

# Climate Action Bond Report

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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 promotes development in the areas in which it operates, while also contributing to promote the energy transition. Through its international subsidiaries, it operates in Albania (AGSCo), Austria (TAG, GCA), China (Snam Gas & Energy Services Beijing), 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 company has the most extensive transmission network among European peers (over 41,000 km including international activities) and greatest natural gas storage capacity (ca. 20 billion cubic meters, including international activities). It is also one of the main regasification operators in Europe, an activity it carries out through its Panigaglia terminal and its stakes in the Rovigo plant (Adriatic LNG) in Italy and in the Revithoussa plant (DESFA) in Greece.

As part of its new €6.5 billion plan to 2023, Snam will invest €1.4 bn in the Snamtec (Tomorrow's Energy Company) project, which aims to reduce the environmental impact of its activities by promoting innovation and contribute to decarbonisation. Through this project, Snam aims to reduce methane emissions by 40% by 2025 and direct and indirect CO2 equivalent emissions by the same amount by 2030 and to invest in new energy transition businesses. These include sustainable mobility (compressed - CNG and bio-CNG - and liquefied natural gas distributors - LNG and bio-LNG, Small Scale LNG), infrastructure for biomethane from organic waste and agricultural and agro-industrial waste, and energy efficiency services tailored to apartment buildings, the public administration and industry. Promoting the use of renewable gases, Snam was also the first European company to test the introduction of hydrogen blended with natural gas in its network.

Snam's business model is based on sustainable growth, transparency, the promotion of talent and diversity and the social development of regions through the initiatives of Fondazione Snam.

# 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. With approximately €17 billion in market capitalization, it is one of the largest Italian companies and is included in the FTSE MIB index of Borsa Italiana.

Natural gas is key to achieving a successful long-term energy transition away from more carbon-intensive fossil fuels. When coupled with non-programmable renewable resources, such as wind and photovoltaics, it will help the progressive decarbonisation of the economic system in Italy and, more broadly, worldwide.

Snam promotes the use of natural gas as a flexible, safe and low environmental-impact fuel. The Group has long been committed to transforming Italy into a gas hub for Europe, in order to increase the security of supplies and diversify the country's sources at a fair cost for society and end-users. The focus on natural gas and its sustainable applications is a key strategic consideration for Snam.

## **Snam's business will continue to evolve with a strategic attention on:**

- continuous focus on improving efficiency in core traditional business
- enhance exposure to play a key role in supporting energy transition
- ensure solid performance of international activities.

To achieve these objectives, Snam's 2019-2023 strategic plan details investments of circa €6.5 billion over the plan horizon. As part of the investment plan, the initiatives of the SnamTec project (Tomorrow's Energy Company) have risen by 65% to over € 1.4 billion (of which € 1 billion is RAB) compared to the previous plan. The goal of this project is to accelerate the innovative capacity of Snam and its assets to seize the opportunities offered by the evolution of the energy system increasing sustainability and innovation in the core business and supporting the development of new green businesses.

For the period, investments for the energy transition have risen to at least € 400 million, compared to € 200 million in the previous plan. These include sustainable mobility using CNG (compressed natural gas) and LNG (liquefied natural gas), energy efficiency and biomethane.

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**New emissions targets were declared: -40% in methane emissions by 2025 and -40% in direct and indirect CO2 eq emissions by 2030**

Additionally, new emissions targets were declared: -40% in methane emissions by 2025 and -40% in direct and indirect CO2 eq emissions by 2030. Starting in 2019, the Company has also begun to explore the opportunity brought up by the evolution of green gases (biomethane, hydrogen and power to gas) and by the energy efficiency both on own assets and through TEP energy solutions towards third parties.

# 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, as well as 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.

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. The report is edited in compliance with the Global Reporting Initiative (GRI) guidelines and since 2017 with Comprehensive option of the GRI reporting standards and an independent auditor provides a "limited" type of assurance about the information reported according to the International Standard on Assurance Engagements 3000 (ISAE 3000). Snam also publishes the Non-Financial Statement (NFS) according to the Dgls. 254/2016 in a specific chapter of the Directors' report inside the Annual Report; the NFS is assured by the same independent auditor and according to the same criteria and type of assurance of the Sustainability Report.

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**Snam has been included in the Dow Jones Sustainability World Index for the eleventh consecutive year**

Underscoring its commitment to environmental, social and governance ("ESG") issues, Snam has been included in the Dow Jones Sustainability World Index for the eleventh consecutive year by RobecoSAM, the most important global stock exchange index for Corporate Social Responsibility. This year's results, 81 points, put the company in second place, after the best performer (85 pt): Snam increased its scores in every sector. These results serve as a testament to Snam's global leadership in the decarbonisation movement.

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.

Snam's activities impact all 17 of the United Nation's Sustainable Development Goals ("SDG"). Due to the nature of its business, however, Snam has chosen to target the following goals:

SDG 7 Affordable and Clean Energy - increasing the production of energy from renewable sources, including biomethane, and improving the energy efficiency of Snam's operations whilst avoiding or reducing the impact on the environment, landscape and cultural heritage. To this end, Snam has acquired IES Biogas, one of Italy's leading companies in the development of biogas and biomethane plants, and TEP Energy Solutions, one of the leading Italian ESCOs (Energy Service Companies) in energy efficiency targeted to residential, industrial and real estate sectors. In the biomethane sector, through the new subsidiary Snam4Environment, Snam has also acquired the majority stake of Renerwaste

and signed a binding LOI aimed at negotiating and defining the agreements to launch a strategic partnership in agriculture biomethane infrastructure through a 50% entry into Iniziativa Biometano.

