy efficiency), in Italy and abroad</p>	  
	<p>Participation in working groups in order to take a leading role in advocacy and awareness-raising activities to promote the use of hydrogen at national and international levels</p>	
	<p>Actions and investments aimed at developing hydrogen as an additional source to support the energy transition (e.g. creation of dedicated business units, the inclusion of a 10% hydrogen blend in a section of the national grid, position papers, dedicated studies and strategic positioning)</p>	
	<p>Modernisation of infrastructure in a H-ready perspective, already 70% ready, and the definition of standards for the acquisition of only H-ready components for the grid</p>	


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

LEGAL AND NON-COMPLIANCE RISK

The **legal and non-compliance risk** concerns the failure to comply, in full or in part, with the European, national, regional and local laws and regulations with which Snam must comply in relation to the activities it carries out. The violation of such rules and regulations may result in criminal, civil and/or administrative sanctions, as well as damage to Snam's balance sheet, financial position and/or reputation.

As regards specific cases, the infringement of regulations on the protection of workers' health and safety and of the environment, and the infringement of anti-corruption rules, inter alia, may also result in (possibly significant) sanctions on the Company based on the administrative responsibility of entities (Legislative Decree 231 of 8 June 2001). Snam has, therefore, adopted and undertakes to promote and maintain an adequate internal control and risk management system aimed at allowing for the identification, measurement, management and monitoring of the main risks related to the activities carried out. With regard to the **Risk of Fraud and Corruption**, Snam believes it is of vital importance to ensure a climate of fairness and transparency in corporate operations and repudiates corruption in all its forms in the widest context of its commitment to abiding by ethical principles. Snam's top management is strongly committed to pursuing an anti-corruption policy, trying to identify possible areas of vulnerability and eliminating them, strengthening its controls and constantly working to increase employees' awareness of how to identify and prevent corruption in various business situations.

Reputational checks as well as accepting and signing the Ethics and Integrity Agreement are pillars of the control system designed to prevent the risks associated with illegal behaviour and criminal infiltration of our suppliers and sub-contractors, with the goal of guaranteeing transparent relations and professional morality requirements throughout the supply chain and for the entire duration of the association.

Snam is a member of the United Nations "Global Compact" and operates within the framework of the principles set forth by this global initiative, which are an integral part of its strategies, policies and rules, including the tenth principle of "zero tolerance" towards all forms of corruption, which is the foundation for a consolidated culture of integrity and business ethics.

Since 2014, Snam has collaborated with Transparency International Italia, as a member of the Business Integrity Forum (BIF), and in 2018 Snam signed a Memorandum of Understanding with the Berlin Secretariat of Transparency International.

In 2017, Snam began a collaboration with the OECD, becoming part of the Business at the OECD Committee (BIAC), and in October 2019 - as the first Italian company - joined the Leadership team as Vice-Chair of the Anti-corruption Committee.




In September 2019, Snam was also involved in the Partnering Against Corruption (PACI) initiatives of the World Economic Forum. Furthermore, thanks to its commitment to the issues of Business Ethics and Anti-Corruption, Snam was referenced in the document presented at the B20 Summit under the Japanese Presidency held in Tokyo (2019) as a "*tangible example*" of a company that has distinguished itself in the fight against corruption with its concrete actions.

