



OVERVIEW

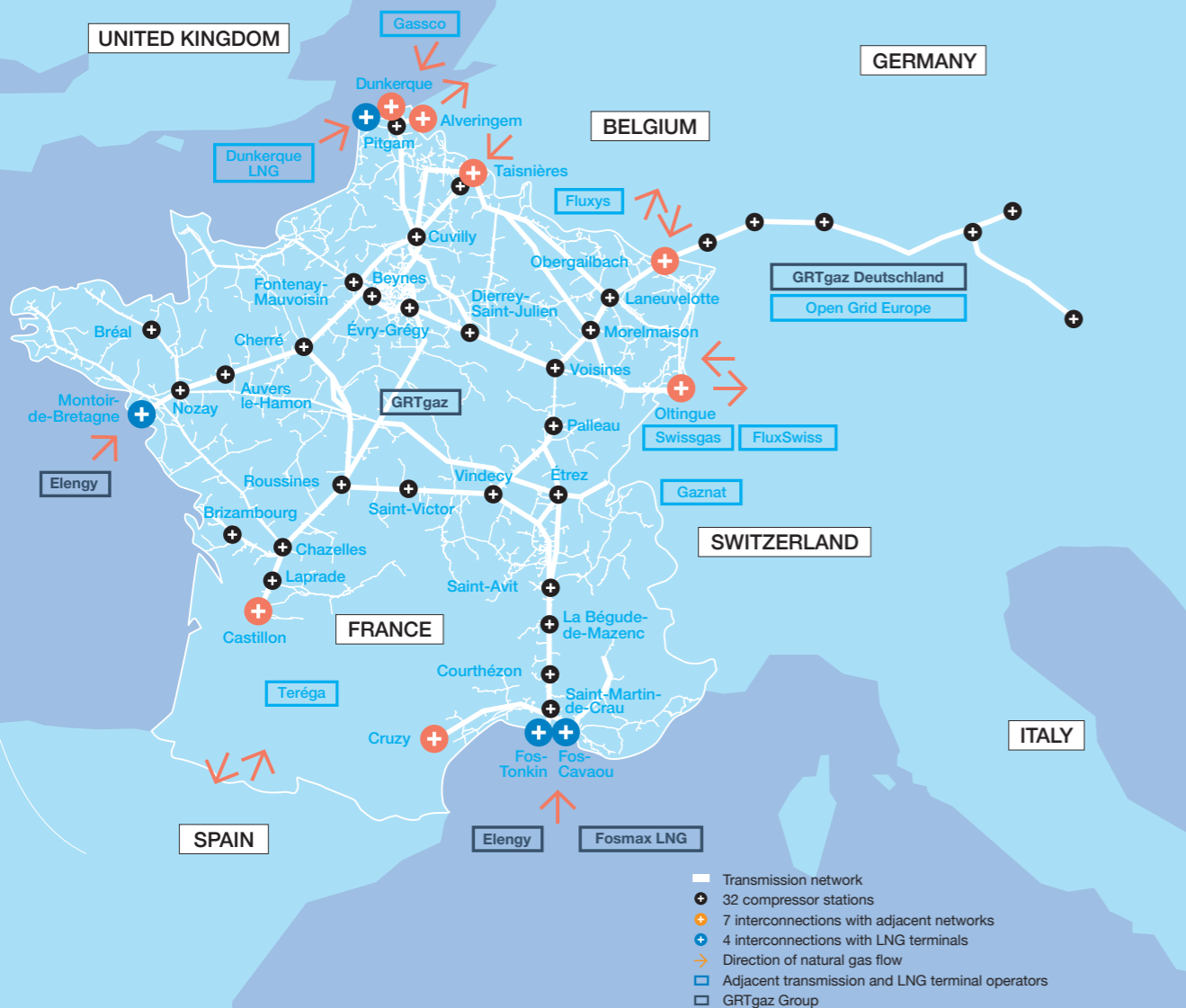
GRTgaz - an actor of the energy transition

2020



GAS TRANSMISSION NETWORKS

From the Atlantic to the east of Germany via the Mediterranean, the GRTgaz Group's infrastructures provide access to gas energy, at the heart of Europe, whatever its form or origin.



PROMOTING THE DEVELOPMENT OF RENEWABLE GASES

95% of national natural gas consumption is serviced by GRTgaz, which develops, maintains and operates 85% of the French gas transmission network.

Its resilient and interconnected infrastructures supply gas distributors, industrial consumers and power-generating plants. GRTgaz is a major player in regional energy security. In a context of energy transition, GRTgaz puts carbon neutrality at the heart of its long-term strategy and places its social and environmental responsibility at the heart of its business model. Together with all its stakeholders, GRTgaz acts every day in the field to promote the development of renewable gases and the regional energy transition.

