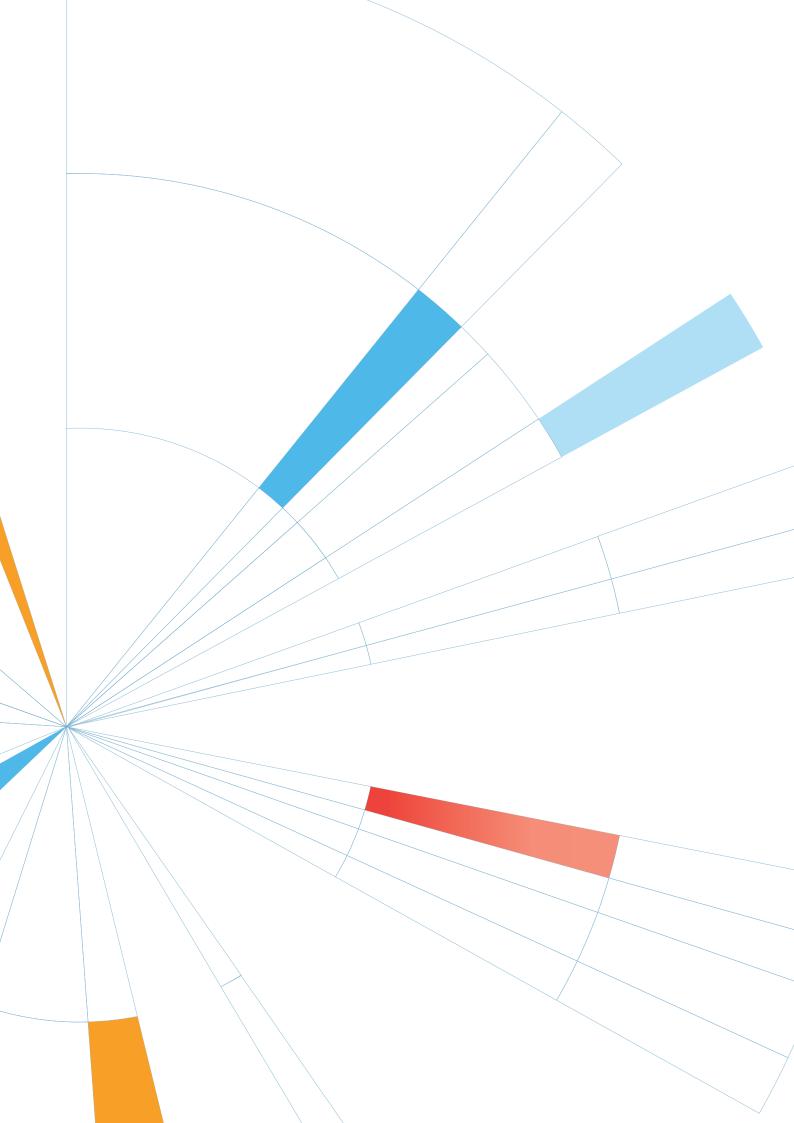




# SUSTAINABLE FINANCE FRAMEWORK 2021





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# **Snam's Profile**

Snam is one of the world's leading energy infrastructure operators and one of the largest Italian listed companies in terms of market capitalization. The company's sustainable and technologically advanced network guarantees security of supply and encourages development in the areas in which it operates, while also contributing to promote the energy transition. Snam is also an international operator working in the most relevant areas of the world for the development of natural gas to replace more polluting fuels and for the energy transition.

Through its international subsidiaries, it operates in Albania (AGSCo), Austria (TAG, GCA), China (Snam Gas & Energy Services Beijing), United Arab Emirates (ADNOC Gas Pipelines), France (Teréga), Greece (DESFA) and the United Kingdom (Interconnector UK). Snam is also one of the main shareholders of TAP (Trans Adriatic Pipeline), the final section of the Southern Energy Corridor.

The group has the largest natural gas transportation network (over 41,000 km including international activities) and the greatest natural gas storage capacity (ca. 20 billion cubic meters, including international activities) among European peers and is a leading player in regasification through its Panigaglia LNG terminal and its stakes in the Rovigo plant (Adriatic LNG) in Italy and in the Revithoussa plant (DESFA) in Greece.

In recent years, Snam has positioned itself to play a role as enabler of the energy transition, in line with its purpose and European targets, thanks to infrastructures that will be crucial for the achievement of decarbonisation objectives.

Snam's 8.1 billion-euro 2021-2025 strategic plan¹ envisages the achievement of carbon neutrality by 2040², investments to make its infrastructure "hydrogen ready" and an acceleration in the development of energy transition businesses such as hydrogen, biomethane, sustainable mobility and energy efficiency (integrated projects).

The company's business model is based on sustainable growth, transparency, enhancement of talent and diversity, protection and social development of the territories, through the Snam Foundation. ESG factors, which are increasingly integrated into the company's strategies and management, guide the choices to the benefit of all stakeholders.

This is testified by the early 2021 approval by the Shareholders' Meeting of Snam, on proposal of Snam's Board of Directors, of some amendments to the Company Bylaws aimed, amongst other things, at reflecting the Company's growing commitment towards the **energy transition** and incorporating the recent provisions of the Budget Law in terms of gender balance.

Particularly, at the end of the legal process, is expected the formal introduction in the Bylaws of the Company's corporate purpose, namely "Energy to inspire the world", to reflect Snam's commitment to advance the energy transition towards a use of resources and energy resources compatible with environmental protection and gradual decarbonisation as well as the principle of the pursuit of sustainable success among the purposes to be pursued by the Company's business activities.

- https://www.snam.it/en/Investor\_Relations/Presentations/
- 2 Snam defined a Net Zero Carbon Strategy to reach the carbon neutrality in its Scope 1 and 2 emissions by 2040 including offsetting.

# Introduction

Snam S.p.A ("Snam", "The Company", or "The Group") is Europe's leading gas utility, ranking first in Europe by transport network size and natural gas storage capacity. The company is also one of the main operators in regasification and is **now strongly committed to the energy transition** process to achieve carbon neutrality. With more than 15 billion euro in market capitalization, it is one of the largest Italian companies and is included in the FTSE MIB index of Borsa Italiana.

Over the last six years, Snam has positioned itself well to be among the protagonists of the great transformation underway in the energy sector. The company's ability to implement and manage projects in the transport and storage of natural gas, the new skills acquired on green gases and new trends in the energy transition, a growing international presence and a strategy that focuses on ESG factors will be essential to help develop the energy system of the future, competitive, safe and net-zero emissions.

Snam will be able to seize new and important opportunities throughout the next decade, in which a strong acceleration of the energy transition is expected to achieve the "net zero" objectives, with increasing investments in particular in infrastructure for the transport and storage of energy, as well as in integrated projects along the entire value chain of green gases.

With the new 2021-2025 Strategic Plan, Snam has taken on the role of enabler of the energy transition, in line with the United Nations 2030 sustainable development goals that guide sustainability actions and with the Paris Agreement framework. To the business model already based on values of sustainable development, Snam has added specific commitments for the coming years. It will be one of the first energy companies to achieve carbon neutrality in 2040, contributing to the decarbonisation of the system through significant investments in innovation, R&D and digitalization, to the expansion of large national and international networks and to the development of green economy businesses, such as sustainable mobility, energy efficiency, green gas and hydrogen.

In this context, already in 2020 Snam raised to -50% by 2030 the target for reducing Scope 1 and Scope 2 Greenhouse Gas (GHG) emissions (direct and indirect energy emission, in  $\rm CO_2$  equivalent) versus a 2018 base year, compared to the previous target of -40% versus a 2016 base year. In 2021, Snam has also identified intermediate targets which are in the trajectory of the carbon neutrality in 2040, in particular, -28% at 2025 and -40% at 2027.

After committing, as one of the first in its sector, to achieving the objective of zero net Scope 1 and 2 (direct and indirect energy)  $\rm CO_2$  equivalent emissions by 2040, Snam has set targets for 2030 on indirect Scope 3 emissions (emissions outside the direct control of the company, for Snam mainly attributable to suppliers and associates). Following a series of collaborative projects and initiatives developed in recent years, Snam is committed to reducing emissions of its associate companies (and other small categories such as emissions on generation and transmission of fuels and energy, business trips as well as commuting from staff) by 46% and the emissions (by economic intensity) of its suppliers by 55%

versus 2019 levels. Snam is the first EU TSO to set Scope 3 emission reduction targets covering its suppliers. All of Snam's emissions reduction objectives are in line with the target of limiting global warming to within 1.5° C.

In addition, to demonstrate its commitment to ESG, Snam has developed a 14-areas "scorecard" with 23 material and quantitative targets and with the monitoring of results<sup>3</sup>.

To achieve these objectives, Snam's 2021-2025 strategic plan details investments of circa 8.1 billion euro (almost 1 billion euro more than the 7.4 billion euro of the previous plan), attributable both to the core business of regulated infrastructures (6.8 billion euro) and to the new activities of energy transition (over 1.3 billion euro, almost doubled compared to the previous plan). In this context, c.50% of the investments foreseen in the plan is for "hydrogen ready" infrastructure, i.e. to the substitution and development of assets with "hydrogen ready" standards, aiming at promoting the development of hydrogen to foster the decarbonisation of the energy sector, transport and manufacturing.

The plan foresees about 500 million euro of investments in digitalization – from the remote control of activities to the adoption of Internet of Things (IoT), cloud and edge computing – that will allow Snam to become the leading technologically advanced gas transmission operator in the world and to ensure ever greater safety and sustainability of operations.