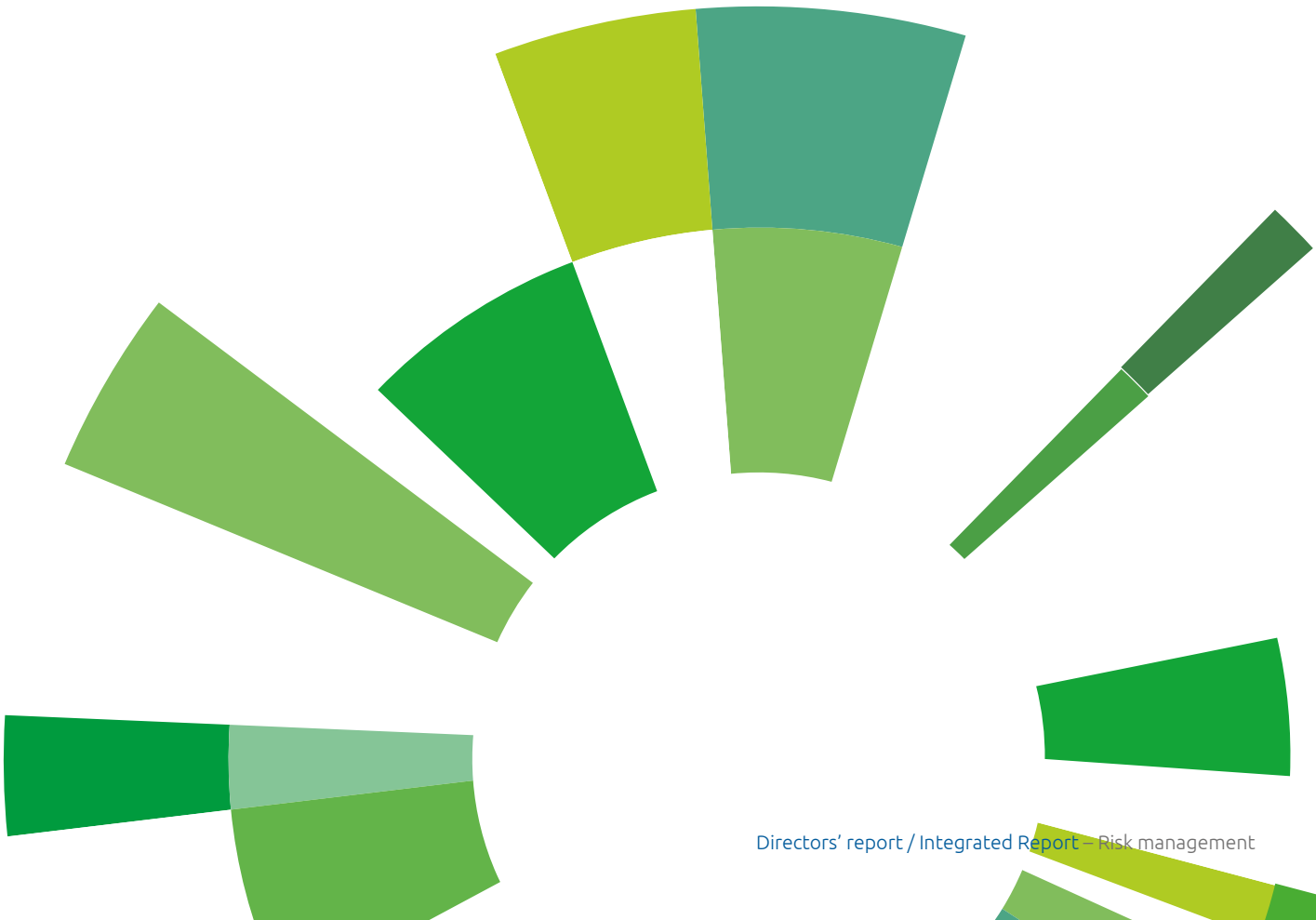
In 2020, in addition to its role as Vice-Chair of the Anti-corruption Committee mentioned above, for the purposes of the progressive enhancement of ESG issues at a multilateral level also, Snam was also selected as a permanent member of the BIAC Corporate Governance Committee and, to the same end, the company's efforts were also increased in the working tables promoted by the World Economic Forum in the area of "ESG and Corporate Governance".

Within the OECD, Snam has participated in several events, among which we should mention the "*Safeguards for a resilient Covid-19 response and recovery*", the first event of the year organised by the organisation since the beginning of the international health emergency, which replaced the annual Global Integrity Forum.

Lastly, during the B20 Saudi Presidency (2020), Snam was also one of the very few Italian companies to take an active part in the work of the Integrity & Compliance Taskforce, whose contributions were incorporated within the Policy Paper that was distributed to G20 members in view of the handover to the Italian Presidency (2021).