Ensure the reliability and performance of the energy system

GAS PIPELINES

A connected, open and reliable network in the heart of Europe

With more than 32,500 km of high-pressure pipelines in France, GRTgaz is connected to the Norwegian, Belgian, German, Swiss, Italian (via Switzerland) and Spanish (via the Teréga network) transmission networks, as well as to 14 underground storage facilities and 4 LNG terminals on the French coast. Thanks to this network, GRTgaz offers transmission and connection services and provides access to diversified, high-performance gas sources to ensure competitive gas prices. It now also accommodates locally produced biomethane, notably using materials produced by farms, and supports the development of new renewable, low-carbon gas processes (pyro-gasification, hydrothermal gasification) to recover other types of waste or excess electricity production via hydrogen (*Power to Gas*).

COMPRESSOR STATIONS

A powerful and efficient network

Every 150 to 200 km, compressor stations restore pressure to the gas flowing through the pipelines. They are all equipped with measurement, control and safety systems.

NATIONAL DISPATCHING CENTRE

A network that guarantees a continuous supply

The national dispatching centre, supported by regional monitoring centres, controls gas flows 24/7 and monitors the main components of the transmission network to ensure continuity of supply.

INDUSTRIAL SAFETY

A closely monitored network

The network is monitored continuously on the ground; on foot, in the air (aircraft, helicopters, drones), by car and even remotely from regional monitoring centres. The purpose of this monitoring is to check the integrity of pipelines that may be damaged, for example, as a result of ground movements. To prevent the risk arising from excavation works, GRTgaz marks pipeline routes, informs local residents and holds meetings to reiterate the declaration obligations for proposed work (DT)*. GRTgaz provides systematic support on the ground to companies having declared their intention to start work (DICT).

POSTS AND MARKERS

A discreet network

Underground pipelines carry large quantities of gas through many, mainly rural, regions, while protecting the environment of the residents, local activities, landscapes and biodiversity. Their location is indicated by yellow posts and markers installed on the surface.

LNG TERMINALS

LNG regasification

LNG terminals are facilities that regasify liquefied natural gas (LNG) transported by sea by shippers from production areas. Once the natural gas has returned to a gaseous state, it is odorised before being injected into the transmission network.

*To declare your proposed works, go to: www.reseaux-et-canalisations.gouv.fr



701 TWh

Quantity of natural gas transported.



1,500

operational experts and technicians ensure on a daily basis all the actions necessary for the reliability and performance of the network.

Ensuring continuity of service and solutions tailored to all its customers

SHIPPERS

Energy suppliers or traders under transmission contract

They use GRTgaz's services to supply consumer customers connected to the transmission and distribution networks or for the transit of gas to neighbouring countries. They expect simplified and customised offers and services, reliable data and minimal work impact.



DISTRIBUTORS

Network operators or local distribution companies under connection and interface contract

They use GRTgaz's transmission network to supply industrial and domestic consumers connected to the distribution networks, which account for 60% of gas consumption in France. Not only are they customers of GRTgaz, they are also adjacent operators and, as such, they work with GRTgaz to ensure that gas and metering data circulate properly between them.



INDUSTRIAL CONSUMERS

Industrial consumers under connection contract

These are industrial operators from all sectors of activity, such as the food, chemical, paper and glass industries, but also **electrical power plants** that consume gas to produce electricity. Industry alone accounts for 40% of the gas consumed in France. GRTgaz is setting up a dedicated commercial contact for the various industrial sites, who will offer support in the optimisation of the performance of their facilities and in their development and gas conversion projects for their industrial and mobility uses.



GAS PRODUCERS

Industrial operators or farmers under connection and injection contract

They produce biomethane from their waste or fermentable materials from farms and inject it into our network. GRTgaz assists them in carrying out their injection project, ensuring that their installation is efficient and cost-effective.



Regulated activity

GRTgaz operates transparently within a regulated framework, without discrimination towards its customers. The Energy Regulation Commission (CRE) sets the public use tariffs for networks, supervises its investments and verifies the quality of the service rendered. Today, for a residential customer using gas heating, the share reserved for the "transmission" activity represents an average of 8% of the final bill.



98%

of customers have a positive image of GRTgaz and are satisfied.

Results of the customer satisfaction barometer covering the mid-2018 to mid-2019 period

The main industrial sectors that consume gas are: chemical and petroleum, power generation, food processing, refining, combined cycle power production, metallurgy, glass, non-metallic materials, urban heating, paper and cardboard, automotive and tyres, etc.