The 1.3 billion euro to be invested in the new energy transition businesses will be used to strengthen a broad and diversified platform of activities dedicated to energy efficiency, biomethane production and infrastructure and hydrogen along the entire value chain, which Snam has created in recent years to be a "system integrator" able to offer green solutions and contribute to the development of renewable gases.

Sustainable finance is one of the pillars of Snam's development strategy and investments in the energy transition aimed at actively contributing to the decarbonisation of the economy. While the share of sustainable financing is expected to increase from 40% in 2020 more than 80% in 2025 with respect to the total financing available to the company considering that the long term target of 60% over the period of the previous strategic plan to 2024 was anticipately achieved in 2021. Snam's commitment to sustainable finance is also evidenced by the adhesion to the Nasdaq Sustainable Bond Network. After being the first European company to launch a 500 million euro Climate Action Bond in 2019, the company has been one of the forerunners of the new Transition Bonds with four issues, of 500 million and 600 million euro respectively in 2020 and 750 and 500 million euro in 2021.

3 https://www.snam.it/en/Sustainability/strategy\_for\_future/esg\_scorecard.html

# Corporate Responsibility in Snam's Operational Practices

Across all its activities, in Italy and abroad, Snam pursues a sustainable and socially responsible growth model, in order to **create value for the company and for the communities in which it operates**.

Sustainability is fundamentally integrated into Snam's business strategy and its investment decision process, in addition to being deeply ingrained in the Group's daily practices. The focus on Sustainability drives the development of Snam's business and ensures the growth of the Group in the long-term. This approach has had numerous advantages, including highlighting the opportunities in the green gas business, and through continuous dialogue has elevated Snam's profile and standing in local communities.

Snam has decided to further strengthen and substantiate its commitment by defining a Plan to become **Net Zero Carbon in its operations by 2040**, which identifies ambitious objectives and concrete actions in the short, medium and long term.

In particular, the new decarbonisation plan provides for a progressive reduction of Scope 1, 2 and 3 emissions, in line with the commitments defined in the Paris Agreement to contain global warming by 1.5°C.

Playing a fundamental role as a **facilitator towards a low-carbon economy** in Italy, Snam has expanded its business by going beyond the regulated market and heading towards the energy transition sectors. In recent years, in fact, it has demonstrated continued commitment and support for the development of sustainable mobility, through the signing of agreements and partnerships with the aim of supporting the expansion of the Italian network of compressed natural gas and liquefied natural gas distributors (small scale LNG, CNG), and investments in companies that promote energy efficiency solutions.

It has also been pivotal in the research and development of **new renewable green gases**, such as biomethane and hydrogen, which can be transported and stored in ever-increasing quantities even in existing infrastructures.

In line with its commitment to corporate transparency, Snam reports on its sustainability progress annually in its Sustainability Report, which has been published since 2006.

Since 2017, the report is prepared in accordance with the GRI Standards: Comprehensive option, and is subjected to a limited assurance engagement according to the criteria indicated by the "International Standard on Assurance Engagements ISAE 3000 Revised - Assurance Engagements Other than Audits or Reviews of Historical Financial Information" principle, issued by International Auditing and Assurance Standards Board (IAASB).

Snam also publishes the Non-Financial Statement (NFS) according to the Italia Decree 254/2016 in a specific chapter of the Directors' Report inside the Annual Report. The NFS is edited in compliance with GRI Standards: Core option and it is

assured by the same independent auditor and according to the same criteria and type of assurance of the Sustainability Report.

In order to show the link between strategy, governance, financial performance and the social, environmental and economic context in which the company operates, Snam publishes also its Directors' Report as an integrated report since 2015, following the Value Reporting Foundation (formerly IIRC) framework.

In addition, given the growing importance of the climate change issue, Snam decided to adhere in 2018 to the Task Force on Climate-related Financial Disclosure (TCFD) which issued recommendations aimed at increasing disclosure on climate change impacts of companies, with a transparent approach towards financial stakeholders. In this context, Snam has been regularly publishing a financial disclosure on climate change showing the Company's approach to directing its strategy in the context of decarbonization and energy transition, as well as its commitment to reaching the energy and climate goals defined at a European and company level.

In light of its commitment to environmental, social and governance ("ESG") issues, in 2020 Snam has also been included in many sustainability indexes that assess companies on their ESG performance and select just the most active and engaged on these issues. The main ones are ISS ESG, FTSE4good, MSCI, Vigeo and Sustainalytics. Alongside this, Snam has been included in the top world A list of the CDP climate change that includes only eight Italian companies (including Snam). Besides Snam obtained a CDP - Supply Chain score of A-, demonstrating its commitment to engaging its suppliers on issues related to reducing emissions and developing sustainability strategies. In this context, Snam was evaluated based on its environmental strategy and targets and was recognized as a global leader in the decarbonisation.

Since 2009, Snam has been a Global Compact member, committing to follow its 10 principles whilst also actively collaborating with the Global Compact Network Italia Foundation.

In 2020, Snam joined a particular initiative proposed by Global Compact: the CFO Task force, which prepared the first integrated principles for finance and investment related to the UN Sustainable Development Goals ("SDGs"). These principles, presented at the UN Private Sector Forum on 21 September 2020, aim to guide companies to match their sustainability commitments and credible financial strategies in order to create real impact on SDGs. In September 2021 the Taskforce has committed to invest more than \$500 billion over the next five years towards the SDGs. To drive the commitment towards the SDGs, the CFO Taskforce has created a framework, which encourages companies to set their own KPIs and targets to track performance on the most relevant SDGs for their business.

Snam's activities impact all 17 of the SDGs and Snam is committed to work on its 2030 Agenda following an holistic approach, as evidenced by Snam's new ESG Scorecard, which includes specific annual KPIs and targets, which while focussing on the environmental, social and governance areas of Snam's strategy are also specifically linked to the relevant SDGs. In 2021 a new area has been added to the Scorecard: sustainable finance, with the new challenging target of reaching 80% of ESG financing on the total commitment funding by 2025.

## **New ESG scorecard**

## **ENVIRONMENT**

- Natural gas and CO<sub>2</sub> emissions
- Energy Savings of Operational Management
- New Business Green Innovation
- Land protection & Biodiversity









COMMITTED TO A NET ZERO WORLD



STRENGTHENING GOVERNANCE



IMPROVING PEOPLE'S LIVES

## **GOVERNANCE**

- Governance Functioning and Structure
- Infrastructure Reliability
- Anti-corruption
- Sustainable Finance









## **SOCIAL**

- Welfare
- Employee Engagement
- Safety
- Gender Diversity
- Responsible Supply
- Local Community Engagement











We evidence below the SDGs where we believe Snam's investments have a deeper impact on, based on the nature of the company's business model:



## SDG 7 Affordable and Clean Energy

Increasing the production of energy from renewable sources, including green gases, and improving the energy efficiency of Snam's operations whilst avoiding or reducing the impact on the environment, landscape and cultural heritage.

Snam achieves this objective through its subsidiaries Snam4Environment and Renovit: the former is specialized in infrastructure for biomethane production (from organic waste, agricultural and agro-industrial waste, and zootechnical effluents) and in the promotion of green activities, while the latter is one of the main Italian operators in energy efficiency services for residential, industry and public administration.

Snam4Environment aims to encourage the development of the biomethane's market through to a low-risk business model, leveraging on the skills of the Renerwaste and Iniziative Biometano platforms, which manage plants that produce biomethane from urban and agricultural waste in Italy.



## SDG 9

## Industry, Innovation and Infrastructure

Building more resilient and sustainable infrastructures. In the new strategic plan, 50% of the investments is dedicated to "hydrogen-ready" infrastructures (replacement and development of new assets with hydrogen-ready standards). The conversion of eight compression stations from pure gas fuelled plants into gas/electric hybrid ones is also planned, with the intention to positively contributing to the achievement of the carbon neutrality goal by 2040. Snam is also planning consistent digitalization investments that will allow the company to become the most technologically advanced gas transmission company in the world and to guarantee greater safety and sustainability of its operating activities.



# SDG 11 Sustainable Cities and Communities

Snam has established Snam4Mobility, a company dedicated to the promotion of sustainable mobility using natural gas (CNG and LNG) and renewable gas (bio-CNG and bio-LNG). Approximately 100 million euro of investments are planned by 2025.



## SDG 13 Climate Action

With the aim to achieve the ultimate goal of playing a key role in the energy transition and with a long-term vision consistent with its purpose and European objectives, Snam will be one of the first energy companies to reach carbon neutrality by 2040 and provide a strong contribution to the decarbonisation of the system through the development of green gases and, in particular, hydrogen.

Snam's milestones towards net zero are: i) -28% of Scope 1 and 2 emissions by 2025 compared to 2018 values, also thanks to -55% of natural gas emissions by 2025 compared to 2015 values, in accordance with UNEP Oil & Gas Methane Partnership (OGMP) Framework; ii) -40% of Scope 1 and 2 emissions by 2027 compared to 2018 values; and iii) -50% of Scope 1 and 2 emissions by 2030 compared to 2018 values; iv) Net zero for Scope 1 and 2 emissions by 2040.

In 2021 Snam strengthened its effort in the decarbonization front by also setting targets on its Scope 3 emissions: i) -46% of emissions from Associates, fuel & energy related activities (not already included in Scope 1 and 2), business travels and employee commuting by 2030 compared to 2019 values; ii) -55% of tCO₂e/M€ capex from suppliers by 2030 compared to 2019 values.

All 2030 near term targets are consistent with reductions required to keep warming to 1.5°C.

