

# Other operating information and results

This section of the report deals with activities and initiatives that have an impact on aspects that do not relate directly to core business processes, but contribute to the creation of value for the Company and its stakeholders. In Snam's business model, the stakeholders "interpret" the industry environment and can influence, sometimes decisively, the conditions that determine the availability of the different capitals that the business needs to be able to operate. These close ties with the capitals, which develop around material issue of mutual interest, enable the stakeholders to benefit from the value that the business creates through its activities.

## Development of human, social and relationship, and intellectual capital

### **NFS** Employment in times of change

To continue to play a key role within a dynamic environment while continuing to lead in an international market abundant in challenges and opportunities, it is necessary to become an integrated player capable of enhancing know-how and meeting new challenges in the regulated and free market alike.

The new organisational structure of Snam, inspired by the *one company* model, was founded with the aim of creating centres of expertise and facilitating collaboration between the structures. People are called to more effectively share experiences and skills guided by the logic of entrepreneurship, simplification and capacity for implementation. This means working more in a team towards a single goal: all determining factors to create innovation and

bring value to the company. The strong sense of belonging to the Group makes it possible to actively engage all employees in continuous improvement, which is increasingly driven by an entrepreneurial spirit, simplification and implementation capacity. For this and to face the new challenges, the new People Strategy was created and the new values of Snam were defined.

In this way, Snam will continue to generate "good employment", characterised by stable and continuous work relationships for qualified and specialised activities. Moreover, through the Snam Institute, the Company intends to enhance the skills not only within the company but also outside.

As of 31 December 2017, out of a total of 2,919 people in service, 94% have an open-ended employment contract, including part-time employment contracts, which were 42 at the end of 2017. The average age of Group employees is 45.7, while the average length of employment is around 21 years, unchanged from the previous year.

### Breakdown of Staff at 31 December (no.)

	2015	2016	2017
Executives	99	87	93
Managers	449	421	456
Office workers	1,736	1,651	1,655
Manual workers	721	724	715
<b>Total employee</b>	<b>3,005</b>	<b>2,883</b>	<b>2,919</b>

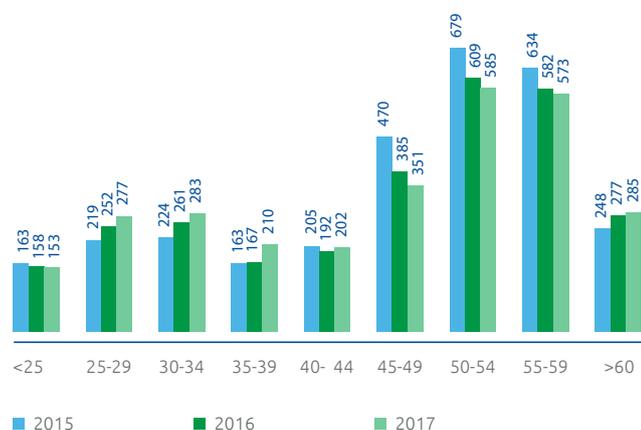
### Personnel broken down by type of contract (no.)

	2015	2016	2017
Permanent contract	2,779	2,631	2,755
Apprenticeship or internship contract	171	206	150
Fixed-term contract	1	1	14
Part-time contract	54	45	42

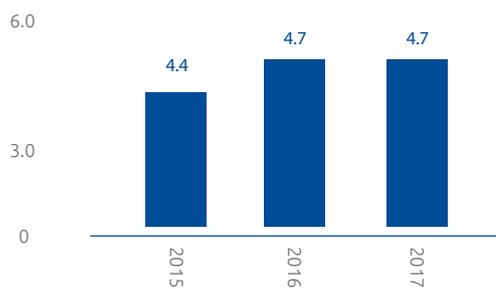
### Personnel hired during the year (no.)

	2015	2016	2017
Hired from the market (total)	162	141	148
. of which university graduates	75	73	100
. of which high school graduates	86	66	48
. of which women	32	35	53
Other new employees (non-consolidated companies, tender acquisitions, etc.)	4	36	36

### Demographic diversity: employees per age bracket (no.)

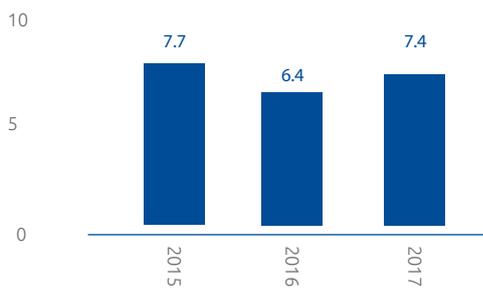


### Absenteeism rate (%)



■ Absenteeism rate = (hours absent/workable hours)\*100

### Staff turnover (%)



■ Turnover = ((incoming + departures)/average headcount employed)\*100

For the purposes of calculating the employee absenteeism rate, all hours worked (paid and unpaid) were excluded, excluding holidays and recoveries. The unprocessed hours of managers were not considered.

### **NFS** Development of roles and skills

With the new People Strategy the model of Leadership has been updated with the fundamental objective of enhancing people, increasing involvement and promoting the culture of innovation and change.

