# Elements of risk and uncertainty



## Introduction

This chapter presents the main elements of uncertainty characterising Snam's core business.

The risks identified by Snam are divided up into financial and non-financial risks. The latter are then further classified as follows:

- strategic;
- legal and non-compliance;
- operating.

Financial risks are described in Note 25, "Guarantees, commitments and risks – financial risk management", of the Notes to the consolidated financial statements.

#### STRATEGIC RISKS

#### Regulatory and legislative risk

**Regulatory and legislative risk** for Snam is closely linked to the regulation of activities in the gas sector. The decisions made by the Autorità di Regolazione per Energia Reti e Ambiente (ARERA) and National Regulatory Authority in the countries in which the foreign associates operate, the directives and regulatory provisions issued on the matter by the European Union and the Italian Government and, more generally, a change to the reference regulatory framework, may significantly impact the Company's operations, economic results and financial balance. It is not possible to foresee the effect that future changes in legislative and fiscal policies could have on Snam's business and on the industrial sector in which it operates. Considering the specific nature of its business and the context in which Snam operates, changes to the regulatory context with regard to criteria for determining reference tariffs are particularly significant.

#### Macroeconomic and geo-political risk

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

In particular, the importation and transit of natural gas from/through these countries are subject to a wide range of risks, including: terrorism and common crime, alteration of the political-institutional balance; armed conflicts, socio-economic and ethno-sectarian tensions; unrest and disturbances; deficient legislation on insolvency and protection of creditors; limits on investment and on the import and export of goods and services; introduction of and increases in taxes and excise duties; forced imposition of contract renegotiations; nationalisation of assets; changes in trade policies and monetary restrictions.

If a Shipper using the transportation service via Snam's networks cannot procure or transport natural gas from/through the aforementioned countries because of said adverse conditions, or in any way suffers from said adverse conditions, or to an extent so as to make it impossible or discourage the fulfilment of contractual obligations towards Snam, this could have negative effects on the Snam Group's operations, results, balance sheet and cash flow.

# Commodity risk linked to changes in the price of gas

With reference to the **risk connected with changes in the price of natural gas**, however, pursuant to the regulatory framework currently in force, changes in the price of natural gas to cover Fuel Gas and network leakages do not represent a significant risk factor for Snam, since all gas for its core activities is provided by Shippers in kind. Similar hedges of risks are guaranteed by the regulations of countries where the foreign associates operate or by the related transmission contracts. However, in relation to transportation activities, the Autorità di Regolazione per Energia Reti e Ambiente (ARERA) has defined, starting with the third regulatory period (2010-2013), procedures for payment in kind, by users of the service to the leading transportation company, of quantities of gas to cover unaccounted-for gas (UFG), due as a percentage of the quantities respectively injected into and withdrawn from the transportation network. Specifically, the Authority, by means of Resolution 514/2013/R/gas, defined the permitted level of the UFG given the average value registered over the last two years, and decided to keep this amount fixed for the entire regulatory period in order to incentivise the main transmission system operator to deliver further efficiency improvements. For the relevant regulatory period, amounts of UFG higher than the permitted level would not be compensated. This criterion also was subsequently confirmed for the years 2018 and 2019 of the transition tariff period. In view of the aforementioned mechanism for the payment in kind of UFG, there is still uncertainty about the quantities of UFG withdrawn over and above the quantities paid in kind by the users of the service.

In general, the change in the regulatory framework currently in force on the payment in kind of natural gas could have negative effects on the Snam Group's operations, results, balance sheet and cash flow.

As part of the process of reviewing the criteria for determining the revenues recognised for the natural gas transmission service for the fifth regulatory period (starting 2020), criteria will also be defined for the recognition of UFG. The resolution to approve the new regulatory criteria is expected for end February 2019.