Building long-term relationships with all its stakeholders

GAS CONSULTATION

Focussing on market players for a product and service offering reflecting as accurately as possible their needs

Consultation arrangements with all the players in the gas chain (traders, shipper customers, industrial customers, producers of electricity from gas, operators of adjacent infrastructures and public authorities), are strengthening our policy, developed for many years now, of focussing on and co-building with our customers. They also contribute to better service and facilitate cross-border trade.

DIALOGUE WITH LOCAL STAKEHOLDERS

Integration and acceptability of works at a regional level

GRTgaz is adapting its transmission network to meet market needs and enhance security of supply. As some projects have an impact on the regions, GRTgaz makes sure that it obtains the opinions of the stakeholders (local authorities, businesses, local residents and civil society) before carrying out the works, to ensure that projects are better integrated and accepted. The latter is also achieved by deploying the ERC initiative (prevent, reduce and offset) and adopting a policy of close cooperation conducted by GRTgaz's Regional Delegations with local authorities and all local players, whether they are industrial operators, farmers, research and training organisations or consular chambers.

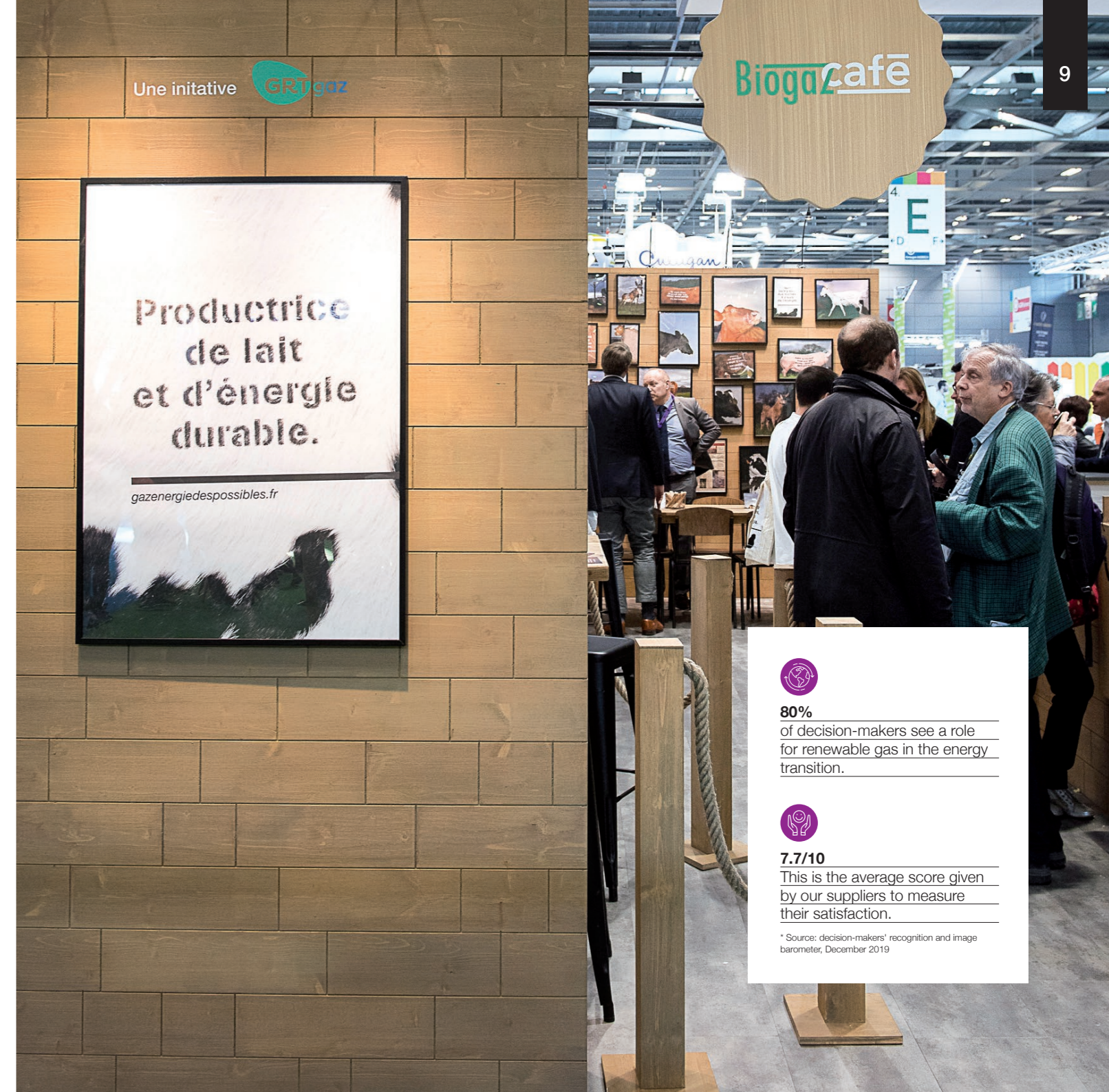
RESPONSIBLE PURCHASING POLICY

In 2019, GRTgaz made €600 million of purchases in France, including €200 million from SMEs and €1.5 million from the protected and adapted sector. The company works with regional stakeholders to maximize the positive local impact of its activities. GRTgaz is a signatory of the Responsible Supplier Relations Charter. As such, the company is committed to respecting payment deadlines, especially with small companies.

THE STAKEHOLDER COMMITTEE

Integration of civil society perceptions and expectations

A stakeholder committee, made up of nine qualified individuals from the sectors of agriculture, industry, environment, innovation and social sciences, provides GRTgaz's Executive Management with advice on company or society transformation issues. Established in 2016, it is held three times a year.



80%

of decision-makers see a role for renewable gas in the energy transition.



7.7/10

This is the average score given by our suppliers to measure their satisfaction.

* Source: decision-makers' recognition and image barometer, December 2019

Taking full social and societal responsibility

SOCIAL POLICY

Combining well-being and high performance, and acting together to ensure everyone's quality of life at work

Equal opportunities, promotion of diversity, career development and employee focus: the company's social policy aims to allow everyone to be themselves and to realise their full potential in a positive environment. This policy combines dialogue, benevolence, support, training and creativity.

SETTING AN ENVIRONMENTAL EXAMPLE

Taking action for the climate and the environment

GRTgaz's commitments to controlling its carbon footprint (reduction of methane emissions, conversion to natural gas for vehicles when renewing its fleet of eligible vehicles), recovering the waste generated by its construction sites or protecting biodiversity are defined in its business plan and its CSR Charter.