In particular, in 2018 Snam will focus on improving leadership skills by implementing the new skills model, maintaining solid and structured succession

plans, identifying and enhancing talent throughout the organisation, to guarantee a sustainable succession line and intensify the level of engagement. In 2017, the use of the Performance Management objective assignment and evaluation system was also confirmed, which also contains objectives on behavioural aspects and sustainability issues, including those relating to accident prevention at work. All assessment processes are formalised and include a feedback interview, which constitutes an institutional moment for exchange and communication between the manager and the employee, also in order to gather information that can be used to define new actions for the development and enhancement of people.

Also in 2017, in view of the 2018 performance cycle, a redesign of the company's performance management system was launched with a view to optimising the current process of assigning and assessing the objectives. All jobs within Snam, Snam Rete Gas, GNL Italia and Stogit are subject to an analytical and overall evaluation of Complexity, Responsibility, Experience and Autonomy (C.R.E.A.) factors. In 2017, 238 CREA assessments were approved. All assessment processes adopted are formalised and include a feedback interview, which constitutes an institutional moment for exchange and communication between the manager and the employee, also in order to gather information that can be used to define new actions for the development and enhancement of people.

The compensation systems are periodically updated based on a comparison with the reference pay markets and criteria inspired by meritocracy and internal equity, as well as in consideration of indications received from external stakeholders.

In particular, these systems are meant to ensure recognition of the results achieved, a link with shareholder interests, the quality of the professional contribution provided and individual development potential.

### Professional enhancement

Training is another essential element for supporting the processes of organisational integration and change management, and for enriching the employment opportunities of Snam personnel.

In 2017, a total of 85,346 hours of training were provided (an average of 29.2 hours per employee), with 8,604 participants and a participation rate of 75%, testimony to Snam's ongoing and wide-reaching commitment to updating and developing its employees' expertise. The involvement rate decreased compared to previous years because there were more training initiatives dedicated to specific employee targets.

In 2017, training also included differentiated courses targeted to meet specific needs, based on a segmentation of the company population horizontally, by role and professional family, as well as vertically,

by level of responsibility.

A significant commitment was dedicated to worker training programmes regarding sensitive issues such as health, safety and the environment, by organising a number of meetings to provide updates and information and raise awareness amongst all professional figures with respect to the implementation of safety measures.

To favour accurate information and the application of the principles set forth in the Model 231, the Code of Ethics and Anti-corruption legislation, specific training activities were carried out for specific segments of the corporate population.

As regards training on the Code of Ethics, Model 231 and anti-corruption, a total of 327 hours of training were provided to 112 participants in 2017.

#### Staff training broken down by position (no.)

	2015	2016	2017
Executives	2,744	2,940	1,908
Managers	11,143	10,021	8,600
Office workers	41,763	31,072	39,316
Manual workers	31,970	38,151	35,522
<b>Total</b>	<b>87,620</b>	<b>82,184</b>	<b>85,346</b>

## Key training initiatives

Description	Hours provided (no.)	Participants (no.)	Recipients
Technical training	66,576	5,543	Office and manual workers
Health, safety, environment and quality	9,675	1,702	Corporate population
Managerial training	5,853	1,096	Executives, Managers

### **NFS** Corporate welfare and work-life balance

Corporate welfare is a powerful tool that is integrated and integrated with the public welfare system and which attempts to respond to new social risks. Corporate welfare refers to a multiplicity of interventions, both monetary and in the form of services, which on the one hand generate benefits for employees who see increasing social protection and purchasing power, on the other they become a lever fundamental for companies, which benefit from a better working and productive climate. Precisely to promote a positive work environment, over the years Snam has created a welfare system that draws on a long tradition of attention to people. It grows and changes over the years with the aim of meeting the emerging needs and requirements of the different sections of the corporate population. The in-depth analysis of the population, different needs and sensitivities, periodically updated, allows Snam to develop a shared, functional and effective welfare system.

Today the Snam Welfare system is a mix of tradition and innovation, whose structure includes actions to support employees in daily practices in traditional areas, such as Family, Health and Savings, and new proposals, also created as a result of agreements with trade unions, to better respond to the

need for a work-life balance.

Snam's corporate welfare system is constantly evolving in order to get closer and closer to the real needs of individuals.

The first group consists of all health and welfare support operations (cancer prevention, WHP Program), study and work orientation for employees' children, parenting support operations (nursery reimbursements, summer camps, SOS Family), mobility (TPL subscriptions, shuttles, mobility portal) and micro-financing.

The "Welfare Award" (part of the Participation Award can be converted to services) and the Smart Working project are part of the second group. With the "Welfare Award" it will be possible, as an alternative to fully paying the individual amount of the Participation Award, to voluntarily choose whether to convert a percentage of the usable Welfare Credit Award for oneself or for one's family members.

The welfare system also includes:

- insurance against workplace and non-work-related accidents additional to the mandatory insurance;
- supplementary healthcare assistance covering public and private healthcare and hospital expenses;
- complementary pension funds, which in most cases are topped up by employer contributions.

### **NFS** Diversity

Snam respects everyone's dignity, and offers equal opportunities throughout all phases and for all aspects of the employment relationship, avoiding all forms of discrimination based on sex, age, health, nationality, political opinion or religious views.