SDG 9 Industry, Innovation and Infrastructure - building more resilient and sustainable infrastructure. In the new strategic plan, Snam has envisaged investments to develop two small liquefaction plants (SSLNG), one in the North and one in Southern Italy, and for the upgrading of the Panigaglia terminal in order to allow the loading of tankers and foster the use of LNG for heavy transport, industry and residential buildings. Snam has also launched Snam Global Solutions, which offers analytical, consulting and project management services to the gas market abroad.

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). By 2023, Snam will develop 150 new refuelling stations throughout Italy. Around 100 new CNG/L-CNG stations were recently contractualized.

SDG 13 Climate Action - with the goal of driving the energy transition towards decarbonisation, Snam is committed to encouraging the use of natural gas to replace other carbon-intensive fossil fuels. Snam's goal is to reduce its methane emissions by 40% from the 2016 level by 2030 and to promote alternative uses for LNG, CNG and biomethane in land and sea transports. Furthermore, Snam is supporting the evolution of green gases with 250m€ investments in biomethane and is experimenting with hydrogen blending and carrying out studies ongoing on asset readiness and power to gas. Snam has created a new business unit dedicated to hydrogen, with the task of evaluating possible pilot projects and contributing to the development of the supply chain. At the same time, studies will continue the adaptation of compression and storage infrastructure, on the role of hydrogen in the future energy system, also with a view on sector coupling, and on possible experiments in power-to-gas. According to a study commissioned by Snam, hydrogen could cover almost a quarter (23%) of the Italian energy demand by 2050 in a scenario of profound decarbonisation.

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**Snam is supporting the evolution of green gases with 250m€ investments in biomethane and hydrogen blending up to 10%**



# Snam's 2019 Inaugural Climate Action Bond

The climate action bond structuring has been carried on by Snam during 2018 and, in November, the result has been published coming up with the Climate Action Bond framework. The document embeds the well-recognized four pillars of the Green Bond Principles both because very familiar to investors and the transparency around the use of proceeds.

In order to structure the issuance of the climate action bond, an internal workflow and a climate action bond committee have been set up. The committee is composed by representatives of the treasury department together with representatives from the sustainability and the engineering ones strictly worked in order to identify the criteria adopted in the selection mechanism of projects that are financed and monitor the proceeds' allocation.

In February 2019, Snam during a series of fixed income investor meetings in Europe presented its Climate Action Bond Framework. The Roadshow trip reached the main European places: London, Amsterdam, Paris and Frankfurt with the aim of telling Snam's story to Socially Responsible Investors (SRI).

The clarity Snam was able to give during meetings on what it is aiming to achieve has been well received, and in no case, we received a negative feedback on the concept of the Climate Action Bond Framework. We also received a positive range of responses regarding eligibility for broader SRI strategy funds. **Investors noted Snam's strong rankings in terms of ESG ratings, which are a helpful external validation of the company's strategy.**

Overall, investor response has been very positive, with appreciation of the holistic approach to ESG within Snam's strategy, and of the decision to focus on a broader interpretation of the themed bond market.

On the 21st February 2019 Snam S.p.A. (rated at issuance Baa2 by Moody's, BBB+ by S&P and BBB+ by Fitch) successfully launched its first Climate Action Bond, whose proceeds was to finance and, partially, refinance Eligible Projects as defined in Snam's Climate Action Bond Framework.

Snam's objectives in issuing the first Climate Action Bond in Europe are to consolidate Snam's role in the energy transition in Europe, to promote investor awareness of

Snam's ESG (Environment, Social and Governance) initiatives and investments and to diversify its investor base.

The notes have been issued under Snam's 10 billion-euro EMTN (Euro Medium Term Note) programme which was approved by the Board of Directors on October 2nd 2018 and have been listed on the Luxembourg Stock Exchange.

The size of the bond has been 500 million euro and maturing on August 28th 2025. The issuance, reserved to institutional investors, was approximately 5 times oversubscribed by high quality and geographically diversified institutional investors. The most active investors were located in France, Germany and Austria, Italy and UK.

The Climate Action Bond issuance was supported by a second party opinion by DNV GL which confirmed that Snam's 2019 Climate Action Bond's use of proceeds is fully aligned with the eligible categories as defined in the framework.

DNV GL concluded that the categories included in the framework fall within the defined categories of climate action as defined in Italy's National Adaption Plan and are also aligned with the transition to a low carbon economy.

It is DNV GL's opinion that the Bond meets the criteria established in the Protocol and that it is aligned with SNAM's Climate Action Bond Framework, Italy's PNACC and the Green Bond Principles 2018.

Starting from December 2019, the Climate Action Bond has been successfully listed also in the Milan stock exchange in the ExtraMOT PRO segment.

# Climate action Bond Framework Summary

# Use of proceeds

The proceeds of the Climate Action Bonds will be used to finance or refinance, in whole or in part, existing and/or future Eligible Projects.

For the purposes of this section, “Eligible Projects” mean Carbon & Emission Reduction, Renewable Energy, Energy Efficiency and Green Development Projects which meet a set of environmental criteria, which are approved by Snam’s Climate Action Bond Committee and, where applicable, a reputed Second Party Opinion provider.

- 1. “Carbon & Emission Reduction Projects”** mean infrastructure, equipment, technology, systems and processes that demonstrate a reduction in energy use/ losses and reduction in emissions in industrial facilities.
- 2. “Renewable Energy Projects”** mean development of new biomethane plants and upgrading of existing biogas plants, in Italy and abroad.
- 3. “Energy Efficiency Projects”** mean energy efficiency projects for Snam’s corporate facilities or supply chain.
- 4. “Green Development Projects”** mean the development and maintenance of conservation areas, natural capital preservation and the development and maintenance of green areas/buildings.

