

NFS Elements of risk and uncertainty

Introduction

This chapter illustrates the main risk factors and uncertainties that characterise Snam's routine operations, in spite of most of them being regulated and therefore exposed to regulatory and compliance risk, all types of risk relating to the business operations that are the subject of careful analysis.

The main risks identified by Snam are classified in the following categories:

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

Strategic risks

Regulatory and legislative risk

Regulatory risk and legislative risk for Snam is closely linked to the regulation of activities in the gas sector. The relevant directives and legal provisions issued by the European Union and the Italian government and the resolutions of the Energy Network and Environmental Regulation Authority (ARERA) and, more generally, changes to the regulatory framework may have a significant impact on the Company's operating activities, financial position and economic outcomes. 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 particularly sensitive politically, socially and economically, crossed by currents of instability or which could constitute future crisis scenarios.

In particular, the importation and transit of natural gas from 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, high inflation; volatile exchange rates; deficient legislation on insolvency and protection of creditors; limits on investment and on the import and export of goods; increases in taxes and excise duties; forced imposition of contract renegotiations; nationalisation or renationalisation of assets; changes in trade policies and monetary restrictions.

If a Shipper using the transportation service via Snam's networks cannot procure natural gas from the aforementioned countries because of said adverse conditions, or in any way suffers from said adverse conditions, or is consequently unable to fulfil their

contractual obligations towards Snam, this could have negative effects on the Snam Group's operations, results, balance sheet and cash flow as well as in reference to its participation in TAP.

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. However, in relation to transportation activities, the Authority 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. This criterion also was subsequently confirmed for the years 2018 and 2019 of the transition period. For the relevant regulatory period, amounts of UFG higher than the permitted level would not be compensated. 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. 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.

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 $\pm 4\%$ 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 2016 and 2017, 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. The change to the regulatory framework in force could

have negative effects on the Snam Group's operations, results, balance sheet and cash flow.

Risk of climate change

Compliance with greenhouse gas regulations in the future may require Snam to adjust its facilities, and to control or limit its emissions or undertake other actions that could increase the costs of complying with the regulations in force, and therefore have negative effects on the Snam Group's operations, results, balance sheet and cash flow.

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 *EU emissions trading system* 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. 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.

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".

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 and/or administrative sanctions, as well as damage to Snam's balance sheet, financial position and/or reputation. As regards specific cases, the infringement of regulations on the protection of workers' health and safety and of the environment, and the infringement of anti-corruption rules, inter alia, may also result in (possibly significant) sanctions on the Company based on the administrative responsibility of entities (Legislative Decree 231 of 8 June 2001). 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 signature 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; in this context in 2017, on the occasion of the "Snam 75 & Partners' Day" event, Snam dedicated a special space to the issue of ethics and transparency as excellence and innovation in business activity.

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".

During 2017, Snam started collaboration with the OECD being part, as the first Italian company in the private sector, of the *Business and Industry Advisory Committee* (BIAC).

Snam has also collaborated with the Ministry of Foreign Affairs participating in the "VIII Italy-Latin America and Caribbean Conference" and the "Italian Business Integrity Day" held at the Italian Embassy in Washington.

During these events, the company illustrated the instruments implemented in terms of transparency and the fight against corruption.

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 Trieste) 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 years⁵⁰. 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.

NFS 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, earthquakes, 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.

⁵⁰ Stogit's concessions issued before the entry into force of Legislative Decree no.164/2000 can be extended by the Ministry of Economic Development no more than twice for a period of ten years each, pursuant to art.1, paragraph 61 of Law no. 239/2004. Pursuant to art.34, paragraph 18, of the Decree Law n. 179/2012, converted by Law 221/2012, the duration of the only Stogit license issued after the entry into force of Legislative Decree no.164/2000 (Bordolano) is thirty years with the possibility of extension for a further ten years.

NFS Delays in the progress of infrastructure implementation programs

There is also the concrete possibility that Snam could incur *delays in the progress of infrastructure implementation programmes* as a result of several unknowns linked to operating, economic, regulatory, authorisation and competition factors, regardless of its intentions. Snam is therefore not able 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 and to a market risk such as to adversely affect their activities, economic results and the equity and financial situation. For Snam this may entail a partial achievement of the economic and financial objectives connected to the foreign investments and expected during the acquisition phase.

Cybersecurity

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. *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.

Financial risks are described in Note 24, "Guarantees, commitments and risks – financial risk management", of the Notes to the consolidated financial statements.