Furthermore, Snam is supporting the development of green gases' value chain through continuous investments in biomethane and hydrogen technologies. Over the last year, Snam has launched a Business Unit focused on hydrogen, with the aim of being at the forefront in this sector, with planned investments of at least 300 million euro by 2025. In the near future, Snam will also support the conversion of the first railway lines from diesel to hydrogen leveraging on partnership agreements with FS Italiane and Alstom. The areas in which the investments of the plan will be concentrated are mobility, in collaboration with Snam4Mobility (trains, refueling stations for light and heavy vehicles, airports), the industrial sectors (thermal, feedstock, fuel cells) and venture capital initiatives. The plan includes projects for which Snam has submitted funding requests under existing calls (IPCEI, Innovation Fund, Horizon 2020).

Away from this, Snam also intends to focus on new technologies as per the partnership with ITM<sup>4</sup> and De Nora<sup>5</sup> to get technological edge on electrolyzers and start new pilot projects. In this context, Snam, has been awarded (together with other partners) three grants under the Fuel Cells and Hydrogen Joint Undertaking, which will allow access to funds and pilot projects at European level to create new end-use partnerships.

<sup>4</sup> ITM Power is leader in PEM technology.

<sup>5</sup> De Nora is at the heart of the electrolyzer process and supplies global top licensors of Alkaline water electrolyzers.

# Snam's initiatives and technological partnerships supporting the hydrogen strategy

Hydrogen is a clean and versatile energy source that, if generated from renewable energy and then transported, stored and used as a gas, does not generate emissions of carbon dioxide and other climate-changing gases, nor emissions harmful to humans and the environment. For this reason, it can play a key role in the national and international energy transition and contribute to achieving the goal of a climate-neutral economy.

The most promising way for the development of hydrogen is represented by the production of the so-called "green hydrogen", generated through the process of electrolysis of water, in which electrical energy is used to "break down" water into hydrogen and oxygen without any emission of CO<sub>2</sub> at the point of release.

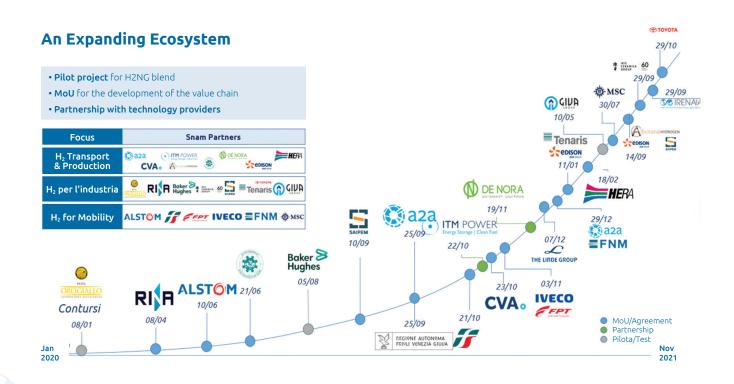
Using hydrogen has many advantages: (i) it does not emit  ${\rm CO}_2$  or pollutants (ii) it complements renewable sources (iii) it can be transported at low cost using the existing transport network and can be stored for a long time in a reliable, safe and convenient way (iv) it can effectively decarbonise the so-called "hard-to-abate" sectors such as steel and refining (v) it can be used in sustainable mobility and in heating systems and, moreover, (vi) it could favor the integration between the electricity and gas sectors allowing greater flexibility and therefore lower costs for the energy system as a whole.

Snam, also thanks to infrastructures that will be crucial for the achievement of decarbonisation targets, is committed to establishing a market position along the hydrogen value chain and in 2019 set up a dedicated Business Unit which is focused on various activities, such as: scouting of hydrogen-related technologies, designing of innovative business models and defining business cases for the utilization of hydrogen in different sectors:

- H<sub>2</sub> for Sector coupling and RES integration: Solutions for innovative utilities and sector coupling
- H<sub>a</sub> for Industry: Supply for green industrial processes
- H, for Transportation: Solutions for sustainable mobility systems
- **H, for Commercial Use:** Supply for green industrial processes

Snam, is especially focusing on three key areas:

- Ensuring that our network «hydrogen ready», and can accommodate growing blends. To this day, studies suggest pipelines can accommodate high percentages of hydrogen with limited adjustments. In this context, we are currently studying the impact of a 5-10% blend on existing compressors, and scouting the market for machines which can reach higher percentages. Further studies have been conducted on geological storage<sup>6</sup> and on membranes that can be used to separate different gasses
- Understanding how the transition to hydrogen will work in practice the overall potential, where supply and demand might be localised, what infrastructure will be required for the hydrogen market to take off, and where, and also what sort of coordination is necessary
- Positioning ourselves to develop hydrogen projects, with a focus on pilot projects, potential partnerships and also opportunities to invest in leading technologies.
- 6 Snam is working on assessing what percentage of H2 can be stored in our fields. Considering that 2% blending are already assessed. In particular, different percentage of H2 can depend on the geological features of underground storages (i.e. Depleted oil & gas fields; Salt caverns; Aquifers and Artificial Rock Caverns).



With reference to the above, the main initiatives are:

## Pilot projects

On 1st April 2019, Snam launched its experiment of introducing a 5% hydrogen and natural gas blend into the Italian gas transmission network. The experiment, the first of its kind in Europe, was conducted in Contursi Terme, in the province of Salerno, in Southern Italy, and involved the supply of H2NG (a blend of hydrogen and gas) to two industrial companies in the area: a pasta factory and a mineral water bottling company. The experiment marked the first step in Snam's commitment to developing hydrogen. On 16th December 2019, Snam doubled the volume of the hydrogen blend to 10%.

On 20<sup>th</sup> July 2020, Baker Hughes and Snam successfully completed testing of the world's first "hybrid" hydrogen turbine designed for a gas network. The test paved the way to the implementation and use of a blend of hydrogen and natural gas in Snam's current transmission network infrastructure.

On 19<sup>th</sup> May 2021, the world' first test of a 30% hydrogen/ natural gas blend in the forging processes used in industrial steelmaking was held in Rho (province of Milan), at the Forgiatura A. Vienna plant. Finally, on 29<sup>th</sup> September 2021 Snam and IRENA<sup>7</sup> (International Renewable Energy Agency) have announced a Partnership Agreement aimed at developing hydrogen based on renewables ("green hydrogen") to support the energy transition worldwide.

The signing ceremony was held today at the presence of Roberto Cingolani, Italy's Minister for the Ecologic Transition, during the "The H2 Road to Net Zero" conference organised in Milan by Bloomberg in collaboration with IRENA and Snam.

The two parties will cooperate to study and possibly implement alongside other partners, pilot projects on renewables generation, transport and distribution of green hydrogen with a view to the development of replicable business cases.

Leading intergovernmental organisation supporting countries in their sustainable and renewables transitions.

## **Mobility Sector**

On 4<sup>th</sup> June 2020, Snam signed a five-year agreement with Alstom, a global leader in integrated solutions for sustainable mobility, to develop hydrogen trains in Italy.

The agreement, after the conclusion of the first phase dedicated to feasibility studies that concluded in Autumn 2020, aims to develop railway mobility projects in 2021 including both hydrogen-powered trains and the related technological infrastructure, as well as management and maintenance services.

On 21th October 2020, FS Italiane and Snam signed a Memorandum of Understanding to evaluate the technical and economic feasibility and consider new business models relating to the development of a hydrogen rail transport in Italy. The agreement is aimed at performing technical analysis and feasibility studies and at developing joint projects on railway lines that can be converted to hydrogen on the national territory

On 29<sup>th</sup> December 2020, FNM, A2A and Snam signed a memorandum of understanding to provide a further boost to the development of green hydrogen mobility in Lombardy. The plan, called H2iseO, will make it possible to create the first Italian "Hydrogen Valley" in Lombardy, particularly in Sebino and Valcamonica, by equipping the region with a fleet of hydrogen trains and related infrastructure, starting from 2023.

## Partnerships to invest in leading technologies

On 22<sup>th</sup> October 2020, Snam signed a partnership agreement with ITM Power Plc, one of the largest global producers of electrolysers. The agreement envisages the start of a commercial and technological collaboration for the development of future joint initiatives and the concurrent entry of Snam into the shareholder structure of ITM with a minority stake.

On 19<sup>th</sup> November 2020, Snam purchased a strategic stake of ca. 33% in De Nora<sup>8</sup>, a global innovator and world leader in sustainable clean energy and water treatment technologies. Snam will leverage on De Nora's technologies and know-how, with the aim to enhance its competitive edge in hydrogen projects.

The assessment of "H2-readiness" is performed across our assets, network, turbines and compressors, while we are conducting ongoing studies on underground storages to verify the feasibility to store a blended gas of methane and hydrogen.