## Projects evaluation and selection

At issuance and on an annual basis thereafter the Snam Finance Department determines the proceeds of the Climate Action Bond not yet allocated (“Unallocated Proceeds”) and sends a request to the Climate Action Bond Committee asking for Eligible Projects to be funded over the next 12 months, up to an amount equal to the Unallocated Proceeds.

The Climate Action Bond Committee, based on the criteria set in the Use of Proceeds section of the Climate Action Bond Framework, address the requests to the Relevant Functions and provides them the guidelines for the selection of the projects.

The Relevant Functions select the Eligible Projects, using the criteria set forth in the Use of Proceeds section of the Climate Action Bond Framework and following the guidelines provided by the Climate Action Bond Committee, and indicate the capital expenditures expected over the next 12 months.

The Climate Action Bond Committee is responsible for approving (or rejecting) the Eligible Projects contained in the list provided by the Relevant Functions.

## Internal Reporting

On a quarter basis, the finance department collects, aggregates and shares information related to all Eligible Projects funded with the climate action bond committee and in particular, the current funded amounts and a relevant focus on relevant changes quarter by quarter. In case a change raises, the committee is promptly informed. On a yearly basis, this information collected about the eligible projects is relevant in the annual reporting process.

## Verification – External review

An external and independent certification body analyses the information included in the Climate Action Bond Report and releases the Annual Climate Action Bond Report Assurance (in accordance with ISAE 3000), until all the Climate Action Bond proceeds are allocated in full.

# Use of Proceeds and Environmental benefits

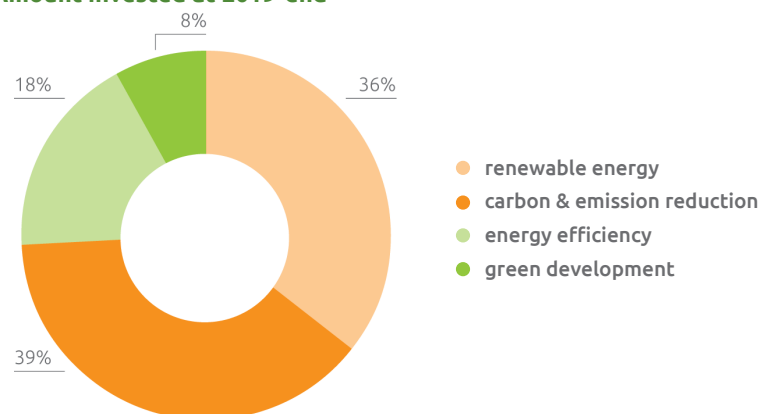
Within the current Climate Action Bond framework and the categories included in, eligible projects identified and financeable at 31 December 2019 amount to ca. €700 million only considering the list of project already identified at the bond's issuance, thus maintaining a consistent buffer over the bond already issued.

The proceeds of the Climate Action Bonds, issued so far, will be used to finance or refinance, in whole or in part, existing and/or future Eligible Projects and as of the end of 2019, 48% of the proceeds have been allocated to eligible projects equal to ca. €235 million invested.

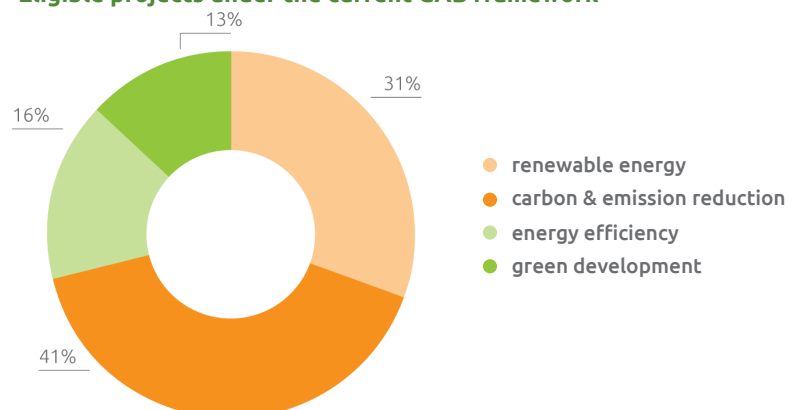
The proceeds not yet allocated are expected to be invested in the next few years and until the full allocation, the company can hold funds in cash and cash equivalent or repay the outstanding debt. However, the company is committed to allocate to eligible projects an amount equal to the CAB's proceed.

For more details, below the breakdown of amounts already invested per category included in the climate action bond framework. The larger category of projects already financed is the Carbon & emission Reduction category and in particular, the 32% of the investment selected within this category has been financed at December 2019.