For Snam, diversity is a value and, in particular, great attention is paid to gender diversity which is considered a resource for the development of the company.

This is proven by the fact that, despite a large part of our business activities, in particular the operational ones, requiring technical training which on the market is predominantly found amongst men, female representation has gone up in 2017 compared to the previous year.

In 2017, female representation in the company consisted of 393 individuals (+6.5% compared to 2016), constituting 13.5% of all employees (12.8% in 2016).

The growth in female representations is still a corporate objective for 2018 with the commitment to recruit at least 50% of women in staff positions. In order to make the most of diversity, in 2017 Snam became a Contributing Member of Valore D, the first association of companies promoting diversity, talent and female leadership for the growth of companies and the country. This collaboration has given its employees the opportunity to

access courses for the enhancement of gender, generational and cultural diversity and for developing an inclusive culture, which is a factor of innovation, competitiveness and growth for people and companies. During the year, 40 employees (80%

women) participated in over 20 courses.

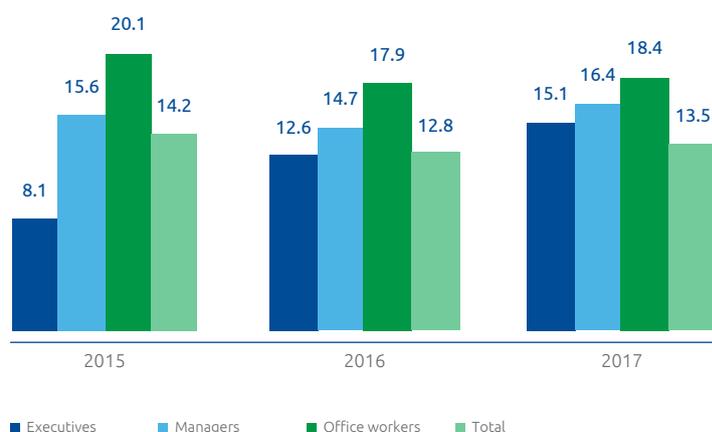
Furthermore, the Group employs 126 disabled people, whose path of development aims to favour their inclusion and integration in company processes.

### Staff training broken down by position (no. hours)

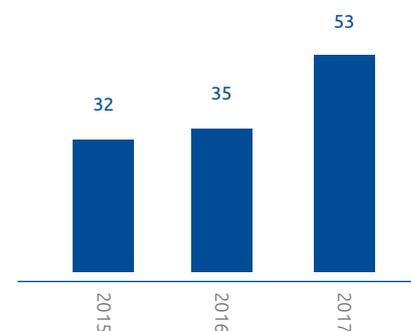
	2015	2016	2017
Average hours of training provided to men (hours/year)	30.9	30.2	31.3
Average hours of training provided to women (hours/year)	18.4	17.0	15.8

### Total female presence and by qualification (%) and Women hired by the market (no.)

FEMALE PRESENCE (%)

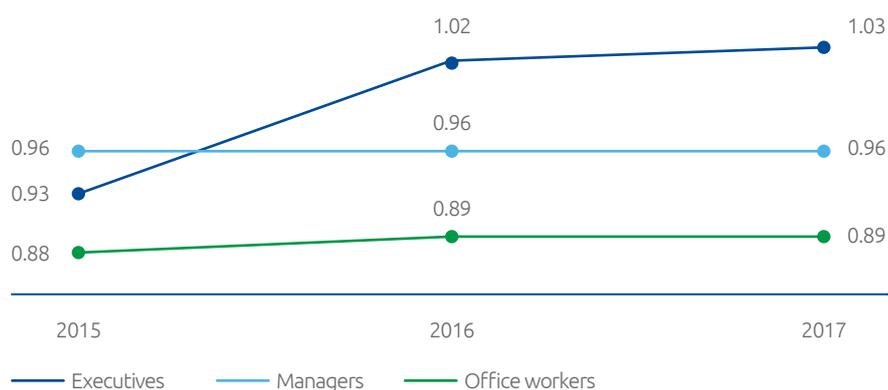


WOMEN HIRED BY THE MARKET (NO.)



### Pay gap (women/men)

PAY GAP (WOMEN/MEN)



## Stakeholders and relationship capital

In Snam's business model, the stakeholders "interpret" the industry environment and can influence, sometimes decisively, the conditions which determine the availability of the different capitals which the business needs in order to be able to operate. These close ties with the capitals, which develop around material issues of mutual interest, enable the stakeholders to benefit from the value which the business creates through its operations.

In order to develop our business activities, internal cohesion, image and reputation are also important. As a result, it is essential to manage our long-term relationships with stakeholders (social and relationship capital) by focusing on trust, listening, being universally open and transparent, and attempting to maintain and develop constructive dialogue both within and outside the Company.

With the "Partners' Day 2017", a special event on the occasion of the 75th anniversary of its foundation, Snam aimed to gather together for the first time all the subjects with whom it maintains relations, discussing issues of common interest such as the importance of infrastructures, dialogue with the territories and new uses of gas, and sharing strategies and perspectives for development with them.