# 100% of Snam network verified for H2 transport (km, cumulated)



# Setting standards for H2 transport



First example in EU of network H2 readiness certification



Readiness

Co-operation with other European TSOs to share test results, analysis, studies







# Snam network

verified according to ASME regulation ≈ 99% of the network is ready<sup>1</sup> to transport 100% H2

70% with limited reductions on max operating pressure, 30% with

Future revisions of the regulation are expected to overcome such limitations

1 Based on Option A of ASME B31.12

more significant reductions

Collaborations with universities and institutions

Collaboration with fire department and universities to develop technical standards for H2 transport









# Storage: tests confirm the possibility to blend gas in depleted fields

## **Preliminary Test Results**

## **Mineralogical Analysis**

Exposure of reservoir & cap-rock samples to gas mixture with increasing H2 blend



No risk of dissolution / alteration of reservoir & cap rock minerals

in 100% H2 environment

## Tests with multi-reactor

## Ongoing tests in a reactor

on microbiological activity with up to 50% H2 blending (up to 100% in 2022) at reservoir pressure & temperature conditions

## **Diffusivity Tests**

Gas diffusion measurements for cap rock samples representative of Stogit fields



Confirmed gas-tightness of reservoir for blends up to 100% H2

## Microbiological Analysis

Microbiological reservoir characterization based on bio-chemical kinetics



No risk of H2S production or methanation in the reservoirs by microbial activity

## **Test on Well Specimens**

Testing on wells material



No impact on cements up to 100% H2 and to elastomeric\* up to 20% H2

#### Pilot test in 2023-24

Development of a pilot test in Snam storage sites to confirm test results in the long-term behavior

\* On going 100% H2 tests

## Tests confirm possibility to blend H2 in our natural gas depleted field







C<sub>2</sub> Circle Lab

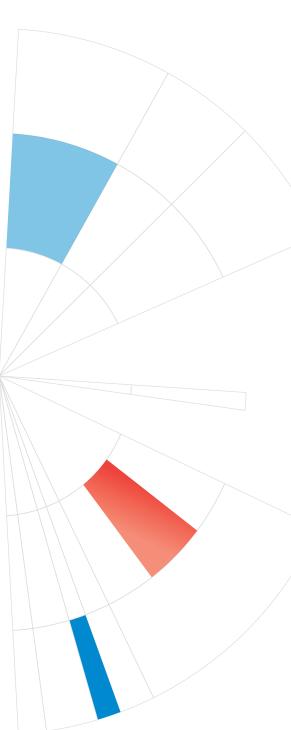
# Sustainable Finance aligned with Corporate Strategy

Sustainable Finance represents a key tool through which Snam reiterates its commitment to sustainability and since the first Climate Action Bond Framework, the Group has structured its activity to develop a path which is consistent with the ESG market evolution. Addressing climate change risks is crucial in order to achieve long term business success and our business plan is a clear evidence of Snam's growing attention to environmental issues, with a substantial amount of green investments. Considering this, the Group is focused on aligning the company's financial structure with our sustainable growth path in the medium-long term.

Snam strongly believes in the development of the sustainable finance market, as also evidenced by Snam's adhesion to the **UN Global Compact and the CFO Taskforce** in 2019, an initiative which aims to connect investors, issuers, banks and credit agencies to create an efficient market for SDG investments and capital flows, and consistency in how to measure ESG KPIs. At the EU level, Snam is also a member of the Corporate Forum for Sustainable Finance, an initiative of European companies set up with the aim of creating a permanent network for exchanging views and useful ideas for the development of sustainable finance, linked to projects that have a positive impact on the environment. In 2020, Snam also joined ICMA's Climate Transition Finance Working group made up of representatives from more than 80 entities participating in the capital markets with the aim to provide clear guidelines9 on the information that should be made publicly available to investors, especially when raising funds in debt markets for climate transition-related purposes through the issuance of 'Use of Proceeds' Bonds following best market practice established by the Green and Social Bond Principles or Sustainability Bond Guidelines, or general corporate purpose Bonds issued in line with the Sustainability-Linked Bond Principles. Finally, in January 2021, Snam joined the Nasdaq Sustainable Bond Network, the sustainable finance network run by Nasdaq which brings together investors, issuers, investment banks and specialist organisations.

Snam's path into sustainable finance has started in 2018 when the existing Revolving Credit Facility in place was converted in a Sustainability-Linked RCF. On the capital markets' side, Snam issued its inaugural Climate Action Bond in February 2019 and, successively, various Transition Bonds for an overall amount of 2.85 billion euro. By moving from a Climate Action to a Transition Bond, Snam intended to **consolidate its role in the energy transition and to increase investors awareness** of Snam's ESG initiatives and investments. On the back of this, in April 2021, Snam was awarded the 'Bond Awards 2021 – Award for Innovation' assigned by Environmental Finance. Snam received this recognition for the innovative and forward-looking Bond Framework, developed with the aim to finance energy transition.





More recently, Snam further expanded the scope of its ESG funding to cover more instruments within its financial structure. At the end of 2020, the existing Euro Commercial Paper ("ECP") Programme was converted into an ESG ECP programme for the issuance of ESG notes up to 2.5 billion euro, where the ESG component is featured by the ESG rating released by Standard Ethics. In June, Snam signed a new 150-million-euro loan agreement with the EIB to support the Group's energy efficiency projects for residential and industrial sectors. Finally, in July and October, new Term Loans linked to ESG KPI's were secured with primary banks.

At the end of 2020, Snam's share of sustainable finance accounted for 40% of total available funding and in the first nine months of 2021 Snam's sustainable finance instruments largely increased reaching more than 10 billion euro on a cumulative basis (ca. 60% of total available funding – already reaching the long-term target at 2024 announced in November 2020). Moreover, as part of the new Strategic Plan 2021-2025, Snam committed to increase the sustainable finance more than 80% of total committed funding by 2025 also leveraging on the issuance of instruments under this Framework.



# Rationale behind the Framework evolution

Following the 2020-2024 Strategic Plan Presentation in November 2020, Snam's commitment towards ESG has been further scaled up through the Net Zero strategy that will lead Snam to be carbon neutral by 2040. As a continuous effort to integrate ESG attention in the corporate strategy, in the new Strategic Plan 2021-2025 Snam has improved the existing targets on natural gas emissions and Scope 1 and 2 GHG emissions reduction and has also adopted new targets for Scope 3 GHG emissions reduction.

This evolution in the corporate strategy, together with the recent Regulatory and market developments (EU Taxonomy and updated Green Bond Principles), is the basis for a new step forward for Snam's ESG financial strategy.

Snam's Sustainable Finance Framework (the "Framework") represents the output of this new step and intends to be the cornerstone of the Group's financial strategy for the next years. The Framework has been developed to clarify the link between the financing choices and the initiatives and investments that Snam intends to carry out in the upcoming years.

Under this Framework, Snam will be able to issue EU Taxonomy aligned Transition Bonds and Sustainability-Linked Bonds, loans, project financings and/or any other financing instruments in various formats and currencies. Through this Finance Framework, Snam will decide to use either a Use of Proceeds or Sustainability-Linked formats.

Use of Proceeds financing instruments issued under this Framework will follow best market practice as established by the Green Bond Principles 2021 administered by the International Capital Market Association (ICMA)<sup>10</sup> ("ICMA GBP"), the Green Loan Principles 2021<sup>11</sup> administered by the Loan Market Association (LMA)'s ("ICMA GLP"), the Climate Transition Finance Handbook and subject to its finalization, be aligned with the draft European Green Bond Standard ("EU GBS") and the European Commission's recommendations by voluntarily adhering to the requirements of the EU GBS regulation proposal. In addition, Sustainability-Linked financing instruments issued under the Framework will be aligned with the Sustainability-Linked Bond Principles 2020 administered by the ICMA<sup>12</sup> ("ICMA SLBPs") and the Sustainability-Linked Loan Principles 2021 administered by the LMA<sup>13</sup> ("LMA SLLPs").

<sup>10</sup> Green Bond Principles, June 2021, ICMA https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/

<sup>11</sup> Green Loan Principles, LMA, February 2021 https://www.lma.eu.com/application/files/9716/1304/3740/ Green Loan Principles Feb 2021 V04.pdf

<sup>12</sup> Sustainability-Linked Bond Principles, ICMA, June 2020 https://www.icmagroup.org/assets/documents/ Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-Principles-June-2020-171120.pdf

<sup>13</sup> Sustainability-Linked Loan Principles, LMA, May 2021: https://www.lma.eu.com/application/files/8416/2210/4806/Sustainability\_Linked\_Loan\_Principles.pdf

# Future updates to this framework

The Framework is also aligned as closely as possible with the EU Taxonomy Regulation that entered into force on 12 July 2020<sup>14</sup>, and the Delegated Acts on Climate Change Mitigation and Adaptation adopted on 6 July 2021<sup>15</sup> ("EU Taxonomy"). In accordance with the EU Taxonomy, Eligible Projects should not only contribute to at least one of the EU Environmental Objectives, but should also do not significantly harm ("DNSH") to any of the remaining EU Environmental objectives. In addition, Eligible Projects should be complying with minimum social safeguards that should be in place at company level<sup>16</sup>.

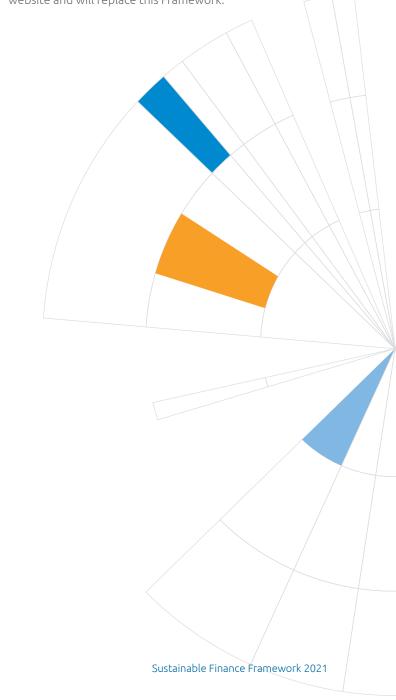
Snam confirms that the Eligible Projects are also compliant with internal environmental and social directives, in addition to the official international, national and local laws and regulations.

The Sustainable Finance Framework for both the Use of Proceeds and Sustainability-Linked sections has been reviewed by ISS ESG.