#### Amount invested at 2019-end



#### Eligible projects under the current CAB framework



Below the detail for each category at the end of 2019 in terms of amount already allocated and the environmental impact of the projects:

## 1. Carbon & emission reduction projects

The category includes those currently identified investments which aim at

Investment category/ description	Description of the investments	Funded amount at end 2019 (€000)	Environmental Performance indicator (A or N) <sup>1</sup>	Environmental benefit
Replacement of old generation boilers ("heaters") with more efficient boiler units ("Skids")	Within 2022, 90 heaters will be replaced, with a total thermal capacity of 99 MW	23,264	N - Energy saving expected at the end of the activity  N - Methane leakages avoided	15% <sup>2</sup>  5,400 Smc/year per unit
Revamping of the equipment at the network's main connection nodes	Replacement of gas powered pneumatic instrumentation with electrically driven instrumentation - Expected within 2021	1,242	A - Methane leakages avoided	742,000 Smc/year
Replacement of turbo-compressors with latest-generation machines	The activity consists in the replacement of turbo-compressors with latest-generation machines powered by gas	50,774	N - NOx lower emissions	80%
Replacement of gas-powered turbo-compressors with electric powered compressors	Replacement of turbo-compressors powered by gas with electric machines eliminating the consumption of gas	4,547	A - NOx lower emission (tons)  N – Energy saving	35 tons/year  4 MSmc
Replacement/renovation of valves, control and command devices	Replacement of the valves with pneumatic actuators with valves with electric actuators and of control and command devices for globe valves with a monitor function (about 460 positioners)	12,310	A - Methane leakages avoided	8.6 MSmc

<sup>1</sup> "A" is used when the environmental benefit has been identified on an actual basis or can be assessed with a random sample data collection, while "N" stays for those projects for which the environmental cannot be assessed on an actual basis but it can be deducted exclusively by the constructor's information.

<sup>2</sup> The value does not factor in the level of obsolescence of the old heaters, indeed assuming a certain degree of obsolescence vs nominal efficiency of the heaters at the end of the useful life to be replaced the energy efficiency would be comfortably above 15%.

reducing the greenhouse gasses emissions and energy consumption related to the company's assets.

## **2. Renewable energy projects (biomethane)**

At the end of 2019, Snam owns 2 companies directly involved in the biomethane production sector:

### **Energi Sicilia**

Feedstock: Organic Fraction Municipal Solid Waste (OFMSW) and agricultural biomass

Production of biomethane expected within 2020

Current installed capacity: 3.2 Mmc/year

### **Renerwaste**

#### **Albairate plant**

- Feedstock: Organic Fraction Municipal Solid Waste (OFMSW)
- Production of biogas (for electricity production)
- Current installed capacity: 14,829,664 kWh
- Conversion of the plant in order to produce biomethane expected within 2020
- Expected capacity: 7.7 Mmc/year

#### **Tortona plant**

- Feedstock: Organic Fraction Municipal Solid Waste (OFMSW)
- Production of biogas (for electricity production)
- Current installed capacity: 6,709,848 kWh
- Conversion of the plant in order to produce biomethane expected within 2021
- Expected capacity: 3.4 Mmc/year

Until the end of 2019, Snam has invested ca. €90 million in projects falling within this category, of which ca. 90% related to M&A activity, and represents ca. 45% of the overall identified amount to finance within renewable energy category.

In this field, eligible investments are plants mainly producing biomethane but also those plants producing biogas and ultimately electricity can be eligible as the production of renewable energies is also achieved.

### **Organic Fraction Municipal Solid Waste plants**

Average investments of around € 15/20 million and average size of ca. 2MWeq and 500Scm/h. This type of plant mainly does revenues from OFMSW, biomethane sale and CICs (public incentive for each certificate for 10 years).

### **Sustainable agricultural biomass**

Average investments of around € 5 million and average size of ca. 1MWeq and 250Scm/h. This type of plant mainly does revenues from biomethane sale and CICs (public incentive for each certificate for 10 years).

### 3. Energy efficiency projects

The category includes investments both (i) for the energy efficiency of the current Snam's assets and (ii) for the acquisition and development of ESCo companies with the aim to support the development of the entire Italian energy efficiency sector for residential and industrial segments.

Investment category/ description	Description of the investments	Funded amount at 2019 (€000)	Environmental Performance indicator (A or N)	Environmental benefit
Replacement of traditional lamps with LED lamps	More than 80% of interventions already executed. Full replacement expected within 2020	1,980	N - Energy saving	40% equivalent to 34MWh
Acquisition of ESCo companies	Acquisition of TEP, TEA and TEP nord-est	21,000	Companies operating in the energy efficiency sector for residential and industrial solutions	
Further development in Energy efficiency sector	Investing in ESCo companies supporting the growth	11,895	Supporting the energy efficiency solutions that Snam's Escos companies can offer to clients <sup>3</sup>	

<sup>3</sup> The relevant indicator is the number of interventions (deep renovation in residential buildings) within the company portfolio. Considering TEP, which has been integrated into Snam perimeter in 2018, 40 interventions have been concluded in 2019, with a reduction of the emissions granted to clients estimated, based on our internal calculation, to be ca. 10,000 tCO<sub>2</sub>e for the entire useful life.

### 4. Green development projects

This category includes projects addressing the development and maintenance of conservation areas, natural capital preservation and the development and maintenance of green areas and buildings.

At the end of 2019, €26 million equal to ca. 27% of the total amount of green development projects have been allocated and, 9 out of 13 projects have been concluded:

- 2 new buildings: energy class obtained B and D respectively
- 4 compression stations' buildings renovation: energy class improved from G to B
- 2 company's buildings renovation: energy class improved from G to C
- Redevelopment of green area of Minerbio compressor station.

The remaining projects are in progress and the completion is planned in the next few years. For these projects LEED certificates and B/C energy classes are expected.



# Case studies of selected projects

# Renewable Energy project: the Enersi plant

**Enersi Sicilia is an innovative project that involves the recovery of the organic fraction of solid urban waste (the Italian acronym is "FORSU") through the construction of a biomethane production plant and quality compost.** The biomethane produced will be inserted in the network as a renewable energy source while the compost will be used as a natural fertilizer to replace chemical fertilizers.