Legal and non-compliance risk

Description	Related material topics	Mitigation actions	Impact on capital
Possible violation of rules and regulations, with particular reference to Legislative Decree 231/2001	<ul style="list-style-type: none"> ■ Health and safety ■ Business integrity ■ Anti-corruption 	<p>Updating and monitoring of Model 231 protocols</p> <hr/> <p>Awareness-raising and training initiatives on corruption and accident prevention for the entire company and its contractors</p> <hr/> <p>Analysis and evaluation of the reports received via the channels provided in the reporting procedure</p> <hr/> <p>Adoption and maintenance of Health, Safety and Environment management systems certified in accordance with the ISO14001 and OSHAS18001 or ISO45001 standards</p>	  
Maintaining an adequate reputation profile for suppliers and sub-contractors	<ul style="list-style-type: none"> ■ Business integrity ■ Anti-corruption 	<p>Introduction of additional measures to prevent corruption and criminal infiltration</p> <hr/> <p>Obligation for suppliers and contractors to sign the Ethics and Integrity Agreement</p> <hr/> <p>Reputation checks on suppliers and sub-contractors</p>	
Failure to align Corporate Governance and/or the internal control and risk system with regulations and/or best practices	<ul style="list-style-type: none"> ■ Business integrity ■ Anti-corruption 	<p>Regular review of employer's model</p> <hr/> <p>Updating of Model 231 and Code of Ethics</p> <hr/> <p>Analysis of compliance with the latest version (June 2020) of the Italian Stock Exchange's Corporate Governance Code and with corporate governance best practices</p>	




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

OPERATIONAL RISKS

Ownership of storage concessions

The risk linked to **maintaining storage concessions** is associated for Snam to the business in which the subsidiary Stogit operates on the basis of concessions provided by the Ministry of Economic Development. Eight of the ten concessions (Alfonsine, Brugherio, Cortemaggiore, Minerbio, Ripalta, Sabbioncello, Sergnano and Settala) expired on 31 December 2016 and can be renewed no more than twice for a duration of ten years each time. With regard to these concessions, Stogit has submitted – within the statutory terms – the extension request to the Ministry of Economic Development. The extensions of the concessions in Brugherio, Ripalta, Sergnano, Settala and Sabbioncello were granted until the end of 2020. For Alfonsine, Cortemaggiore and Minerbio, the related proceedings are still pending before the aforementioned Ministry. For the pending extensions, the Company's

activities, as provided for by the reference regulations, will continue until the completion of the authorisation procedures that are in progress, as envisaged by the original authorisation, which will be extended automatically on expiry until said completion. One concession (Fiume Treste) will expire in June 2022 and has already been renewed for the first ten-year extension period in 2011 and an application was submitted for the second extension on 18 May 2020. Lastly, another concession (Bordolano) will expire in November 2031 and can be extended for a further ten years²⁰. If Snam is unable to retain ownership of one or more of its concessions or if, at the time of the renewal, the concessions are awarded under terms less favourable than the current ones, there may be negative effects on the Company's operations, results, balance sheet and cash flow.

Malfunction and unexpected service interruption

The risk of the **malfunctioning and unforeseen interruption of the service** is determined by accidental events, including accidents or malfunctions of equipment or control systems, reduced output of plants, and extraordinary events such as explosions, fires, landslides or other similar events, third-party interference and corrosion, outside of Snam's control. Such events could

result in a reduction in revenue and could also cause significant damage to people and property, with potential compensation obligations. Although Snam has taken out specific insurance policies to cover some of these risks according to industry best practices, the related insurance cover could be insufficient to meet all the losses incurred, compensation obligations or cost increases.

Delays in the progress of infrastructure implementation programs

There is also the possibility that Snam could incur **delays in the progress of infrastructure construction programmes** as a result of several unknowns linked to operating, economic, regulatory, authorisation, competition and social factors or health emergency situations, regardless of its intentions. Snam is therefore unable to guarantee in absolute terms that the projects for upgrading, maintaining and extending its network will be started, be completed or lead to the expected benefits in terms of tariffs. Additionally, the development projects may require greater investments or longer time frames than those originally planned, affecting Snam's financial position and economic results.

Investment projects may be stopped or delayed due to difficulties in obtaining environmental and/or administrative authorisations or to opposition from political forces or other organisations, or may be influenced by changes in the price of equipment, materials and workforce, by changes in the political or regulatory framework during construction, or by the inability to obtain financing at an acceptable interest rate. Such delays could have negative effects on the Snam Group's operations, results, balance sheet and cash flow. In addition, changes in the prices of goods, equipment, materials and workforce could have an impact on Snam's financial results.