- 14 Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852
- 15 COMMISSION DELEGATED REGULATION (EU) .../... supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=PI\_COM:C(2021)2800
- A basis for the determination of the definition of UE Taxonomy aligned Transition Bond has been established in the EU with the publication in the Official Journal of the EU on 22 June 2020 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 (the "Sustainable Finance Taxonomy Regulation") on the establishment of a framework to facilitate sustainable investment (the "EU Sustainable Finance Taxonomy"). The EU Sustainable Finance Taxonomy is subject to further development by way of the implementation by the European Commission through the formal adoption of specific delegated acts in respect of the Sustainable Finance Taxonomy Regulation (the "Sustainable Finance Taxonomy Regulation Delegated Acts") which is expected to be fully adopted by the end of 2022.

Pending development of the technical screening criteria for all the European environmental objectives in the Sustainable Finance Taxonomy Regulation, the Group's Eligible Projects are aligned with the relevant objectives for the EU Sustainable Finance Taxonomy, however, until the technical screening criteria for such objectives have been developed, it is not known whether the Group's Eligible Projects will satisfy the criteria. Accordingly, alignment with the EU Sustainable Finance Taxonomy, once the technical screening criteria are established, is not certain. Additionally, although the aforementioned technical screening criteria are generally prescriptive in nature, their application will involve the exercise of judgement and, in certain instances, the technical screening criteria also give broad discretion on the methodologies and assessments that should be undertaken. Accordingly, please note that different persons (including third-party data providers and other financial market participants) may interpret and apply these technical screening criteria differently, use internal methodologies (where permitted) and/or arrive at different conclusions regarding the extent of the EU Sustainable Finance Taxonomy alignment of a financial product. The EU Sustainable Finance Taxonomy alignment of Notes issued as 'EU Taxonomy-aligned Transition Bonds' has therefore been calculated by the Snam on a best efforts basis, having regard to these limitations and potential inconsistencies

Snam will review this Framework from time to time, including its alignment to updated versions of the relevant Principles and Taxonomies as and when they are released, with the aim of adhering to best practices in the market and of providing full transparency to investors. In the contest of any Framework update, Snam will involve the SPO Provider and, in case of material changes to the Eligible Project categories, KPIs and/or the SPTs calibration, Snam will ask for an updated SPO. The updated Framework will be published on Snam's website and will replace this Framework.



# Use of Proceeds format

When issuing Use of Proceeds instruments under this Framework, Snam commits to following best market practice and to communicating in a transparent manner on:

- I. Use of Proceeds
- II. Process for Project Evaluation and Selection
- III. Management of Proceeds
- IV. Reporting

## 1. Use of Proceeds

The Proceeds of the financing instruments issued under this Framework will be used to finance or refinance, in whole or in part, existing and/or future Eligible Projects (as defined below).

For the purposes of this section, "Eligible Projects" means projects included in the following categories<sup>17</sup>:

- Network Readiness and Pollution Prevention, Leak Detection and Control
  - · Carbon & Emission Reduction.
  - Retrofit of Gas Transmission Network
- Green Gases
  - · Advanced Biomethane
  - Hydrogen

The Eligible Projects that are classified within the aforementioned categories shall meet a set of environmental criteria, which are approved by Snam's Sustainable Finance Committee and verified by a Second Party Opinion provider against the relevant market guidelines/Principles and or Regulation, where applicable, and will contribute to the EU environmental objective of climate change mitigation.

The Proceeds of financing instruments will be used to finance or refinance Eligible Projects located in Italy and with disbursements occurring in the 36 months prior to the financing instrument's issuance. Eligible Projects may include Capital Expenditures (capex), Operating Expenditures (opex) ensuring the continued and effective functioning of Snam's assets, as well as acquisitions of a majority or minority stake in "Pure Player" companies specialized in any of the Eligible Project Categories described in the Use of Proceeds section of this Framework. A pure player company is defined as having revenue mainly derived from activities falling in any of the below Eligible Project Categories.

<sup>17</sup> The Framework aims to set the general criteria for the projects selection. Intended and final allocation of bond Proceeds, including qualifying projects, will be provided as per the EU GBS requirements - at the project level, subject to availability and relevance, or otherwise category level.

Macro category	NACE Code	Relevant Taxonomy article	Eligible projects	Description	SDGs
Infrastructure (Asset Readiness and Pollution Prevention, Leak Detection and Control)	D35.22 (Distribution of gaseous fuels through mains) H49.50 (Transport via pipeline) F42.21 (Construction of utility projects for fluids)	4.14 Transmission and distribution networks for renewable and low-carbon gases  The activity includes leak detection and repair of existing gas pipelines and other network elements to reduce natural gas leakage.  Pollution prevention and control  Fans, compressors, pumps and other equipment used which is covered by Directive 2009/125/EC of the European Parliament and of the Council187 comply, where relevant, with the top-class requirements of the energy label, and with implementing regulations under that Directive and represent the best available technology.	Carbon & Emission Reduction Projects	Infrastructure, equipment, technology, systems and processes that, in the context of a conversion of existing natural gas networks to hydrogen, demonstrate a reduction in methane leakage in industrial facilities. Examples of investments include, inter alia:  a. replacement of old generation boilers ("heaters") with more efficient boilers ("Skids") with an expected nominal energy saving of at least 15% and a reduction of natural gas emissions of around 5,400 standard cubic meters for each equipment;  b. revamping of the network connection nodes, with the replacement of gaspowered pneumatic instrumentation with electrically driven instrumentation;  c. replacement of turbo-compressors with latest-generation machines yielding an expected reduction in NOx emissions of at least 75%18;  d. electrification of compressor units19: replacement of turbo-compressors powered by gas with electric machines resulting in the elimination of natural gas use and leading to an expected lower consumption of gas at least of 4 million standard cubic meters and to expected savings in terms of NOx emissions of at least 35 tons per year; and  e. installation of Leak Detection System which allows a real time monitoring of the network and a timely intervention in case of significantly reduce the time for intervention.  f. replacement/renovation of valves, control and command devices, pneumatic actuators and instrumentations etc. with an expected reduction in natural gas emissions at completion of the interventions of at least 20%.	9 IMPRESE. INFINITIVAZIONE E INFINITIVAZIONE E INFINITIVAZIONE INFINITIVAZIONE  11 CONTRO CIMATICO CIM

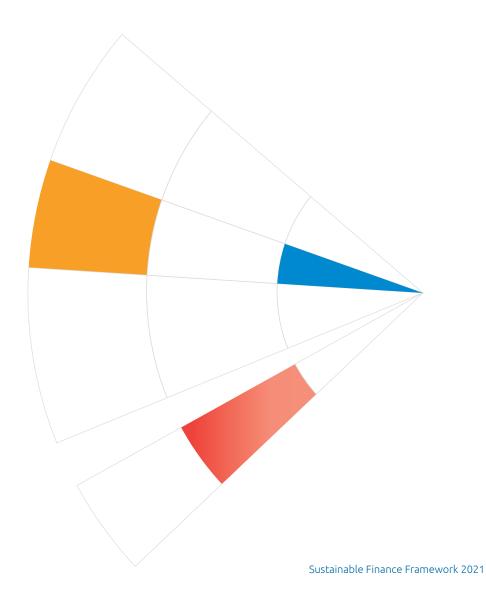
 <sup>18</sup> In case of replacement of gas powered turbo-compressors. In the case of Brugherio plant, the replacement of an old electric-compressor with latest-generation machine has a positive environmental impact in terms of flexibility of the system.
 19 The electrification of compressors units, among other things as reported on page 3, strongly contributes to reach the target of -40% of direct CO<sub>2</sub> emissions by 2030.

Macro category	NACE Code	Relevant Taxonomy article	Eligible projects	Description	SDGs
		Retrofit of gas transmission and distribution networks that enables the integration of hydrogen and other low-carbon gases in the network, including any gas transmission or distribution network activity that enables the increase of the blend of hydrogen or other low carbon gasses in the gas system;	Retrofit of gas transmission network	Activities and projects carried out with the aim to adapt Snam's gas network to be ready to transport a certain increasing percentage of hydrogen and/or other low-carbon gases. Examples of projects include:  - Replacement of already existing pipelines with new hydrogen-ready 19 pipelines, in order to enable the integration of hydrogen and other low-carbon gases, while maintaining at the same time the current network operating and safety standards.	9 IMPRESE. INTOVAZIONE E INFRASTRUTTURE  13 LOTTA CONTRO IL CAMBIAMENTO CLIMATICO  CLIMATICO
Green Gases	D35.21 (Manufacture of gas)	4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids	Advanced Biomethane	Acquisition and development of biomethane plants and upgrading of existing biogas plants, in Italy.  Both greenfield and revamping projects will have biomass sustainability and greenhouse gas emission reduction criteria laid down in the Renewable Directive as fundamental pillars.  Biomethane supply chain can deliver very high decarbonization effects while preserving biodiversity and food security <sup>20</sup> .	7 ENERGIA PULITA E ACCESSIBILE  9 IMPRESE. INNOVAZIONE E INFRASTRUTTURE  13 LOTTA CONTRO LI CAMBIAMENTO CLIMATICO  CLIMATICO

For hydrogen-ready Snam means SNAM internal standards ("GASD") coming from the implementation of international standards currently available. Design and construction of all SNAM network are based on these standards including company's know-how. The SNAM's network "hydrogen-ready" is based on the ASME B31.12' "Hydrogen Piping and Pipeline" standard. GASD remain unchanged for H2NG mixtures up to H2 100% in volume. These standards regulate design and construction phases of new gas network.