Snam4Mobility, a wholly-owned subsidiary of Snam, was involved in the operation. The conclusion of the first phase happened in November 2018, with the acquisition of a company vehicle holding an authorization to build and operate a biomethane-powered production plant of FORSU.

Construction works began in December of the same year and, from the last update on their state of progress, they should end with the introduction of biomethane in Snam networks by the end of 2020, despite some slowdowns due to an appeal to the TAR introduced by some local committees.

## The numbers of the project

The plant will be able to recover around 36,400 tons/year of FORSU and will contribute to improve the efficiency of the waste management system of the Province and of the Region by favouring the reduction of the environmental impact through a lower use of landfills and waste transport outside of the Region, and therefore also reducing costs for the municipality and the citizens.

The key numbers of the project:

- Project investment: 19,6 M€
- Approximately 3,2 Mmc/year of biomethane (corresponding to an annual energy production of approximately 30 GWh) produced equal to:
- approximately 2.800 families served for one year with the biomethane produced, or
- approximately 570 cars a day fed with the biomethane produced, or
- over 3.500 equivalent tons of oil saved per year
- Approximately 12.000 tons/year of compost produced, intended for agronomic use and replacing chemical fertilizers

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**Approximately 570 cars  
a day fed with the biomethane  
produced**

## What are the advantages for the territory, thanks to the Enersi Sicilia plant?

The main and immediate advantages for the territory are given by:

- Employment and skills generation: at least 8 permanent and qualified jobs;
- Investments on the territory: economic return on local companies, which will be involved in the construction, support and supply phase of the plant;

- Savings for the citizens and/or the municipality in terms of transfer tariffs to the Enersi Sicilia plant: the construction of the plant within the Caltanissetta basin will reduce the distances travelled by the vehicles that are transporting today the organic waste produced locally outside the province, minimizing the long-range vehicle traffic, and therefore the logistics costs attached to it. Consequential improvement also on the relative atmospheric emissions of the vehicles mentioned above.



# Energy efficiency project: TEP Energy Solution

TEP Energy Solution is one of the main Italian Energy Service Companies, in charge of energy efficiency operations by offering case-based solutions aimed at reducing companies' economic and environmental cost. In 2018 Snam bought a controlling stake, equal to 82% of TEP's capital, to favour the decarbonisation of the country and a better use of energy in the areas where it operates.

**TEP's mission is to contribute to the energy transition helping its customers to reduce their environmental footprint both through energy efficiency solutions and tree planting in urban areas.**

The main strengths of TEP Energy Solution are technological independence, investment capacity directly to customers' projects, an R&D team dedicated to scouting of technological solutions, and large operational and contractual flexibility.

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**2.8 million tons of CO<sub>2</sub> were avoided thanks to the totality of their projects**

Amongst TEP Energy Solution's successes, it is important to note that 2.8 million tons of CO<sub>2</sub> were avoided thanks to the totality of their projects (the equivalent of 142 million trees planted), it has been accredited in the Italian energy services manager (the English translation of "gestore dei servizi energetici GSE S.p.A.") since 2006, it has accumulated over 200 clients, and it handles over 1 million white certificates.

**As a company operating in the energy efficiency business, the commitment for sustainability and decarbonization is at the core of the TEP's business strategy.** Besides this, TEP developed a special attention for the regeneration of cities and it is committed to create with continuity urban woods which are functional both against air and noise pollution and as leisure spaces for local communities.

**TEP's sustainability strategy fits into the Snam's one, which acknowledges a company's success through a combination of economical, environmental and social factors addressing all the stakeholders' requests.** With the adoption of its new business strategy, Snam aims to be a reference point for the Italian and European path towards decarbonization.

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**Since 2016, 650 km of environmental restoration and 865.000 sq m of reforestation took place**

TEP's commitment for urban tree planting is in continuity with the Snam's internationally recognized best practice of environmental restoration following the infrastructure construction phase. Since 2016, 650 km of environmental restoration and 865.000 sq m of reforestation took place. Snam, through TEP and Snam Foundation, is also partner of the ForestaMI fund launched by the Municipality of Milan with the aim of planting 3 million of new trees downtown Milan and in its metropolitan area by 2030.

TEP Energy Solution has envisioned various energy efficiency projects, either for companies, for the public administration, and for condominiums. Two programs will be explored in detail: CasaMIA and Energy Performance Contract.







## CasaMIA

CasaMIA (Italian for “my home”) is TEP’s complete solution for the energy requalification of condominiums. It is an organic program of intervention project that finances itself with the energy consumption savings (up to 50%) and with a certified tax credit, while at the same time increasing the residential building’s comfort and the wellness of the people. Moreover, CasaMIA project helps Italian condominiums to reduce their environmental impact, increase their value (up to 15%) and contribute to the city well-being thanks to the planting trees activity specifically supported by the project.

**A successful example of the CasaMIA project was completed in August 2019 in the suburbs of Crotone.** After only a couple of months, TEP Energy Solutions managed to renovate radically a condominium by providing and installing the outer vertical coat in expanded polystyrene, stapled with steam. **The sum of the energy saved by the building was 31%.**

## Sustainable Energy Program

The Sustainable Energy Program assists companies to develop new strategies allowing a more sustainable use of the natural capital – an innovative and sustainable path to increase their energy and social – environmental performance.

This program is meant to offer long term solutions useful for the industrial planning of customer companies.

**Tep, investing along with its customer, manages all the energy related topics and helps companies to take strategic decisions and sustainable planning (ESG).**

The Sustainable Energy Program’s purpose is to identify an Action Plan to be developed in the following steps:

- Operational: aiming to improve the energy and emission performance of the customer company
- Managerial: aiming to sustain the continuous improvement of the customer company’s performance
- Communicational (knowledge): aiming to improve the customers company’s ability to communicate the determinants of the decision-making processes.