#### Market risk

With reference to the **risk connected with demand for** gas, based on the tariff system currently applied by the Authority to natural gas transportation activities, Snam's revenue, via the directly controlled transport companies, is partly correlated to volumes transported. ARERA, however, introduced a guarantee mechanism with respect to the share of revenues related to the volumes transported. This mechanism provides for the reconciliation of major or minor revenues, exceeding ± 4% of the reference revenues related to the volumes transported. Under this mechanism, approximately 99.5% of total revenue from transportation activities is guaranteed. Based on the tariff system currently applied by the Authority to natural gas storage activities, Snam's revenue, via Stogit, correlates to infrastructure usage. However, the Authority has introduced a mechanism to guarantee reference revenue that allows companies to cover a significant portion of revenues recorded. For 2018 and 2019, the minimum guaranteed level of revenue recorded was approximately 97%. ARERA is reviewing an integration of such mechanisms which, for subsequent years, will result in reliance on the guaranteed minimum level of revenue, as well as the storage company's efficiency in terms of managing capacity allocation procedures and service provision procedures, following a procedure launched by ARERA. In general, the change to the regulatory framework in force could have negative effects on the Snam Group's operations, results, balance sheet and cash flow. Abroad, market risk protection is afforded by French and Greek regulation, long-term TAP contracts and Austria (different scheduling for TAG and Gas Connect as from 2023). In Austria and the United Kingdom (in relation to Interconnector UK), the regulation does not guarantee cover of the volume risk.

## NFS Risk of climate change

Compliance with regulations on greenhouse gas emissions may require, in the future, that Snam adapts its plants, and that it controls or limits greenhouse gas emissions or takes other action that may increase the costs for compliance with current regulations and therefore negatively impact the Snam Group business and economic, equity and financial position.

The **risks connected with** the emissions market fall within the scope of the European Union Directives on the sale of permits relating to carbon dioxide emissions and the rules on controlling emissions of certain atmospheric pollutants. With the start of the third period of the European Emissions Trading System (EU - ETS) and of regulation (2013-2020), the updating of the sector regulations has had as its main objective the authorisations for emitting greenhouse gases and a constant reduction of the quotas on emissions released free of charge. The allowances will be assigned to each plant on a gradually decreasing basis, and will no longer be constant, and will also depend on the actual functionality of the plants. To date, Snam has managed to comply with regulatory obligations relative to ETS mechanisms thanks to the use of quotas assigned freely to the Group's plants. The ongoing further development of European legislation could lead to identifying new ways of managing the necessary quotas, in particular through possible reward mechanisms, to be agreed with ARERA, for the reduction of emissions from owned plants. More specifically, in consultation document no. 512/2018/R/gas on the criteria for determining the revenues recognised for the fifth regulatory period of the natural gas transmission service, ARERA expressed the value of introducing specific regulatory criteria to encourage the transporter to adopt virtuous conduct in seeking to reduce CO2 emissions, which involves the recognition of a standard quantity of CO2 quotas and the cover of the price risk associated with the related procurement.

Climate change scenarios could lead to a change in population behaviour and could have an impact on natural gas demand and transport volumes, just as they could affect the development of alternative uses of gas and the promotion of new business.

Climate change could also increase the severity of extreme weather events (floods, droughts, extreme temperature fluctuations) causing worsening of the natural and hydrogeological conditions of the territory with a possible impact both on the quality and continuity of the service provided by Snam, and on the demand for Italian and European gas. With reference to the effects of the change in the gas demand on the balance sheet, income statement and financial position of the Snam Group, see the previous paragraph "Market risk".

Matters connected with climate change may also heighten the awareness of public opinion and the various stakeholders, altering the perception of Snam with possible impacts on Group results and investor behaviour.



#### LEGAL AND NON-COMPLIANCE RISK

**Legal and non-compliance risk** concerns the failure to comply, in full or in part, with the European, national, regional and local rules and regulations with which Snam must comply in relation to the activities it carries out. The violation of such rules and regulations may result in criminal, civil, tax and/or administrative sanctions, as well as damage to Snam's balance sheet, financial position and/or reputation. With reference to specific cases, inter alia, infringement of regulations protecting the health and safety of workers and the environment, and violation of the laws established to fight corruption, may also lead to sanctions, even substantial, against the company based on the administrative liability of the entities (Legislative Decree no. 231 of 08 June 2001). With regard to the Risk of Fraud and Corruption, Snam believes it is of vital importance to ensure a climate of fairness and transparency in corporate operations and repudiates corruption in all its forms in the widest context of its commitment to abiding by ethical principles. Snam's top management is strongly committed to pursuing an anti-corruption policy, trying to identify possible areas of vulnerability and eliminating them, strengthening its controls and constantly working to increase employees' awareness of how to identify and prevent corruption in various business situations.