²⁰ The Stogit concessions issued prior to the entry into force of Legislative Decree 164/2000 can be extended by the Ministry of Economic Development a maximum of twice, for ten years at a time, pursuant to Article 1, paragraph 61 of Law 239/2004. Pursuant to Article 34, paragraph 18 of Decree-Law 179/2012, converted by Law 221/2012, the duration of the single Stogit concession issued after the entry into force of Legislative Decree 164/2000 (Bordolano) is for thirty years with the possibility of extension for a further ten years.


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

Environmental risks

Snam and the sites in which it operates are subject to laws and regulation relating to pollution, environmental protection, the use of hazardous substances and waste disposal. These laws and regulations expose Snam to potential costs and liabilities related to the operation and its assets. The costs of possible environmental remediation obligations are subject to uncertainty regarding the extent of contamination, appropriate corrective actions and shared responsibility are therefore difficult to estimate.

Snam cannot predict if and how environmental regulations and laws may over time become more binding and cannot

provide assurance that future costs to ensure compliance with environmental legislation will not increase or that these costs can be recovered within the mechanism's tariffs or the applicable regulation. Although Snam has also taken out specific insurance contracts to cover some of the environmental risks, according to industry best practices, substantial increases in costs relating to environmental compliance and other related aspects and the costs of possible sanctions could have a negative impact on the business, operating results and financial and reputational aspects.

Employees and staff in key roles

Snam's ability to operate its business effectively depends on the skills and performance of its personnel. The loss of "key" personnel or the inability to attract, train or retain qualified personnel (particularly for technical positions in which the availability of appropriately qualified personnel may be limited) or situations in which the capacity to implement the long-term business strategy is influenced

negatively due to significant disputes with employees could trigger an adverse effect on the business, financial conditions and operating results.

The events related to this risk category may also refer to the theme of Diversity and Inclusion.

Risk linked to foreign equity investments

Snam's investee companies abroad may be subject to regulatory/legislative risk, conditions of political, social and economic instability, market risks, and the cyber security, credit and financial and other risks typical of the natural gas transportation and storage segments identified for Snam

such to negatively influence their operations, economic results, balance sheet and cash flows. For Snam, this could have negative impacts on the contribution to profit generated by such investments.

Risks associated with future acquisitions/equity investments

Every investment made under the scope of joint venture agreements and any future investment in Italian or foreign companies could involve an increase in the complexity of the Snam Group's operations and it may not be possible to ensure that these investments generate the anticipated income under the scope of the acquisition or investment

decision and are correctly integrated in terms of quality standards, policies and procedures consistent with the rest of Snam's operations. The integration process could require additional costs and investments. Improper management or supervision of the investment made may adversely affect the business, operating results and financial aspects.


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

Operational risks

Description	Related material topics	Mitigation actions	Impact on capital
Maintaining gas storage concessions	<ul style="list-style-type: none"> Economic performance and value creation 	Development of storage in accordance with the most current technical and economic criteria and science and technology best practices	
Delays in the progress of infrastructure implementation programs	<ul style="list-style-type: none"> Protecting the local area and biodiversity Relations with local communities 	Application of the strictest national and international environmental and safety standards during the design process with particular attention to protecting the natural value of the territories and biodiversity	
		Communication policy concerning the work to be carried out in order to share projects with the territory and stakeholders from the beginning	
		Structured and meticulous performance qualification and monitoring system for contractors	
Breakage or damage to pipelines/plants, also as a result of extraordinary events, which could cause malfunction and unexpected service interruption	<ul style="list-style-type: none"> Health and safety Reliability of infrastructures, business continuity and cyber security 	Application of management systems and procedures that take the specific nature of Snam's activities into account	
		Implementation of a recovery plan and business continuity management system	
		Communication initiatives aimed at providing information regarding the presence of infrastructure and the behaviours to be avoided/implemented by third parties in order to prevent damage occurring to them	
		Technologically-advanced tools for monitoring/controlling the state of the infrastructure/plants and the territories concerned	
		Continuous verification of insurance coverage in relation to the type of business and related risks	
Systematic and continuous maintenance and control			
Acquisition of equity investments	<ul style="list-style-type: none"> Economic performance and value creation 	Due diligence for investment assessment, also with the support of external advisers	
		Overall planning in terms of the time, actions and resources required to ensure efficiency/effectiveness in the management of activities	
		Elaboration and continuous monitoring of the acquisition business plan	
Asset Management	<ul style="list-style-type: none"> Economic performance and value creation 	Support for affiliates, as a business partner, in the regulatory, operational and financial structure optimisation fields	
Cyber threats (Cyber security)	<ul style="list-style-type: none"> Reliability of infrastructures, business continuity and cyber security 	Adaptation of IT and business continuity systems to the ISO/IEC 27001 and ISO22013 standards respectively, with the provision of the relative certifications	
		Definition of a security incident management team model to promptly respond to events that could potentially damage the integrity of information and computer systems used	