### Engagement of people

Through internal communication, Snam continues to promote the involvement of people with regard to events and activities which affect the company, with the aim of stimulating participation in the processes of change, especially from a cultural point of view.

The 360-degree communication strategy is supported by a large volume of activities, including frequent updates of the Easy company intranet, news and interviews with people for articles in the Energie corporate magazine with its in-depth analysis "Specials", an intense production of video content and video interviews, and a rich programme of engagement events for the entire corporate population, with a very strong commitment from senior management.

Tools	Description
<b>"Easy" the intranet portal</b>	An informative and awareness-raising space aimed at all Snam people, but also a place for sharing knowledge, exchanging work documents and sharing opinions through the "let's collaborate" space, designed to facilitate people working in teams.
<b>Main paper tools</b>	The magazine "Energie" continues to represent the corporate identity of Snam and the narrative voice of the main events. The "Energy Specials" - attached to the editorial, with a focus on specific topics. The "Observations on Gas Demand" newsletter with news, analysis and comments on gas demand, also available on mobile devices to all employees.
<b>Management meeting</b>	Meeting of executives and meeting of managers to deepen the corporate strategic plan. Meeting dedicated to management (managers and executives) aimed at strengthening team spirit. Roadshow on the territory of the CEO to describe the strategic plan (Route22). Thematic meetings aimed at strengthening innovative thinking and team spirit ("The future is in our hands"). Event at the end of the year in video conference to bring together the main poles of the Network (Christmas on the net).

## Market reputation

Though Snam has a natural monopoly in regulated sectors, when dealing with its customers it adopts an approach based on a competitive market, in which it is essential to understand how the customer perceives value.

The challenges for the Italian and foreign gas market were the subject of debate at the "Partners' Day 2017" which saw the participation of commercial stakeholders and also, for the first time, of external companies such as Eni, A2A, Shell Energy Europe and Edison.

In November 2017 a new online customer satisfaction survey was conducted, involving all Shippers and Traders with whom Snam collaborated in the recently concluded Thermal Year 2016-2017. The analysis, which on this occasion was also extended to the transport, storage and regasification sectors (as from September 2017 the commercial management of the 3 businesses merged within a single organisation), was concerned with surveying customer satisfaction with regard to the quality of the services offered, and to the additional features and services introduced during 2017, as well as in relation to the wishes expressed by their customers in previous occasions of comparison as well as regulatory developments. The participation rate was 63% and about 93% of those interviewed showed great satisfaction with the Stakeholder Engagement activities which were developed by Snam to improve the services offered and consolidate an effective collaboration with its contacts. All the observations received represent the starting point for identifying actions aimed at making Snam's operations more efficient, in line with the continuous improvement of the quality of the services offered.

During 2017, workshops were held which were aimed at a mutual comparison of the dynamics of balancing and of the market as well as at the collection of observations/wishes on the part of the operators. In particular, the meetings provided an opportunity to discuss innovations and the progress of balancing and transport, storage and regasification, as well as providing feedback on the process of renewing IT systems.

## Relations with the Supply Chain

Snam carries out intense engagement activities with its suppliers to encourage growth and improvement of the supply chain and to create a common vision, sharing values, ideas, know-how, best practices and information.

As part of the "Partners' Day 2017" Snam met 170 supplier companies with whom it shared the most important issues concerning the sustainable supply chain, together with a common culture around Snam's values.

Continuous communication with suppliers takes place through the Supplier Portal, the web platform through which existing and potential suppliers come into contact with Snam. Active since 2013, the Portal contains documents, insights, best practices and updates on the processes and procedures which regulate qualification and procurement operations. All registered suppliers have at their disposal a special reserved area, containing information on the product sectors for which they are qualified, the activated contracts, the performance in terms of safety at work. At the end of 2017 there were over 1,900 suppliers registered to

the portal (+5% compared to 2016). Starting from January 2018, Snam has provided a new feature dedicated to the certification of services which will allow suppliers to more easily and immediately learn the most suitable time for issuing invoices as a result of the services they provide to Snam. The 65,598 SAP documents uploaded during the year (+16% compared to the previous year) attest that the Supplier Portal is a live website which is being used more and more.

## Relations with the territory

Snam is present, through its infrastructure, in almost all the country's regions, in areas and communities which are varied in terms of culture, traditions, and economic, social and environmental conditions. In creating new infrastructures and managing existing ones, Snam adopts a rigorous, transparent, collaborative and constructive approach to ensure the environmental compatibility of the settlements and to favour their acceptance by the stakeholders. Environmental impact assessments cover all phases of the life cycle of the work, location, design, construction, operation and disposal. These assessments are carried out as part of the Environmental Impact Assessment (EIA) procedures, at the end of which the administrations in charge, both at central and local level, issue the authorisations required by current legislation.