<sup>21</sup> In particular, the energy conversion of agricultural residues such as manure can avoid GHG emission from cattle breeding allowing in some cases to reach a carbon negative effect. Advanced agricultural practices such as "biogasdoneright" implemented in order to supply anaerobic digestors with non-food sustainable secondary energy crops can both ameliorate the carbon sequestration capacity of agricultural land and mitigate the soil erosion phenomenon. In addition, the circularity concepts behind "biogasdoneright" practices consider the digestate as a biological fertilizer that can substitute chemical fertilizers obtained from fossil sources.

Macro category	NACE Code	Relevant Taxonomy article	Eligible projects	Description	SDGs
	C.27 (Manufacture of electrical equipment) C.28 (Manufacture of machinery and equipment n.e.c.) M.71.12 (Engineering activities and related technical consultancy)	3.2 Manufacture of equipment for the production and use of hydrogen 4.1 Electricity generation using solar photovoltaic technology 6.14. Infrastructure for rail transport 6.15. Infrastructure enabling low-carbon road transport and public transport	Hydrogen	<ul> <li>Hydrogen fuelling stations for trains</li> <li>Fuel cells H2-ready on Snam network to supply electricity and heat consumptions</li> <li>Manufacture of equipment for the production of hydrogen (Electrolysers to produce hydrogen that will comply with the TSC of climate change mitigation of the EU Taxonomy (category 3.10), construction of hydrogen production plants)</li> <li>Production of electricity from PV plants</li> </ul>	



# 2. Project Evaluation and Selection Process

The proceeds of the instruments are intended to be allocated to Eligible Projects that are evaluated and selected based on compliance with the eligibility criteria set out above by Snam's Sustainable Finance Committee (formerly known as Transition Bond or Climate Action Bond Committee), which is comprised of members of the Finance Department, the CSR Department, the Technical Department and the Planning & Control Department.

The Eligible Projects are selected by the relevant functions of Snam (Technical Department, P&C Business Unit Asset Italia Department, M&A Department, Business Development Department, Energy Efficiency and Bio-methane Department) from the pool of investments included in the Business Plan. On an annual basis, these investments are assessed and validated by the Sustainable Finance Committee, on the basis of Snam's Project evaluation and selection process policy, a summary of which will be published on Snam's website<sup>22</sup>. In particular, during this assessment the Committee reviews the list of selected projects included in Snam's capex plan and evaluates their alignment with the requirements set in the Framework. At the end of the analysis, the Committee will have to unanimously agree on the eligibility status of each project.

The allocation of the Proceeds of the financing instruments will also be overseen by the Finance Department.

## 3. Management of Proceeds

The Proceeds from the financing instruments will be managed by Snam's Finance department.

The net Proceeds from the instruments will be tracked internally and an amount at least equivalent to the net Proceeds of each instrument will be earmarked for allocation to the portfolio of Eligible Projects.

The balance of Proceeds should be periodically adjusted, in order to match allocations to Eligible Projects (re)financed during this period. To this end, if for any reason projects became no longer eligible, Snam commits to substituting them as soon as as practically possible, on a best effort basis.

Pending the full allocation of the financing instruments' Proceeds which is expected within maximum 5 years from the issuance as per the requirements of EU GBS, Snam will invest the balance of the net Proceeds at its own discretion as per its liquidity management policy, including to reimburse outstanding credit facilities, pay down existing debt, or keep it in cash or cash equivalents, overnight or other short-term financial instruments.

Payment of principal and interest on the financing instruments' will be made from Snam's general funds and will not be directly linked to the performance of any of the Eligible Projects.

22 https://www.snam.it/en/Investor\_Relations/debt\_credit\_rating/sustainable\_finance.html



## 4. Reporting

On an annual basis and up until full allocation of the financing instrument Proceeds, the Company will publish a report including, at a minimum:

#### **Allocation Report**

- 1. Allocation of the net Proceeds of financing instruments to Eligible Projects, at the project level where possible, or otherwise at the category level;
- 2. Brief description of all Eligible Projects funded, including their location (country), the types and sectors of projects, and the respective NACE codes<sup>23</sup>;
- 3. Contribution to the EU environmental objectives;
- 4. Proportion of Proceeds used for financing versus refinancing;
- 5. Current funded amounts, percentage funded by the Proceeds, and funding dates; and
- 6. assertions by management that an amount equal to the net Proceeds of that tranche or series of financing instruments are invested in qualifying Eligible Projects and that, until full allocation, an amount equal to any unallocated net Proceeds is used to reimburse outstanding credit facilities / pay down existing debt or kept in cash, overnight or other short-term financial instruments.

#### **Impact Report**

- 1. Environmental impacts of the projects financed, where feasible;
- 2. Estimation of positive and adverse environmental impacts in aggregated form;
- 3. Information on the methodology and assumptions used to evaluate the impacts of projects, where the European green bond factsheet of the bond did not include this information; and
- 4. Information about the projects' positive and negative environmental impacts and, where available, related metrics. Where this information is not available at project level, this will be justified.

In addition, Snam intends to provide:

- detailed case studies on a select number of projects; and
- evidence of the linkage between the projects financed and Snam's Climate Transition Strategy, as reasonably practicable and on a best effort basis.

The updates and assertions will be accompanied by a report from an independent auditor in respect of the independent accountant's assurance of management's assertion, conducted in accordance with International Standard on Assurance Engagements (ISAE) 3000. If the net Proceeds are not fully allocated within one year of issuance, the Company will continue to provide updates annually together with an annual attestation report from an independent accountant until the net Proceeds are fully allocated. Snam confirms that any reporting activity will be also in line with the requirements envisaged by the EU Green Bond Standards. In this context, Snam will seek a post-issuance review of the allocation report by an external reviewer certified by ESMA. All the reports will be available on Snam's website at the following link: https://www.snam.it/en/Investor\_Relations/debt\_credit\_rating/sustainable\_finance.html

<sup>23</sup> In accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006

# Sustainability-Linked format

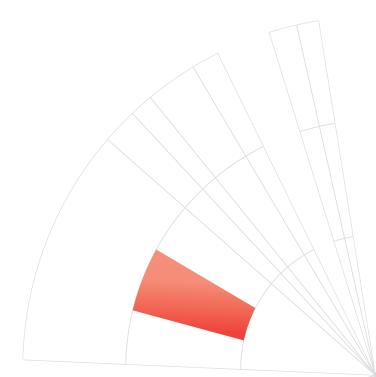
Sustainability-Linked ("SL") instruments (bonds "SLBs" and loans "SLL") are any type of instruments for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined Sustainability Performance Targets ("SPTs") by the Reference Date. SLBs are intended to be used for general corporate purposes and are forward-looking performance-based instruments. The documentation of each instrument having the Sustainability-Linked format will detail one or more KPIs to which the instrument is linked. In accordance with SLBPs and SLLPs, Snam's SLBs are structured around the following five core elements:

- Selection of Key Performance Indicators (KPIs)
- Calibration of Sustainability Performance Targets (SPTs)
- Financial characteristics
- Reporting
- Independent Verification

## Selection of Key Performance Indicators (KPIs)

With its Net Zero Carbon strategy, Snam envisages concrete actions and significant investments for a gradual reduction of direct and indirect Scope 1 and 2 GHG emissions, in line with the commitments defined in the Paris Agreement to limit the rise in global temperature to no more than 1.5°C compared to pre-industrial levels, until carbon neutrality is achieved in 2040.

In order to substantiate and trace the path towards Net Zero Carbon, Snam identified three key performance indicators that are used to define clear intermediate targets in the short and medium term towards the achievement of the Net Zero goal related to Scope 1 and 2.



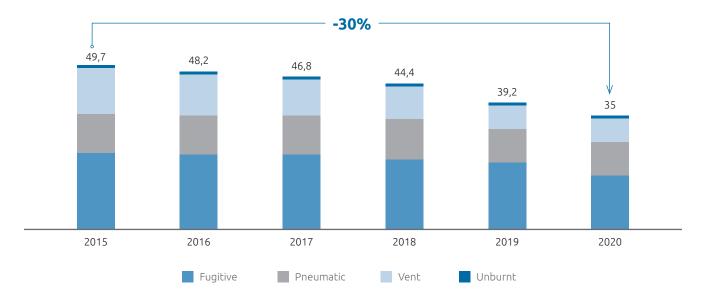
Indicator	Definition	Description
KPI 1: natural gas emissions reduction	Absolute Scope 1 natural gas emissions reduction expressed in Mm³, in accordance with the UNEP Oil & Gas Methane Partnership initiative (OGMP) <sup>24</sup>	Natural gas emissions <sup>25</sup> of the Snam Group <sup>26</sup> arise from the release of natural gas into the atmosphere, from normal plant operation, from the connection of new gas pipelines and the maintenance activities, or from accidental spills occurring at infrastructures
KPI 2: Scope 1 and 2 GHG emissions reduction	Absolute direct (Scope 1) and indirect (Scope 2) GHG emissions reduction expressed in tCO <sub>2</sub> eq	Direct emissions derive from: (i) methane emissions resulting from Snam's various businesses such as transport, storage and regasification (Snam Group), (ii) emissions due to Snam's direct consumptions, such as natural gas used in the combustion of industrial processes and for heating offices, and other fuels such as diesel oil, gasoline and LPG and (iii) emissions of HFC used in air conditioning systems. Indirect energy emissions derive from the production of electricity and steam produced by third parties and which Snam uses for its own activities
KPI 3: Scope 3 emissions reduction	Absolute indirect Scope 3 emissions expressed in tCO <sub>2</sub> eq	Emissions released along the Company's value chain and related to four emission GHG Protocol categories as associates, fuel-and-energy-related activities (which are not otherwise included as part of the Scope 1 and Scope 2 GHG Emissions), business travels and employee commuting

Direct emissions amounted to approximately 1.27 million tonnes, a clear reduction compared to 2019 (-5%) and 2018 (-15%), as showed in the charts below. CO<sub>2</sub> emissions from combustion amounted to approximately 0.66 million tonnes in line with 2019 and -9% if compared to 2018, while CO<sub>2</sub>eq emissions deriving from methane was equal to approximately 0.62 million, down 11% compared to 2019 and 21% compared to 2018, thanks to in-line gas recompression interventions, interventions with tapping machines (technology that allows offtakes from operating pipelines for new connections without interrupting the transportation service), the use of Leak Detection and Repair (LDAR) technologies and other initiatives to replace network components. The overall natural gas reduction in 2020 was -30% compared to 2015.