# Carbon & emission reduction projects: Revamping of Malborghetto station and in-line plants

The compression station of Malborghetto has been realized to allow the import of natural gas from Russia, and its delivery through the Italian network of gas pipelines. At present, it is equipped with:

- 2 compression units (TC1 e TC2) composed by a gas turbine, type NP-FR 3R, with centrifugal compressor, type NP-PCL802-1/30. These compression units (realized in the '70s), due to their elevate range of emissions of NOx and CO, have been restricted to operate for a maximum of 17500 hours each, starting from the 1st January 2016 to the 31st December 2023. After this date, they will have to be dismantled.
- 2 compression units (TC3 e TC4) composed by a gas turbine NP-PGT25 DLE, coupled with a centrifugal compressor NP-PCL 603-2
- 1 compression unit (TC5) made up of a gas turbine NP-PGT25 DLE, coupled with a centrifugal compressor NP-PCL 603-1

The implementation of **the Project “Revamping of Malborghetto station and in-line plants” will allow to completely renew the following parts of the implant of the station, those which are more in need of urgent actions considering their obsolescence**, and in order to keep on respecting the Snam Rete Gas internal codes and standards related to reliability levels of the network operability:

- Replacement of the compression units (TC1 e TC2) with 2 brand-new units of ca. 11MW, composed by an electric motor and an integrated centrifugal compressor, characterized by zero NOx and CO emissions.
- The choice of these electric integrated units will allow, on one side, the installation of a brand-new technology and, on the other side, the reduction to zero of the emissions released into the atmosphere.
- These new electric compression units will require, to be powered, a new connection with the Terna electricity grid, which in turn will imply the design and realization of a new Switching Station powered at 132kV, and a Distribution Substation reducing the voltage from 132 to 20 kV, together with their relative connections in HV (high voltage) and MV (medium voltage);
- Revamping of all the aged instrumentation, of the protection and control system, of the switchboards and of the auxiliary systems with those adequate to allow the installation of these 2 electric compressors
- Upgrade of both the piping and the auxiliary implants of the station, linked to the gas transportation network, in order to adequate them to the transport regimes
- Replacement of current all the gas-powered Actuators, with Pneumo-Electric-Hydraulic ones, which will allow the reduction of pneumatic emissions in the atmosphere.

Activities planned to date, following the authorized MAP:

- 2019-2020 Engineering – Main Permits
- 2021-2022 – Procurement Materials and Construction
- 2022-2024 - Construction (commissioning and end-over of these two new units forecasted for December 2024).

This report is validated by the Climate Action Bond Committee on behalf of Snam.

**The choice of these electric integrated units will allow, on one side, the installation of a brand-new technology and, on the other side, the reduction to zero of the emissions released into the atmosphere**







# Assurance letter (Third Party Opinion)

## SNAM - Climate Action Bond Report 2019

### Independent Assurance Statement

#### Introduction

DNV GL Business Assurance Italia Srl ('DNV GL'), was requested by SNAM SpA ('SNAM') to carry out an annual assurance on the Climate Action Bond Report 2019 ('CAB Report 2019'), covering the management of proceeds, projects and assets that were included in the bond.

In particular, the application by SNAM of the "environmental criteria" and of the "use of proceed criteria" in the financing of the investments of the year 2019 (and previous 36 months) was the main subject of this independent evaluation.

Our responsibility in performing the work commissioned, in accordance with the terms of reference agreed on with SNAM, is solely towards SNAM's Management.

This independent assurance statement is intended solely for the information and use of SNAM's stakeholders, and is not intended to be and should not be used by anyone other than these specified parties.

#### Scope of Assurance

We have carried out our work to provide a limited independent assurance on the information related to financed projects of the Climate Action Bond of 2019 ('CAB') issued by SNAM, contained in the CAB Report 2019 of SNAM for the year ended 31 December 2019 and prepared in accordance with the document named "SNAM Climate Action Bond Framework dated on 2018 ('Framework').

The aspects of the information subject to our review are the following:

- the net proceeds of the CAB used to finance or refinance projects included in the eligible categories as described in the Framework;
- the process for projects evaluation and selection;
- the rules for the management of proceeds;
- the verification of the reporting about the allocation processes of the net proceeds of CAB to eligible projects and the KPIs defined to monitor the eligible projects performance.

#### Responsibility of Management

SNAM's Management is responsible for the preparation, content and presentation of the CAB Report 2019, in accordance with the requirements included in the Framework in which the allocation of funds, the categories of eligible projects and the KPIs are described.

Management's responsibility includes establishing, implementing and maintaining the internal control required to ensure that the information included in the CAB Report 2019 is free from any material misstatement due to fraud or error.

SNAM's Management is also responsible for defining, implementing, adapting and maintaining the management systems from which the information required to prepare the CAB Report 2019, is obtained.

#### Our Responsibility

Our responsibility is to issue a limited independent assurance evaluation based on the procedures that we have carried out and the evidence obtained. Our limited independent assurance was done in accordance with the ISAE 3000 "Assurance Engagements other than audits or reviews of historical financial information", issued by the International Auditing and Assurance Standards Board ("IAASB") of the International Federation of Accountants ("IFAC").