Snam also evaluates, in relation to the performance of the most important works (compression systems or large natural gas pipelines), the direct and indirect economic and social impact on the territory and on the local communities with "Social Impact

Assessment” tools and methods. Over time Snam has built a network of relationships with regional branches of Confindustria and other local associations to discuss issues of energy, economic and environmental policy affecting the territory. At local and national level, the Company collaborates with the authorities and takes part in the work of numerous associations and committees, providing its commitment and skills to participate in the processes of social innovation and sustainable development. To that end, the Company collaborates

with local and national authorities to best lay out its plans for carrying out the work to both the authorities and the affected communities. During the year and in the transport sector alone, to lay out the plans for carrying out work, 106 meetings were held with local administrations and local associations. Together with the latter, two agreements were signed regarding constraints. **In 2017, around €249 thousand were allocated to the territory for donations and sponsorships and about €5.6 million for environmental compensation.**

**Performance of the main initiatives in the territory**

Initiative	
<b>Young Energy from Snam, to bring young people closer to work</b>	<p>Snam has decided to take advantage of the opportunity offered by the school-work alternation - part of the "Good School" Law no. 107 of 2015 - to get closer to young secondary students, strengthen relations with the territory, strengthen employer branding and encourage the recruitment process. We did this by making the company's knowledge available to the students and offering tools for navigating the world of work. The training programme, defined in the contents and in the procedures together with the schools involved, has provided classroom training aimed at acquiring soft skills and orientation to the world of work, project work on issues related to the business and company visits at the Snam offices. Traineeships also take place at various operational sites to make the company's business more easily understandable.</p> <p>All this took place with the involvement of about 50 people from Snam - district managers, technicians, managers and other people in the HR area. A very ambitious project rooted in the territory - particularly in Southern Italy - which has so far reached about 600 students from 9 secondary schools, including 7 technical schools.</p>
<b>Snam Foundation</b>	<p>"Welfare che Impresa!", promoted by the Snam Foundation, together with other important Italian foundations, has collected the ideas of young people under 35 for projects on community welfare, able to promote social cohesion, development and networking. Through this first initiative the Snam Foundation hopes to present itself as a social innovator and a catalyst for ideas and projects aimed at people and territories, using technology as an element of social and economic inclusion. The four winning organisations were able to benefit from an economic contribution, a zero-interest loan and an incubation cycle.</p>
<b>Sustainable Paths, A Garden in the Network</b>	<p>The most beautiful and representative images of the initiative "Un Orto nella Rete", promoted by Snam in Terranuova Bracciolini (Arezzo) and developed by the Social Cooperative Onlus Betadue, to produce vegetables locally whilst favouring the inclusion of socially disadvantaged people, were collected in a book which tells of a project born to support, through Snam's assets, the economic and social development of the territories crossed by its infrastructures. The book, which is part of the Sustainable Paths series promoted by Snam to raise awareness of the company's commitment to environmental protection and sustainability, was presented at the Turin International Book Fair.</p>

### **The value of brand identity**

Again in 2017, Snam continued to improve its presence on the web and in the use of digital communication tools, aimed at supporting the development of activities also in terms of sustainability. In this sense, during the year several special projects were carried out; for example, the launch of a section dedicated to natural gas to support the broader corporate strategy of decarbonising the energy mix.

Snam's digital communication is based on quality content and on the active involvement of users. Thanks to its presence on the main social media sites (Twitter, Youtube, LinkedIn, Google+, Flickr, Instagram, Slideshare, Facebook), this year Snam has received important recognition with first place in Webranking Italy, with the highest score ever registered and first place in Lundquist's online CSR awards.

On the main media an increase in the number of articles in particular linked to trends such as sustainable mobility and energy decarbonisation has been observed through the use of new sources (for example biomethane), and on the role of Snam in the country system, along with its drive towards innovation.

Furthermore, during 2017 the press office aimed to highlight the company's positions and its willingness to carry out dialogue in the territories (such as Abruzzo and Puglia) featuring the presence of resistance to some projects.

## **Innovation for business development**

The Group's strategic evolution in an increasingly complex and challenging context will require it to rely more heavily on developing innovation and on the good use of technological assets to ensure that it makes the most of what has already been achieved, as well as developing innovative solutions, as a support for and source of business development. During the course of the year, various research and development activities launched in previous years were either continued or completed. At the same time, some new projects were launched with a potential impact on various areas of corporate operations.