- The reduction target (covering all the Snam's group activities) and the baseline year of the natural gas target are in line with the UNEP (United Nations Environment Programme) protocol on the reduction of natural gas emissions issued by the Oil & Gas Methane partnership OGMP, a voluntary initiative that Snam joined in November 2020.
- Natural gas emissions are measured in Sm3 and then converted in CO<sub>2</sub>eq and for the conversion the CO<sub>2</sub>eq we assessed considering the methane content of natural gas and in accordance with the instructions of the most recent Intergovernmental Panel on Climate Change (IPCC) "Fifth Assessment IPCC Reports" that assigned methane a Global Warming Potential (GWP) of 28.
- 26 Defined as the entities part of Snam Group's scope of consolidation, excluding its Italian and international subsidiaries that are minority or otherwise jointly owned by Snam.

Indirect emissions are calculated with both the Market Based approach, which gives a nil  $\rm CO_2eq$  emission factor for energy consumption from certified renewable sources, and the Location Based approach, which considers an average  $\rm CO_2eq$  emission factor based on the national energy mix.  $\rm CO_2eq$  emissions calculated for the 2020 are 3.4% down compared to 2019, thanks to the increasing use of renewable energy sources, thus avoiding the emission into the atmosphere of approximately 18,600 tonnes of  $\rm CO_2eq$ , up compared to the 16,100 tonnes avoided in 2019.

# Natural gas emissions by type (Mm³)



### Components of CH<sub>4</sub> emissions

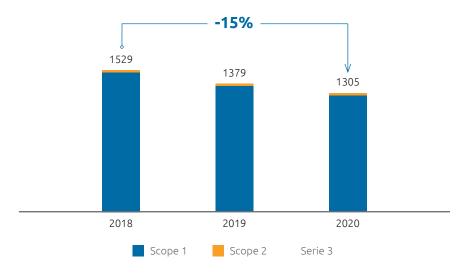
FUGITIVE EMISSIONS: leakages from pipelines, from valves (e.g. open-ended lines, blow down valve)

PNEUMATIC EMISSIONS: resulting from regulated equipment such as valves controlled by means of compressed gas discharge

VENT EMISSIONS: emissions from scheduled maintenance activities, venting or depressurization for emergencies

UNBURNT GAS

# Scope 1 & 2 emissions (tCO<sub>2</sub>eq)



#### Key Scope 1&2 emission reduction initiatives implemented:

- Replacement of pneumatic instrumentation / valves with advanced technology minimizing gas leakage
- Replacement of heaters with new ones with higher efficiency
- Recompression and use of Tapping Machine to reduce vented gas

Finally, in 2020, in relation to other indirect emissions (Scope 3) Snam accounted for approximately 433 thousand tonnes of CO<sub>2</sub>eq<sup>27</sup> (with a 31% reduction compared to the 2019 figure), reported in the 2020 Sustainability Report, to be added to emissions from its Investments (i.e. from participated companies), that amount to 597 ktCO<sub>2</sub>eq and reported in the CDP Climate Change Questionnaire. Overall, considering the 2020 reporting (both Sustainability Report and CDP Climate Change Questionnaire), the GHG Protocol categories included are: Purchased goods and services; Capital goods; Upstream transportation and distribution; Waste generated in operations; Upstream leased assets; Emissions from Fuel-and-energy-related activities (not included in Scope 1 or 2); Business travels; Employee commuting; Investments.

In 2021, the reporting methodology for Scope 3 emissions has been updated following the completion of a project aimed at defining the target for the reduction of indirect emissions and which is an integral part of the decarbonisation strategy already launched by Snam through the definition of targets on direct emissions (Scope 1 and 2). The main change in the methodology regards the recalculation of supplier emissions on the basis of the order placed in the reference year and no longer on the basis of procurement. Thus, in 2021 non-financial reporting, 2019 and 2020 figures will be updated respectively to 982 ktonCO<sub>2</sub>eq and 980 ktonCO<sub>2</sub>eq (corresponding to a -0.2% reduction compared to 2019).

<sup>27</sup> Considering the following GHG Protocol categories: Purchased goods and services; Capital goods; Upstream transportation and distribution; Waste generated in operations; Upstream leased assets; Emissions from Fuel-and-energy-related activities (not included in Scope 1 or 2); Business travels; Employee commuting.

## Calibration of Sustainability Performance Targets (SPTs)

In the context of its Towards Net Zero Strategic Plan, in 2020 Snam identified three Sustainability-Performance Targets along the trajectory to achieving carbon neutrality by 2040 (Scope 1 and 2). In November 2021, Snam has increased its sustainability ambition improving those targets together with a new target on scope 3 emissions.

SPT #1: Reduction of absolute natural gas emissions by 55% in 2025 (Mm³)

Metric	SDG	Unit of Measure	Baseline	Target	Reference Date
Natural gas emissions reduction	13	% vs. Baseline	2015	-55%	31 <sup>st</sup> December 2025

In 2015, natural gas emissions were equal to 49,74Mm³ and Snam has committed to cut them by 55% in 2025. The methodology such as the base year is coherent with the requirements of the OGMP framework. At announcement, in November 2021, Snam's natural gas target is more ambitious than the one set by the Oil & Gas Methane Partnership 2.0 (UNEP protocol). The target is mainly achievable thanks to the acceleration of the Leak Detection And Repair ("LDAR") program that implies the monitoring of emitting components in our facilities to identify natural gas leaks and the planning of maintenance works to repair such leaks. Other actions to reduce emissions are in-line recompression and replacement of valves and pneumatic devices.

SPT #2-3: Reduction of absolute Scope 1 and 2 GHG emissions ( $CO_2$  and  $CO_2$ eq) by 40% in 2027 and 50% in 2030 ( $tCO_2$ eq)

Metric	SDG	Unit of Measure	Baseline	Target	Reference Date
Scope 1 and 2 GHG emissions reduction	13	% vs. Baseline	2018	,	31st December 2027 31st December 2030

As a long term target, Snam aims to achieve net zero emissions by 2040 in its operational activities (Scope 1 and 2), which mainly consist of measures to contain natural gas emissions, through the modernisation, efficiency and maintenance of the network, and the reduction of carbon dioxide (CO<sub>3</sub>) emissions mainly through the conversion of compressor stations to dual fuels, thus replacing gas turbo-compressors with electric compressors, and thus increasing the use of green electricity. In addition, with a view to integrating hydrogen into the existing infrastructure and thus enabling its use, about half of the investments envisaged in the Strategic Plan will be geared towards continuing the adaptation of the existing network to hydrogen ready, which is already ca. 70% ready today. Snam is also installing the first hybrid turbine capable of operating with 10% hydrogen at the Istrana (TV) power plant. To reach the net zero target for Scope 1 and 2 emissions by 2040, Snam has set intermediate SPTs, in particular, the 2030 target is consistent with the reductions required to keep warming to 1.5°C. In 2040, offsetting measures will be implemented through specific offsetting projects for emissions that cannot be eliminated with the best technologies available.

In reaching its target, Snam could face some risks as (i) delays and inefficiencies in the construction / commissioning of dual fuel installations; (ii) delays and inefficiencies in the implementation of initiatives aimed at reducing natural gas emissions (e.g. in-line gas recompression, replacement of pneumatic valves, LDAR initiative; and (iii) Failure to implement the hypotheses on the transport scenarios for green gases (e.g. biomethane, hydrogen) due to the external context or to the lack of technological adaptation of the network with reference to its capability to transport hydrogen.

# WHAT ARE SNAM'S SCOPE 1 AND 2 EMISSIONS?

## Direct emissions (Scope 1)

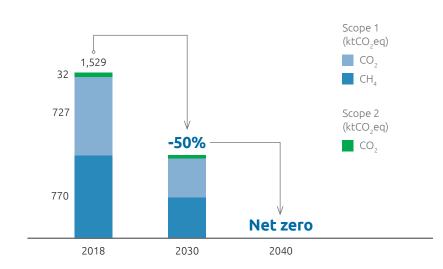
- Methane emissions resulting from Snam's various businesses such as transport, storage and regasification
- Emissions due to Snam's direct consumptions, such as natural gas used in the combustion of industrial processes and for heating offices, and other fuels such as diesel oil, gasoline and LPG
- Emissions of HFC (not relevant), used in air conditioning systems

### Energy indirect emissions (Scope 2)

 Indirect emissions for the production of electricity and steam produced by third parties and which Snam uses for its own activities

# Scope 1 & 2 emissions

#### **TARGET:**



#### **ACTIONS TO ACHIEVE THE CHALLENGES**

#### Reduction of emissions from operations:

- Interventions and application of best practices to minimise CH<sub>4</sub> emissions
- Reducing CO<sub>2</sub> emissions and Group's energy needs, also thanks to installation of new electric compressors in the gas booster and storage plants
- Use of renewable electricity

### Development of green gases

• Development and networking of new green gases, such as biomethane and hydrogen

## Reduction of emissions from buildings and the company car fleet

- Planning a move to a new headquarter certified LEED GOLD
- Use of green electricity produced by photovoltaic plants
- Converion of company fleet to natural gas vehicles

SPT #4: Reduction of absolute Scope 3 GHG emissions by 46% in 2030 (tCO<sub>2</sub>eq)

Metric	SDG	Unit of Measure	Baseline	Target	Reference Date
Scope 3 GHG emissions reduction	13	% vs. Baseline	2019	-46%	31st December 2030

In 2020, Snam has committed to reduce other indirect GHG emissions (Scope 3) primarily by working with participated companies and suppliers to reduce emissions throughout the entire value chain, without using carbon offsets. On Scope 3, Snam is implementing additional initiatives to promote a culture aimed at saving energy and minimising the indirect emissions associated with the Group's activities, including sustainable mobility initiatives and all activities aimed at saving energy by employees. In 2021, Snam has committed to cut Scope 3 emissions by 46% by 2030 considering 4 emission GHG Protocol categories<sup>28</sup> (Associates, Fuel & Energy related activities, Business Travel, Employee commuting) considering as baseline the 2019's emissions equal to 762 ktCO<sub>2</sub>eq. Beyond 2030, Snam will continue to proactively engage with participated companies and suppliers to further reduce Scope 3 emissions in order to achieve carbon neutrality in the longer term.