The procedures that we have carried out are based on our professional judgment and have included consultations, observation of processes, document inspection, analytical procedures and random sampling test. The general procedures employed are described below:

- meetings with SNAM's personnel from finance, operational and sustainability departments who have been involved in the preparation of the CAB Report 2019 in order to understand the characteristics of the projects financed by the CAB, the internal management procedures and systems the data collection process and the KPIs control;
- analysis of the procedures used by SNAM to gather and validate the information and data presented in the CAB Report 2019;
- verification of the traceability of the funds obtained through the CAB to finance projects and verification that the investments undertaken by SNAM in the projects financed have been made in accordance with the criteria defined within the Framework;
- verification through random sampling tests revisions and substantive tests of the information related to qualitative and quantitative KPIs. We have also verified whether they have been appropriately compiled from the data provided by SNAM's sources of information.

## Conclusions

As a result of the procedures carried out, no matters or evidences have come to our attention which may lead us to believe that:

- the funds obtained through the CAB have not been assigned to the projects financed by them and that the capital invested in the financed projects is not attributable to the CAB;
- the selected projects disclosed in the CAB Report 2019 have not been selected in accordance with what is indicated in the Framework;
- the KPIs contain significant errors or have not been prepared, in all their significant aspects, in accordance with what is indicated in the Framework and as indicated in the CAB Report 2019 in relation to their calculation.

## DNV GL's Competence and Independence

DNV GL is a leading provider of sustainability services, including the verification of green bond frameworks and reports. Our environmental and social assurance specialists operate in over 100 countries.

We have fulfilled our work in accordance with the independence requirements and other ethical requirements of the Code of Ethics for Professional Accountants of the International Ethics Standard Board for Accountants ("IESBA"), which are based on basic principles of integrity, objectivity, professional competence and diligence, confidentiality and professional conduct.

DNV GL was not involved in the preparation of any statements or data included in the CAB Report 2019 except for this independent assurance statement. DNV GL maintains complete impartiality toward stakeholders interviewed during the verification process.

DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this independent assurance statement.

For and on behalf of DNV GL Business Assurance Italia Srl

20<sup>th</sup>, February 2020



Fabrizio Foglia  
Lead Verifier

# Appendix A

## Climate action bond framework - Published on 7<sup>th</sup> of November 2018

### Company overview

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.<sup>1</sup> With approximately €12.7 billion in market capitalization, it is one of the largest Italian companies and is included in the FTSE MIB index of Borsa Italiana.

### Snam: committed to sustainability

#### Integrating sustainability into Snam's business strategy

Natural gas is key to achieving a successful long-term energy transition away from more carbon intensive fossil fuels. When coupled with non-programmable renewable resources, such as wind and photovoltaics, it will help the progressive decarbonisation of the economic system in Italy and, more broadly, worldwide.

Snam has long promoted the use of natural gas as a flexible, safe and low environmental-impact fuel. The Group has long been committed to transforming Italy into a gas hub for Europe, in order to increase the security of supplies and diversify the country's sources at a fair cost for society and end users. The focus on natural gas and its sustainable applications is a key strategic consideration for Snam.

Snam's business will continue to evolve with a strategic attention on:

- continuous focus in improving efficiency in core traditional business
- enhance exposure to play a key role in supporting energy transition
- ensure solid performance of international activities.

To achieve these objectives, Snam's 2018-2022 strategic plan details investments of circa €5.7 billion over the plan horizon. The investment strategy is mainly focused on the maintenance and development of Italian energy infrastructure and its interconnection with Europe's network. It also includes investments in green gas (such as gas from renewable sources) as well as energy efficiency and emission reduction projects to reduce the Group's greenhouse gas emissions. Specifically, Snam will develop several projects aimed at promoting the use of Compressed Natural Gas, biomethane and Liquid Natural Gas ("LNG") in the transportation sector. The company also aims to foster new technologies, such as gas heat pumps and power-to-gas solutions, leveraging renewable power and the use of hydrogen in current assets.

#### Corporate responsibility in Snam's operational practices

Across all of 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, as well as 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

<sup>1</sup> Transport network size of over 32,500 km in Italy and about 40,000km including international subsidiaries. Natural gas storage capacity of 16.7 billion cubic meters in Italy and about 20 billion in international subsidiaries.

highlighting the opportunities in the green gas business, and through continuous dialogue has elevated Snam's profile and standing in local communities.

Stakeholder engagement (which includes materiality analysis and stakeholder mapping) is a highly structured and important process that helps identify and define Snam's sustainability targets. This process, coordinated by the Corporate Social Responsibility ("SR") function, involves both corporate management and subsidiary companies.

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. The report is edited in compliance with the Global Reporting Initiative (GRI) guidelines and since 2017 with GRI reporting standards.

Underscoring its commitment to environmental, social and governance ("ESG") issues, Snam has been included in the Dow Jones Sustainability World Index for the tenth consecutive year by RobecoSAM, the most important global stock exchange index for Corporate Social Responsibility. Furthermore, for the second year running, the company has been included in the Climate change A-List, CDP's highest scoring level, which includes only 112 best-scoring and most environmentally friendly companies in the world. These results serve as a testament to Snam's global leadership in the decarbonisation movement.

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.

Snam's activities impact all 17 of the United Nations Sustainable Development Goals ("SDG"). Due to the nature of its business, however, Snam has chosen to target the following goals:

**SDG 7 Affordable and Clean Energy** -increasing the production of energy from renewable sources and improving the energy efficiency of Snam's operations whilst avoiding or reducing the impact on the environment, landscape and cultural heritage. To this end, Snam has acquired TEP Energy Solutions, one of the first Italian companies in the energy efficiency industry, and IES Biogas, one of the leading Italian companies in the construction of biomethane plants.