<b>Gas metering</b>	<p><b>Alternative tools</b> - During the course of 2017 the gradual introduction of instruments to measure the quality of gas alternative to the gas chromatograph on the transport network in order to measure the higher calorific value, relative density and carbon dioxide content of natural gas, was continued. In particular, as part of this initiative, a project for the technological adaptation of the fuel gas measurement at the storage centres was opened, which involves the installation of quality analysers and the automation and remote reading of the main measurement and reserve measurement.</p> <p><b>Demand forecast</b> - With the start of the thermal year (1 October 2017), a new model for forecasting transport demand based on the use of the Neural Networks as a mathematical algorithm has come into operation, and which has a Machine Learning methodology to constantly improve the quality of the forecast and manage the large amount of information available. The objective is to improve the quality of the forecast, subject to an incentive scheme by the AEEGSI.</p> <p><b>Estimation of natural gas emissions</b> - Collaboration continued within the European research group GERG (European Gas Research Group, <a href="http://www.gerg.info">www.gerg.info</a>), involving other European natural gas transporters and distributors, with particular reference to the project for the evaluation of two methods for estimating the natural gas emissions expected at an international level and of the project for the study of potential impacts, along the entire gas supply chain, of the trace chemical components in the biomethane in order to create the conditions for the safe development of biomethane as a source of gas in the transport network.</p>
<b>Governance and monitoring of the network and plants</b>	<p><b>Remote control</b> - In 2017 the study of the SMART Tel project was begun, with the aim of analysing the requirements of the acquisition processes and the management of data relating to the control and operation of the network, of increasing its effectiveness levels and identifying the best supporting technologies of the whole remote-controlled process. The "Remote Control Systems Development" project continued in 2017, with the aim of ensuring the technological development of field apparatus and the methods through which they are connected and managed, in order to upgrade the administration and monitoring of the transportation network.</p> <p><b>Safety</b> - In gas storage, following a trial conducted on site, a project was launched to install phonometric systems to record any accidental leaks at plants and to enable quick and effective blocking measures. In 2016 installation operations at 6 stations were concluded. The last installation is expected to be completed in 2018.</p>
<b>Physical integrity of infrastructures</b>	<p>Collaboration with EPRG (European Pipeline Research Group) is continuing <a href="http://www.eprg.net">www.eprg.net</a>. The EPRG is an association which researches pipeline-related topics and counts Europe's biggest gas transportation and pipeline manufacturing companies among its members, and of which Snam is a member. This group manages projects (broken down into three major areas: Design, Material and Corrosion) with the aim of constantly improving the knowledge and management of the integrity of gas pipelines throughout their life cycle (pipe manufacturing, pipeline construction and operation).</p> <p><b>Electrical protection</b> - In 2017 the pilot project for innovating the electrical protection system was launched, aimed at experimenting in the field of equipment and operational solutions based on the results of the study conducted in 2016.</p> <p><b>Geochemical and microsimical monitoring</b> - As regards storage, with regard to the new projects for the operation of deposits in conditions of overpressure and the strengthening of monitoring systems, work continues on the construction and installation of geochemical and microseismic monitoring prototypes. In particular, with regard to the projects for the operation of deposits tested under overpressure conditions, currently up to a maximum of 110% of the initial deposit pressure, we are continuing with the installation activities of the microseismic (surface networks and deep well sensors) and geochemical (surface stations) monitoring equipment.</p> <p>In 2017, Stogit focused its attention on activities aimed at monitoring microseismicity, by upgrading its networks to standards of technological excellence. Among the operations aimed at guaranteeing high-quality performance, the development of a new automatic data management and processing system called AMPIS (Automatic Microseismic Processing and Interpretation System) is particularly worthy of mention; it has been active since October 2017 and will gradually be rolled out to all concessions.</p>
<b>Maintenance and checking of networks</b>	<p><b>Revision of maintenance processes</b> - The execution phase of the "Gas Transportation Network Asset Maintenance System" was continued, which is aimed specifically at completely overhauling work processes and regulations related to the transportation network, compression stations, metering and remote control plants. This through identifying of the needs for the evolution of the professional model of the resources and of the technological and ICT tools used to carry out the maintenance activities. In particular, in 2017 the Roll Out of the Asset Implementation and Management systems for the network was completed and the Pilot of the Asset Implementation and Management Systems of the Boost Units was launched.</p> <p><b>Experimentation with leak detection</b> - The trial of a system aimed at identifying and locating gas leaks along the transport network, based on the analysis of the pressure waves and the detection of possible perturbations and their propagation time, continued.</p> <p><b>Experimentation on air flyover checks</b> - For the purpose of evaluating the existence of technologies which are useful for the improvement of air flyover controls, trial operations were begun on two themes: assessment of the current satellite detection technologies available and participation in the trial operations carried out by ENAV and ENAC on the development of the flight infrastructure in the BVLOS mode of drones.</p>

## Mitigation of environmental and health and safety effects

Accident prevention and environmental protection are areas of management in which the creation of value is linked to the ability to mitigate the most significant impacts caused by the company's business activities. Safeguarding the physical integrity of staff and natural capital is an integral part of the definition of Snam's corporate policies and investment decisions.

On these issues, Snam adopts specific certified management systems, with the aim of overseeing the corporate processes and activities which have the biggest impacts, linked to the fight against climate change, the reduction of energy consumption and the protection of nature and biodiversity. On environmental protection, Snam spent approximately €120.6 million (€108.4 million on investments and €12.2 million on management costs). On the health and safety of workers, Snam spent approximately €34.7 million.

### Management systems

Snam also continued its commitment to expanding and maintaining management systems that cover certain specific issues such as health and safety at work, the environment and the quality of services provided. During the year, Snam corporate updated the ISO 14001 Environmental Management System to the new version of the standard (ISO 14001:2015).

To maintain the certifications in place, Snam carries out all the necessary operations, including the verification activities carried out by both internal and external personnel. In Snam, 31 auditors are available, also qualified for external audits.

In 2017, 163 audits were carried out (36 of which by an external team). The decrease in the total number of audits is attributable to greater optimisation between internal and external audits and to the increase in the number of HSEQ integrated audits. In order to check the effectiveness of the management systems adopted, 47 health, safety and environment audits were also carried out on contractors working on Snam sites.