Snam's targets have been tested with the SBTi general methodology tool and result as being in line with the commitments defined in the Paris Agreement to limit the rise in global temperature to no more than 1.5°C, until carbon neutrality is achieved in 2040.

## **Recalculation Policy**

The KPIs and SPTs set out in this framework will remain applicable throughout the maturity of any financing issued under the Framework, regardless of any future changes of Snam's sustainability strategy. However, SPT(s) and/or the baseline(s) should be recalculated and applied to existing financing at the occurrence of:

- 1) any event that requires the Group to change its methodology to calculate the GHG emissions following a significant change in data due to better data accessibility or discovery of data errors or
- 2) in case of significant structural changes of the Group perimeter such as acquisitions, divestitures or mergers. In such events the SPT/baseline should be recalculated in good faith by Snam, on the condition that Snam's Second Party Opinion provider has independently confirmed to Snam in writing that the proposed revision:
  - A. is consistent with Snam's sustainability strategy; and
  - B. is in line or more ambitious than the initial target, and shows an improvement of Snam's commitment; and
  - C. has no material impact on the second party opinion originally provided to Snam in connection with the Framework.

<sup>28</sup> These categories represent more than 2/3 of the total Scope 3 emissions, in line with Criteria C6 of SBTi Criteria and Recommendations, that is "C6 — Scope 3 emissions coverage for near-term targets: Companies must set one or more emission reduction targets and/or supplier or customer engagement targets that collectively cover(s) at least two-thirds (67%) of total scope 3 emissions considering the minimum boundary of each scope 3 category in conformance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.".

When significant structural changes occur in the middle of a year, the current and baseline year will be recalculated for the entire year. In the event of an acquisition, in order to ensure that full and accurate data are available, recalculation will be carried out within one year after the structural change has occurred.

Baselines and/or SPTs adjustments will be reported by Snam in the ESG Progress Report.

Snam has developed a target aligned with Science Based Targets Initiative (SBTi) general methodology, since as of today it is still not clear which methodology is applicable to Snam.

As soon as this will be clarified, Snam is committed to reconsider the calculation of Sustainability Performance Targets accordingly.

By that time, Snam will evaluate whether to take a commitment also beyond 2030.

### Financial characteristics

In accordance with best market practices, Snam intends to issue SLBs for general corporate purpose, unless otherwise stated, and which incorporate one or multiple KPIs, as outlined in the section dedicated to the "Selection of Key Performance Indicators".

All Sustainability-Linked instruments issued under this Framework will have a Sustainability-Linked feature that will result in a coupon step up, or a premium payment as the case may be, if a Trigger Event occurs. A Trigger Event occurs if:

- One or more of the selected KPIs have not achieved the SPT(s) on the reference date, or
- The verification (as per the verification section of this Framework) of the SPT(s) has not been provided and made public as set out in the External Verification section of this Framework.

The relevant KPIs, SPTs, step-up coupon applicable to interest periods following such reference date, or premium payment amount, as applicable, will be specified in the relevant documentation of the specific transaction (e.g. Final Terms of the Sustainability-Linked instrument).

The SPT will be measured once, at the target date. However, the KPIs will be reported on annually (as described in the Framework) which will enable investors to track Snam's performance.

For the avoidance of doubt, no more than one step-up margin or margin adjustment, as applicable, can be applied over the life of a given Sustainability-Linked instrument. If Snam has achieved its SPT(s), as identified in the relevant documentation of the Sustainability-Linked instrument, and reporting and verification for the SPT have been provided and made public in accordance with the reporting and verification sections of this Framework, the financial characteristics of the financing instrument shall remain unchanged.

## Reporting

With reference to the KPIs, Snam will report at least annually on their performance and trajectory towards the predefined and associated target, and in any case for any date/period relevant for the assessment of the trigger event associated to the specific Sustainability-Linked Bond, in the Group's Consolidated Non-Financial Disclosure (NFD), in accordance with Legislative Decree 254/16 (as amended and supplemented from time to time), which will be available on the Company's website.

In particular, the reporting will include:

- up-to-date information on the performance of the selected KPI(s), including baselines where relevant;
- any additional relevant information enabling investors to monitor the progress of each selected KPI towards the SPT
- a verification assurance report relative to the KPI outlining the performance against the SPTs and the related impact, and timing of such impact, on the Bond's financial and/or structural characteristics; and
- any information enabling investors to monitor the level of ambition of the SPTs (e.g. any update in the issuers sustainability strategy or on the related KPI/ESG governance, and more generally any information relevant to the analysis of the KPIs and SPTs).

## **Verification**

### Pre-issuance verification

The Framework has been verified by ISS ESG against the relevant market guidelines/ Principles and or Regulation, where applicable. It will be made public on Snam's website.

#### Post-issuance verification

KPIs are reported in Snam's annual Non-Financial reporting (NFS and Sustainability Report) that is subjected to a limited assurance engagement according to the criteria indicated by the "International Standard on Assurance Engagements ISAE 3000 Revised - Assurance Engagements Other than Audits or Reviews of Historical Financial Information" principle, issued by International Auditing and Assurance Standards Board (IAASB), by an External Verifier. As such, the annual performance of each selected KPI will be subject to external verification an annual basis and at "Limited Assurance" standard.

"External Verifier" means any qualified provider of third-party assurance or attestation services appointed by Snam, to review Snam's statement on KPIs.

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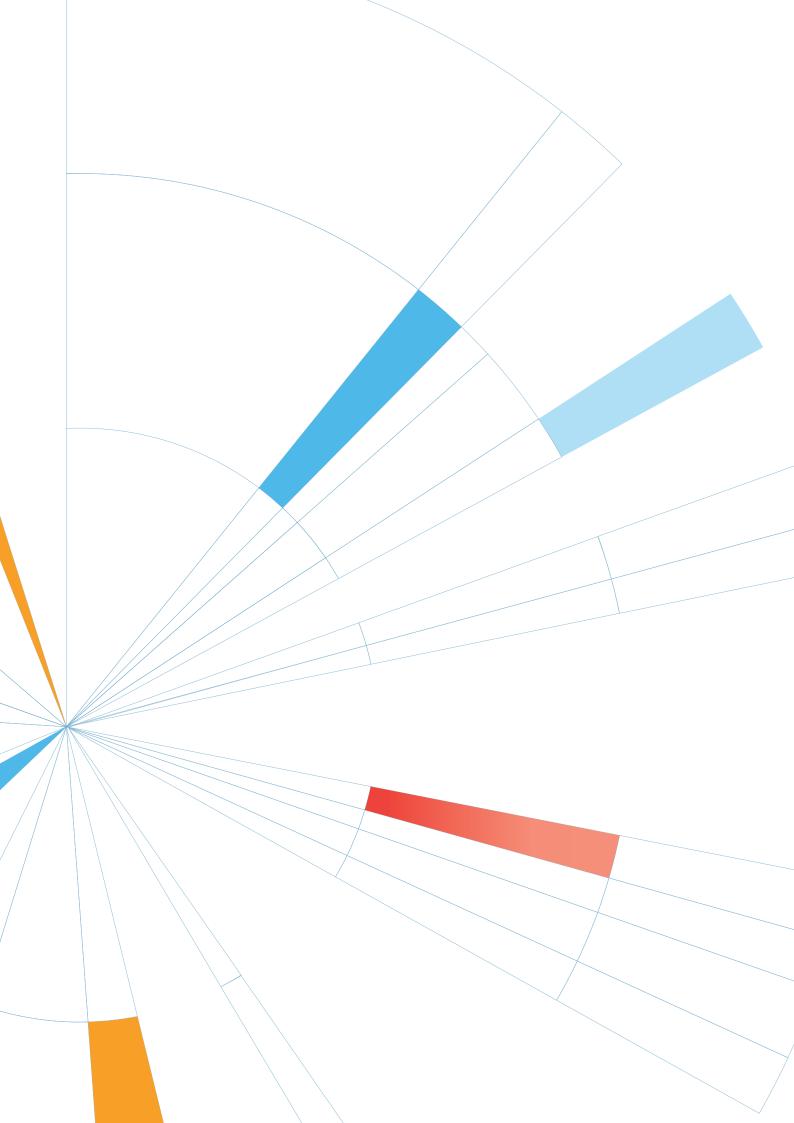
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