> Highlights

> Directors' report integrated report

> Consolidated non-financial statement

> Consolidated Financial Statements

FINANCIAL RISKS

Financial risks are illustrated in Note 26, “Financial risk management”, of the Notes to the consolidated financial statements.

Financial risks

Description	Related material topics	Mitigation actions	Impact on capital
Interest rate changes	<ul style="list-style-type: none"> Economic performance and value creation 	Cash Flow at Risk monitoring through an Asset & Liability Management (ALM) model	
Liquidity: inability to meet payment commitments		Minimising opportunity cost and maintaining a balance in terms of debt composition and maturity Monitoring contractual protection clauses in loan agreements (e.g. negative pledge and pari passu clauses) Constant monitoring of Snam’s rating indicators and the availability of long-term credit lines	
Receivables		Regular monitoring of the credit situation and systematic management of reminders and possible recovery actions for overdue debts at certain intervals Check of the authenticity and validity of financial guarantees received Reporting of any critical issues in the regulatory system that could lead to opportunistic/fraudulent behaviour by operators	


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

NFS EMERGING RISKS

Within the Group's Enterprise Risk Management model, particular attention is paid to identifying changes in the reference context in order to seize upon events or macro-trends coming from outside the organisation that could have a significant medium-long term impact (3-5 years and beyond) on Snam's business or on the sector.

These changes may, on the one hand, cause new risks to emerge in the long term, but also have consequences for the company today, changing the nature and extent

Cyber security

Materiality and potential impacts on Snam

Snam carries out its activities through a complex technological architecture relying on an integrated model of processes and solutions capable of promoting the efficient management of the entire country's gas system. The development of the business and recourse to innovative solutions capable of continuous improvement, however, requires a constant focus and an ability to continuously adapt to the changing needs to protect it. The Group's new Business Plan provides for approximately 500 million euros of investments in digitalisation - from the remote control of activities to the implementation of articulated infrastructures enabling the Internet of Things via which Snam aims to become the most technologically-advanced gas transportation operator in the world, as well as to guarantee increasingly greater security and sustainability in its business processes.

Global experts project and the company believes that cyber security threats will evolve in the future, in terms of both number and complexity. The digital channel is increasingly used illicitly by various types of actors with different purposes and modes of action: cyber criminals, cyber hackers, and state-sponsored action groups. Similarly, technological evolution makes increasingly sophisticated

Mitigation actions

Snam has developed its own cyber security strategy based on a framework defined in accordance with standard principles on the subject and has had a dedicated department for a few years now which, comprehensively, deals with addressing and implementing what has been planned at the strategic level, ranging from

of potential impacts and the probability of occurring of already identified risks.

The purpose of the process of identifying emerging risks is to succeed in assessing their impact in good time and putting in place the necessary strategies and related mitigation actions, both in terms of prevention and control. In this area, some of the emerging risks identified by Snam are cyber security and risks related to the energy transition.

tools available to these categories, through which consolidated attack techniques can be made more effective and new ones can be developed. In addition to this, the increasing digitalisation of the network with the use of new technologies (e.g. Internet of Things) poses significant challenges for the Group in these regards, extending the potential attack surface exposed by both internal and external threats.