## Management systems

Company	Coverage certification	Type of certification and accreditation	Year of first certification
Snam	Company	<b>ISO 14001:2015</b>	<b>2017</b>
		BS OHSAS 18001	2012
Snam Rete Gas	Gas process systems	ISO 22301	2015
	Company	ISO 9001	2016
	Dispatching Centre	ISO 22301	2015
	Information security management for natural gas dispatching and metering	ISO 27001	2014
	Company	ISO 14001	2013
	Company	BS OHSAS 18001	2010
	Testing laboratory (LAB 764 conveyed gas flows)	ISO 17025	2007
GNL Italia	Company	Calibration laboratory (LAT 155 mixtures of natural gas)	2002
		BS OHSAS 18001	2012
Stogit	Company	ISO 14001	2000
		BS OHSAS 18001	2012
		Design and delivery of natural gas metering and accounting	ISO 9001
ITG	Company	ISO 14001	2002
		BS OHSAS 18001	2009
Snam 4 Mobility (*)	Company	ISO 14001	2010
		/	/

(\*) Company that became operational at the end of 2017.

## Accident and health protection

The Snam Group has a long-term commitment to developing and promoting the protection of health and safety at its workplaces, as part of an ongoing process to improve its HSE performance in accordance with its Health, Safety, Environment and Quality Policy.

When managing health and safety issues, it is essential to implement standardised management systems developed and maintained in accordance with the OHSAS 18001 standard. Specifically, Snam's Worker Health and Safety Management System aims to carry out strategic guidance, coordination and monitoring for the Group's operating companies. Accident prevention, the main health and safety objective, is carried out

through the adoption of targeted actions aimed at eliminating or reducing risk factors inherent in employees' work.

In-depth analysis of the causes of accidents aims to identify any measures that can be taken to eliminate, mitigate or correct risk factors, implementing organisational, technical and managerial solutions on equipment, plants and workplaces, as well as operational and behavioural procedures in which suppliers are also heavily involved.

In pursuing a progressive and continuous improvement of its performance, Snam considers the development of a better culture and awareness on the issues of health and safety by all the personnel and third parties involved to be crucial. In this context, the company has reviewed and implemented the Safety

Trophy and the Zero Accident Award, which from 2018 will also involve the functions of Staff (executives, managers, employees and workers). At the same time, the launch of initiatives to involve and raise awareness among suppliers about the need to adopt best practices has helped the Company to bring about improvements in terms of managing health and safety issues in contracted activities.

The Company pays careful attention when selecting and subsequently monitoring suppliers, through the use of a feedback form and the performance of checks during the execution of works.

<b>Zero accidents</b>	<b>Sub-groups that achieved 365 days without accidents in 2017</b>
Snam, Gasrule	Not in force
Snam Rete Gas	North West District, North Eastern District, South West District, North District, Ingcoss, Staff, Operational Staff, Central Eastern District, South Eastern District
Stogit	Fiume Treste Operations Hub, Crema (headquarters), Ripalta-Sergnano Operations Hub, Cortemaggiore-Bordolano Operations Hub

The protection of workers' health is based on ongoing monitoring of risk elements analysed in corporate processes and the implementation of adequate prevention and protection measures.

### Health and safety training (hours)

	<b>2015</b>	<b>2016</b>	<b>2017</b>
Hours provided	24,305	19,288	<b>8,193</b>
Participation	4,117	3,484	<b>1,508</b>

Work environment inspections are periodically carried out by the Competent Physician and the Prevention and Protection Department in order to evaluate adequate and appropriate working and environmental conditions and to identify possible measures for prevention or improvement.

Snam's workers are not exposed to a high risk for contracting occupational diseases (no cases have been recorded in the last three years). Staff who are exposed to specific risk factors undergo periodic health monitoring carried out by Competent Doctors based on specific health protocols defined according to the risk, as well as additional specialist visits. Employees whose work requires them to travel to non-European countries receive specific preventive care.

The various initiatives run by Snam to promote workers' health include: a flu vaccine campaign, an early-diagnosis plan to prevent cancer, agreements with specialist institutions, a ban on smoking in the workplace (which also includes e-cigarettes), and a ban on drinking alcohol in company canteens.

### Health Monitoring (no.)

	<b>2015</b>	<b>2016</b>	<b>2017</b>
Medical visits	1,270	1,561	<b>1,914</b>
Periodic medical visits	991	1,337	<b>1,688</b>
Environmental surveys	203	172	<b>279</b>

## **NFS** Climate change and energy efficiency

The greenhouse gases emitted into the atmosphere by Snam operations are carbon dioxide CO<sub>2</sub> and methane (CH<sub>4</sub>), a primary component of natural gas. The CO<sub>2</sub> produced is directly related to fuel consumption, while methane emissions arise from the release of natural gas into the atmosphere deriving from the normal operation of the plants, from interventions for connecting new pipelines and maintaining them or from accidental events occurring on the infrastructures.

Snam intends to develop projects to strengthen its operational excellence and thus contribute to the containment of climate-altering emissions. For this reason, the Company has set itself the goal of reducing its natural gas emissions by 2021 by 10% in the transport network compared to the 2016 emissions within the same perimeter and to

increase energy efficiency on various plant facilities.