Reputational verification and acceptance and stipulation of the Integrity Ethical Pact are the pillars of the system of controls aimed at preventing the risks associated with illegal behaviour and criminal infiltrations concerning our suppliers and subcontractors, with the aim of ensuring transparent relations and professional morality requirements in the whole chain of enterprises and for the whole duration of the relationship.

Snam has been working since 2014 in partnership with Transparency International Italia and joined the Business Integrity Forum (BIF) and, in 2016, became the first Italian company to join the "Global Corporate Supporter Partnership".

As part of this collaboration, in October Snam renewed its partnership with Transparency International, the Secretary General of Berlin, during the 18th International Anti-Corruption Conference of Transparency International held in Copenhagen. On this occasion, Snam took part in a restricted round table that saw, for the first time, the participation of 4 private companies too, including Snam as the only Italian representative.

Moreover, in 2018, in collaboration with Transparency International Italy and the OECD, Snam took part in a series of events on transparency and integrity as well as best practices in good governance and the prevention of corruption on a global level, such as the 27th Session of the Commission on Crime Prevention and Criminal Justice of the United Nations, organised by MAECI at the United Nations office of Vienna and the seminars organised by the OECD in St Petersburg and Moscow, intervening in matters of integrity and the fight against corruption. Finally, following the 2018 International Anti-Corruption Day held in Farnesina, Snam was asked by the Ministry of Foreign Affairs and International Cooperation to take part in the assessment and review of the first draft of the G20 High-Level Principles, on the prevention of corruption and promotion of integrity in public companies or SOEs, draft circulated by the Argentinian presidency and which should be finalised in 2019, during Japan's term.

#### **OPERATING RISKS**

#### Ownership of storage concessions

The risk linked to maintenance of the ownership of **the storage concessions** is attributable by Snam to the business in which the subsidiary Stogit operates on the basis of concessions issued by the Ministry of Economic Development. Eight of the ten concessions (Alfonsine, Brugherio, Cortemaggiore, Minerbio, Ripalta, Sabbioncello, Sergnano and Settala) expired on 31 December 2016 and can be renewed no more than twice for a duration of ten years each time. With regard to these concessions, Stogit submitted – within the statutory terms — the extension request to the Ministry of Economic Development and the proceedings are currently pending before the Ministry. Pending said proceedings, the Company's activities, as provided for by the reference regulations, will continue until the completion of the authorisation procedures in progress envisaged by the original authorisation, which will be extended automatically on expiry until said completion. One concession (Fiume Treste) will expire in June 2022 and has already been renewed for the first ten-year extension period in 2011, and another concession (Bordolano) will expire in November 2031 and can be extended for a further ten years<sup>45</sup>.

<sup>45</sup> The Stogit concessions issued before the coming into force of Italian Legislative Decree no. 164/2000 can be extended by the Ministry of Economic Development up to twice for a term of ten years each time, in accordance with Art. 1, paragraph 61 of Italian Law no. 239/2004. Pursuant to art. 34, paragraph 18 of Italian Decree Law no. 179/2012, converted by Italian Law no. 221/2012, the duration of the only Stogit concession issued after the coming into force of Italian Legislative Decree no. 164/2000 (Bordolano) is thirty years with the possibility of an extension for another ten years.

If Snam is unable to retain ownership of one or more of its concessions or if, at the time of the renewal, the concessions are awarded under terms less favourable than the current ones, there may be negative effects on the Company's operations, results, balance sheet and cash flow.



#### Malfunction and unexpected service interruption

Operating risks consist mainly of the malfunctioning and unforeseen interruption of the service determined by accidental events, including accidents, breakdowns or malfunctions of equipment or control systems, reduced output of plants, and extraordinary events such as explosions, fires, landslides or other similar events outside of Snam's control. Such events could result in a reduction in revenue and could also cause significant damage to people, with potential compensation obligations. Although Snam has taken out specific insurance policies to cover some of these risks, the related insurance cover could be insufficient to meet all the losses incurred, compensation obligations or cost increases.