In this scenario, cyber security plays an extremely important role as it deals with preventing or tackling very diverse events that can range from the compromise of individual workstations to the degradation of entire business processes in the field of transportation, storage and regasification, with potential effects on the normal capacity to provide the service.

A correct approach to cyber security management also makes it necessary to ensure full compliance with the increasingly stringent sector regulations issued at both European and national level, in order to improve the management and control oversight of companies that provide essential services to the country.

governance aspects to those that are more predominately technological.

First and foremost, we should note the adaptation of internal processes to the provisions of standards ISO/IEC 27001 (Information Security Management Systems) and


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

ISO 22301 (Business Continuity Management Systems), as well as the formal certification of conformity to the listed standards of an independent third party. Secondly, on the basis of multiple activities, out of which Risk Analysis and Technical Verification activities stand out, the protection needs arising from technological evolution, from changing business processes or from the identification of previously unknown vulnerabilities, are assessed and, where appropriate, solutions to replace or integrate those already in place are implemented. More specifically, in order to adequately counter the most modern cyber threats, Snam has defined a cyber security incident management model intended to prevent, monitor and, when necessary, implement prompt remediation against events potentially capable of harming the confidentiality, integrity and availability of information processed and the IT systems used. At the basis of these activities is a Security Incident Response Team which, by relying on solutions that make it possible to collect and correlate all security events recorded throughout the company's IT infrastructure, has the task of monitoring all anomalous situations that could have negative impacts for the company and activate, when necessary, suitable containment and remediation actions via the involvement of the technical and business structures concerned. Even in 2020, the Security Incident Response Team was able to work without interruption and guarantee its support activities 24 hours a day, seven days a week.

The change that has become necessary in operational processes and, in particular, the massive recourse to remote working methods has not had an impact on overall security posture to date; this is mainly due to the fact that the adoption of smartworking, which has occurred in recent years as an alternative solution to working in the office, had already led to risk analysis activities and the adoption of security solutions suitable to preserve the company's interests, even in the presence of a potential attack surface that is larger than in the past. As part of the cyber incident management activities (preventive and reactive) and in respect of formal agreements signed between the various parties, information-sharing with national and European institutions and peers is used in order to improve the capacity and speed of response when

faced with the possible negative events for which exposure may be a reality. This practice will also become increasingly necessary in the future given the cyber threat notification requirements that national security regulations impose and will impose.

With regard to technological development, as mentioned previously, Snam has set in motion an ambitious digitalisation programme that will radically change business processes in the years to come and within which a strong focus on cyber security will always be guaranteed. During 2020, the foundations were laid for the safe development of all the nascent Internet of Things initiatives. Firstly, a precise Security by Design process has been defined, which puts in place compliance for precise requirements and checks for each application and infrastructural development. Additionally, more appropriate security technologies have been defined to support the new capabilities that Snam will acquire in the years to come. Lastly, the security processes to be developed have been identified in order to take due account of the new security requirements that arise from a business context in which work methods, the technologies adopted and the surface area exposed to digitalisation will change considerably over the course of just a few years.

A great deal of attention is also paid to increasing awareness and specialist training of personnel, in order to facilitate the identification of weak signals and raising consciousness about risks of a cyber nature that could occur during normal work activities. Therefore, regular initiatives of various kinds are organised in this area, for which recourse is made to the teaching methods deemed most appropriate at any given time: frontal instruction, the creation of multimedia, exercises and tests, newsletters, etc.

With reference to the management of information supporting business processes, it is worth highlighting that the company owns assets used for data transmission to and from the country (fibre); this gives greater intrinsic security thanks to not being dependent on the service provided by third-parties and the possibility of using the communication channel exclusively.


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

Energy transition and development of the hydrogen technologies market

Materiality and potential impacts on Snam

While the climate change demonstrates the real effects of rising temperatures, the energy sector is facing a momentous transformation. Without any change to the company's commitment to its core business of regulated activities for natural gas transportation, storage and regasification, Snam is building a wide-ranging and diversified platform of activities related to energy transportation (in particular, renewable energy transport and management, the construction and management of plants related to sustainable mobility and energy efficiency) to seize upon the opportunity of being a "system integrator" able to offer green solutions and contribute to the development of renewable gases.