**SDG 9 Industry, Innovation and Infrastructure** -building more resilient and sustainable infrastructures. Recently, Snam has launched Snam Global Solutions, which offers analytical, consulting and project management services to the gas market abroad.

**SDG 11 Sustainable Cities and Communities** -Snam has established Snam4Mobility, a company dedicated to the development of a sustainable mobility system through the construction, management and maintenance of natural gas refuelling stations. In the next few years Snam will invest in the development of compressed natural gas stations in Italy with the goal of constructing 250 of these. The Company's commitment is also made clear through the development of its partnership with carmakers (such as FCA and IVECO) to expand the variety of natural gas vehicles on offer.

**SDG 13 Climate Action** -with the goal of driving the energy transition towards decarbonisation, Snam is committed to encouraging the use of natural gas to replace other carbon-intensive fossil fuels. Snam's goal is to reduce its methane emissions by 25%

<sup>2</sup> Carbon Disclosure Projects

from the 2016 level by 2025 and to promote alternative uses for LNG, compressed natural gas and biomethane in land and sea transportation.

## 1. Use of Proceeds

The proceeds of the Climate Action Bonds 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" mean Carbon & Emission Reduction, Renewable Energy, Energy Efficiency and Green Development Projects which meet a set of environmental criteria, which are approved by Snam's Climate Action Bond Committee and, where applicable, a reputed Second Party Opinion provider.

1. "Carbon & Emission Reduction Projects" mean infrastructure, equipment, technology, systems and processes that demonstrate a reduction in energy use/losses and reduction in emissions in industrial facilities. For example:
  - 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 methane emissions of around 4,000 standard cubic meters for each plant;
  - b. revamping of the network connection nodes, resulting in the elimination of natural gas use;
  - c. replacement of turbo-chargers with latest-generation machines yielding an expected reduction in NOx emissions of at least 75%;
  - d. replacement of turbo-chargers powered by gas with electric machines resulting in the elimination of natural gas use and leading to an expected lower consumption of gas equal to about 4 million standard cubic meters and to expected savings in terms of NOx emissions of around 35 tons per year; and
  - e. replacement / renovation of valves, control and command devices, etc. with an expected reduction in natural gas emissions at completion of the interventions of at least 10%.
2. "Renewable Energy Projects" mean development of new biomethane plants and upgrading of existing biogas plants, in Italy and abroad.
3. "Energy Efficiency Projects" mean energy efficiency projects for Snam's corporate facilities or supply chain. For example:
  - a. replacement of traditional lamps with LED lamps, with an expected nominal energy saving of at least 40%;
  - b. acquisition of (i) 82% of the capital of the Energy Service Company ("Esco") TEP Energy Solution, one of the leading Italian companies in the energy efficiency sector with more than 200 customers including leading Italian companies and multinationals, and (ii) potential future acquisitions of companies in the energy efficiency sector;
  - c. energy efficiency solutions for industrial plants; and
  - d. deep renovation for real estate segment (residential and tertiary) including implementation of energy management systems.
4. "Green Development Projects" mean the development and maintenance of conservation areas, natural capital preservation and the development and maintenance of green areas/buildings. For example:
  - a. redevelopment of areas outside the Minerbio plant, through the planting and the construction of cycle paths and playgrounds for public use;
  - b. construction of new buildings which are expected to receive at least LEED "Gold" or at least BREEAM "Excellent" certification; and
  - c. renovation of buildings leading to an annual energy use reduction of at least 30% of per m2 basis.

The proceeds of Climate Action Bonds will be used to refinance existing Eligible Projects with disbursements occurring in the 36 months preceding the issue date of the relevant bond and / or finance ongoing and future Eligible Projects.

## 2. Project Evaluation and Selection Process

Projects to which the proceeds of Climate Action Bonds are intended to be allocated are evaluated and selected based on compliance with the eligibility criteria set out above by Snam's Climate Action Bond Committee, which is comprised of members of the Finance Department, the CSR Department, the Technical Department and the P&C Business Unit Asset Italia Department. The projects are selected by the relevant functions of Snam (Technical Department, P&C Business Unit Asset Italia Department, M&A Department, Business Development Department and Biomethane Department) amongst the investments included in the Business Plan. On an annual basis these investments are assessed and validated by the Climate Action Bond Committee, on the basis of Snam's "Climate Action Bond - Project evaluation and selection process" policy, a summary of which will be published on Snam's website. The allocation of the proceeds of the Climate Action Bond will be overseen by the Finance Department.

## 3. Management of Proceeds

The proceeds from Climate Action Bonds will be managed by Snam's Finance department. Pending the allocation of Climate Action Bond proceeds, Snam will either use the proceeds to reimburse outstanding credit facilities / pay down existing debt or keep it in cash, overnight or other short-term financial instruments. Payment of principal and interest on the Climate Action Bonds will be made from Snam's general funds and will not be directly linked to the performance of any of the Eligible Projects.

## 4. Reporting

Within one year of issuance of Climate Action Bonds, the Company will provide an update regarding the allocation of an amount equal to the net proceeds of the bonds to Eligible Projects, detailing, at a minimum:

- i. allocation of the net proceeds of Climate Action Bonds to Eligible Projects;
- ii. brief description of all Eligible Projects funded and key performance indicators (where feasible);
- iii. current funded amounts, and funding dates;
- iv. assertions by management that an amount equal to the net proceeds of that tranche or series of Climate Action Bonds are invested in qualifying Eligible Projects and that 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; and
- v. detailed case studies of a select number of projects.

The updates and assertions will be accompanied by a report from an independent accountant 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.



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