To pursue these objectives there is an investment plan that includes:

- gas recompression interventions in the transport network and compression plants;
- replacement of pneumatic actuators powered by natural gas in transport and storage infrastructures;
- operations to improve the energy efficiency of the gas turbine and reduction cabins;
- installation of more efficient heat generators;
- installation of LED lamps for network lighting systems.

During the course of 2018 two trigeneration systems will be built at the compression stations in Gallese and Istrana, whose entry into service is expected in the first few months of 2019. These systems allow self-production of electrical energy from heat recovery plants to support

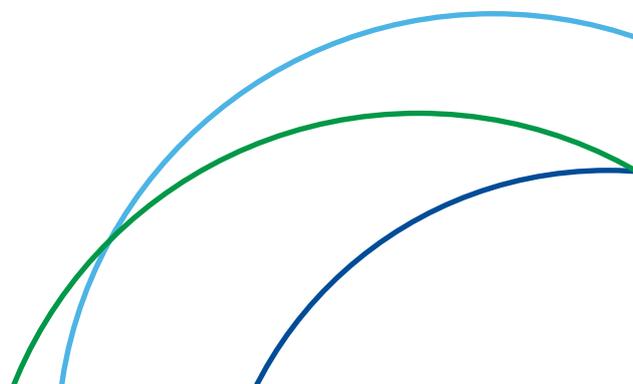
thermal utilities and station cooling.

The systems are listed as high-efficiency cogeneration plants.

Finally, to mention the project for the renewal of personal computers of group employees carried out in 2017, with benefits in terms of performance and energy efficiency, and the launch in the last quarter of 2017 of the Smart Printing project that will lead to the reduction of total number of printing devices and consumables used.

A further contribution to the reduction of our carbon footprint comes from the direct production of photovoltaic energy and the procurement of energy from renewable sources for the compression plants of Terranuova Bracciolini (Snam Rete Gas), Messina (Snam Rete Gas) and Brugherio (Stogit) and to the Panigaglia regasification plant (GNL Italia).

For 2017, thanks to the interventions implemented during the year, a total of 82,780 tonnes of CO<sub>2</sub><sub>eq</sub> emissions were avoided.



## Renewable energy plants

Type	2015			2016			2017		
	(no.)	Total power (kW)	Energy generated (kWh)	(no.)	Total power (kW)	Energy generated (kWh)	(no.)	Total power (kW)	Energy generated (kWh)
Wind power generators	1	1.7		1	1.7		1	1.7	
Photovoltaic plants	1,016	784	<b>711,680</b>	1,153 (*)	938.2	<b>844,608</b>	1,366 (*)	984.4	<b>1,044,309</b>
<b>Total</b>	<b>1,017</b>	<b>785.7</b>		<b>1,154 (*)</b>	<b>940</b>		<b>1,367 (*)</b>	<b>986</b>	

\*Including 1,329 back-up plants.

### **NFS** Environmental monitoring and restoration in the development of the gas pipeline network

Snam considers the protection of the natural value of the territories affected by its activities to be particularly important. For this reason, during the fulfilment phase of its work, it implements the most appropriate design choices to minimise the impacts on biodiversity and once these are completed, it puts in place environmental restorations and monitoring projects carried out in agreement and in collaboration with the competent bodies.

The goal of replanting and reforestation is not just to restore the forested areas affected by pipeline construction work, but generally to rebuild the landscape and recover the biological function of planted areas affected by the work, especially in their role as animal habitats with specific biodiversity features.

Restoration and reforestation is followed by the implementation of "cultivation treatments", i.e. the care and maintenance, for a period of at least five years, of the plants which have been planted.

Through monitoring projects, which concern the layouts of pipes that interfere – even if only marginally – with natural areas of ecological and wildlife value, checks are performed on the effectiveness of the process of restoring the areas affected by the works, based on comparisons between the conditions after the restoration ("post-operam") and the original conditions ("ante-operam"). Monitoring is normally performed for the most significant habitats identified in the design phase.

**Environmental monitoring and restoration (km of network)**

	2015	2016	2017
Restoration	240	227	203
New reforestation (*)	11	3.7	21
Farmland care	140	98	59
Environmental monitoring	1,009	565	388

(\*) Surface area covered by new reforestation: 380,000 m<sup>2</sup>.

**Main environmental monitoring and restoration carried out during the year**

Reference body	Name	Activities carried out
Lombardy Region	"Cervignano-Mortara" pipeline	<p>During 2017 work continued on the construction of the Cervignano - Mortara pipeline, an important 61.7 km long pipeline (underground pipe of 1400 mm in diameter), which runs through the agricultural areas of Lombardy through the provinces of Lodi, Milan and Pavia.</p> <p>It will be connected to some source pipelines, with a smaller diameter, for a total length of 38.5 km.</p> <p>At the end of the works the divestment of the existing Sergnano - Mortara DN 750 pipeline is expected, for a total length of 56.1 km and of the relative source works with a total length of 21.7 km.</p> <p>They mainly pass through agricultural areas, which will be completely restored at the end of the works and returned to their original use, and the protected area of the Ticino Park.</p>