The business diversification can reinforce Snam's position as an enabler of the energy transition towards forms of using resources and energy sources that are compatible with environmental protection and gradual decarbonisation, with a long-term vision that is in keeping with its purpose and European objectives.

Furthermore, Snam has been working to make its infrastructure suitable for transporting increasing quantities of renewable gas with the prospect of

transporting fully decarbonised gas by 2050.

In this context, and with particular reference to the Group's strategy, the main risk factors include the risks posed by technological innovation in favour of switching to the use of electric technologies, and/or delays in the development of new technologies for the production, transportation and storage of green hydrogen at competitive costs; the delay or failure to make investments (infrastructures, projects, new acquisitions) as a result of uncertainties related to operational, economic, regulatory, authorisation, competitive and social factors; the failure to develop the hydrogen market with to the value chain that should fuel the infrastructure. Lastly, consideration must be given to the possible evolution of the regulatory framework in favour of intermittent energy sources and which would, at the same time, penalise the development of the renewable gas market.

Indeed, these factors may penalise the achievement of the development objectives of the aforementioned activities and, more generally, the opportunity for Snam to benefit from the new mega-trends in the energy transition.

Mitigation actions

The development and introduction of new technologies that would enable the achievement of the development objectives for energy transition activities pose a number of challenges for the Group. In this context, specific initiatives have been identified and developed, in order to respond to the urgent need to address climate change. With particular reference to the hydrogen value chain, the study of the necessary technological developments connected to the chemical and physical processes for the relative production requires particular skills and expertise, in order to support research and development both within the company and the national system. The processes commonly used for the commercial production of hydrogen are: the reforming of hydrocarbons and biogas (95%), a thermochemical conversion process, which requires conversion temperatures between 150° and 500°C with the production of CO₂ equivalent to the hydrocarbon used, and the electrolysis of water (4-5%). Specifically, the lack of skills in the alternative technologies to natural gas is a risk that could potentially be exacerbated by rapid changes in

the external environment. That is why the Group is always committed to the development of internal competencies, to bringing skills in-house via acquisitions and to the participation and encouragement of governmental and industry working groups dedicated to hydrogen at national and international level. At the European level, it is also a member of Hydrogen Europe, while in Italy it is represented in the H2IT trade association - the Italian Hydrogen and Fuel Cell Association.

The Group's facilities and assets will also need to be ready to seize upon the opportunities arising from the development of alternative gases to natural gas. In April 2019, first in Europe, Snam experimented with feeding a mix of 5% hydrogen and natural gas into its transmission network, an experiment that was also repeated in December 2019, doubling the percentage of hydrogen by volume to 10%. The company is currently committed to verifying the full compatibility of its infrastructure with increasing quantities of hydrogen mixed with natural gas,


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

as well as to supporting the development of the Italian supply chain, in order to promote the use of hydrogen in many sectors, from industry to transportation. Currently, around 70% of Snam's methane pipelines are compatible with hydrogen and standards have been defined for the purchase of only hydrogen-ready components for the network. The Group's infrastructure development is therefore aimed, on the one hand, at the more efficient use of programmable and low-impact fossil fuels, while, at the same time, promoting the biomethane alternative and guaranteeing the necessary conditions for accommodating hydrogen also.

Italy can use hydrogen to its advantage both to achieve decarbonisation targets and to create new forms of industrial competitiveness, leveraging its manufacturing potential and its expertise in the natural gas chain: that is why it is crucial to develop partnerships to foster the development of operators along the hydrogen value chain,

also participating in working groups so that Snam may take on a leading role in role in advocacy and awareness-raising activities for the use of hydrogen as a fundamental energy source for decarbonisation both in Italy and abroad.

To date, the Group has reached agreements with various entities in order to promote the growth of all phases of the hydrogen value chain, with a focus on conducting pilot projects to increase the production and use of hydrogen, via strategic partnerships in hard-to-abate industries (e.g. steel plants, refineries, other energy-intensive industries, mobility, etc.) and scouting for investment opportunities in innovative technologies (fuel cells, hydrogen production and storage).