#### Delays in the progress of infrastructure implementation programs

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

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



#### NFS Environmental risks

Snam and the sites in which it operates are subject to laws and regulations relating to pollution, environmental protection, and the use and disposal of hazardous substances and waste. These laws and regulations expose Snam to potential costs and liabilities related to the operation and its assets. The costs of possible environmental remediation obligations are subject to uncertainty regarding the extent of contamination, appropriate corrective actions and shared responsibility and are therefore difficult to estimate. In relation to the new global climate agreements (COP21 in Paris 2015, COP22 in Marrakech in 2017), aimed at encouraging the transition towards a more sustainable economy that favours zero emission energy sources, it may envisage regulatory and legislative risk related to the possible implementation of increasingly stringent regulations at European and national level.

Snam cannot predict if and how environmental regulations and laws may over time become more binding and cannot provide assurance that future costs to ensure compliance with environmental legislation will not increase or that these costs can be recovered within the mechanisms tariffs or the applicable regulation. Substantial increases in costs related to environmental compliance and other aspects related to it and the costs of possible sanctions could negatively impact the business, operating results and financial and reputational aspects.



#### NFS Employees and staff in key roles

Snam's ability to operate its business effectively depends on the skills and performance of its personnel. Loss of "key" personnel or inability to attract, train or retain qualified personnel (in particular for technical positions where the availability of appropriately qualified personnel may be limited), or situations in which the ability to implement long-term business strategy is negatively influenced due to significant disputes with employees, could have an adverse effect on the business, financial conditions and operating results.

#### Risk linked to foreign holdings

The foreign companies owned by Snam may be subject to regulatory/legislative risk, under conditions of social and economic political instability, to a market risk, cyber security, credit and financial risk and other risks typical of the business of the transmission and storage of natural gas highlighted for Snam, such as to adversely affect their activities, economic results and the equity and financial situation. This can have negative impacts for Snam on the contribution towards the profits generated by such investments.

## Risks connected with future acquisitions/equity investments

Each investment made as part of joint ventures and each future investment in Italian or foreign companies may entail an increase in the complexity of Snam Group operations and there can be no guarantee that such investments will correctly integrate in terms of quality standards, policies and procedures, consistently with the rest of Snam's operations. The integration process can be costly and require additional investment.

Failure to integrate the investment made can have a negative impact on business, operating results and financial aspects.

## NFS Cyber security

Snam carries out its activities through a complex technological architecture relying on an integrated model of processes and solutions capable of promoting the efficient management of the entire country's gas system. The development of the business and recourse to innovative solutions capable of continuous improvement, however, requires increasing attention to be focused on aspects of cybersecurity.

For this reason Snam has developed its own cybersecurity strategy based on a framework defined in accordance with standard principles on the subject and focusing constant attention on Italian and European regulatory developments, especially as far as the world of critical infrastructures and essential services is concerned. First and foremost, this strategy involves adapting one's own processes to the provisions of standards ISO/IEC 27001 (Information Security Management Systems) and ISO 22301 (Business Continuity Management Systems) and the formal certification of conformity to the listed standards.

Alongside this and in accordance with technological developments, solutions aimed at protecting the Company from cyber threats and malware are assessed and, where deemed appropriate, implemented. More specifically, Snam has defined a model of cybersecurity incident management aimed at preventing and, when necessary, ensuring timely remediation in the event of events that could damage the confidentiality and integrity of the information processed and the IT systems used. At the base of the activity is a Security Incident Response Team which, using technologies that allow collecting and correlating all the security events recorded on the entire perimeter of the company's IT infrastructure, has the task of monitoring all the anomalous situations from which negative impacts may result for the company and to activate, where necessary, escalation plans suitable to guarantee the involvement of the various operating structures.

With reference to the management of information in support of the business processes, it is considered appropriate to stress that the company owns the asset (fibre) used for the transmission of data to and from the territory; this results in intrinsically greater security thanks to the lack of dependency on the service provided by third parties and the possibility of making exclusive use of the communication channel.

Lastly, as part of cyber incident management (preventive and reactive), information-sharing with national and European institutions and peers is used in order to improve the capacity and speed of response following various possible negative events.

A great deal of attention is also paid to increasing awareness and specialist training of personnel, in order to facilitate the identification of weak signals and raising consciousness about risks of a cyber nature that could occur during the course of normal work activities.