REGIONAL ENERGY TRANSITION

Proximity to local decision-makers

Three key missions for GRTgaz's four regional delegations: support local decision-makers in their energy planning exercise; leverage gas assets and the flexibility of the gas system in a multi-energy approach; and support a virtuous ecological transition which serves the regions. To this end, the company makes data available (open data) and carries out prospective studies in connection with the deployment of renewable gases and new uses (e.g. NGV/bioNGV fuelling stations).

"Whether it is the development of renewable gases, the future of hydrogen, clean and accessible mobility for all, the decarbonisation of our industry or the conservation of biodiversity, gas companies have their say on all these subjects and many more."

INDUSTRIAL CONVERSIONS

Supporting development and gas conversion projects

The path towards carbon neutrality is at the heart of GRTgaz's long-term strategy. The company helps its customers and regional players to take these opportunities into account in order to achieve their objectives in terms of energy transition, waste treatment or clean mobility solutions. All teams are mobilized to support customers on a daily basis and encourage them to prioritise gas in their industrial and mobility uses.

Thierry Trouvé,
Chief executive officer of GRTgaz



57%

Reduction of GRTgaz's methane emissions between 2016 and end 2019. GRTgaz's methane emissions represent less than 1% of the emissions observed in France.



20%

of the existing vehicle fleet will be NGV-powered by 2020.



42%

of the waste generated by GRTgaz is recovered.



74%

of decision-makers consider that GRTgaz is useful for the energy transition.

* Source: decision-makers' recognition and image barometer, December 2019

Mobilizing initiatives to serve future generations

RICE INTEGRATED RESEARCH CENTRE

A major player in research and innovation

Created in 2018, RICE (Research & Innovation Centre for Energy) brings together around a hundred researchers and experts, with state-of-the-art technical resources at their disposal. It cooperates with international research organisations, participates in several European R&D programmes and conducts an open and collaborative innovation policy with public and private partners. RICE provides tailor-made services and pilots programmes that contribute to operational excellence, industrial safety and the emergence of new processes in the fields of renewable gases, energy storage and smart grids.

OPEN INNOVATION

A participative innovation process open to the outside

GRTgaz runs projects with major industrial groups, research bodies and universities. In addition, with its call for projects system the Open Innovation Factory, it actively develops its relationships with innovative start-ups, SMEs and micro-businesses. Maintenance, design, training, market applications, etc., digitalisation is spreading to all areas. Every staff member can also contribute throughout the year to innovation by getting involved in the search for solutions via a collaborative platform.

REPRESENTATIVE OFFICE IN BRUSSELS

In contact with European decision-makers

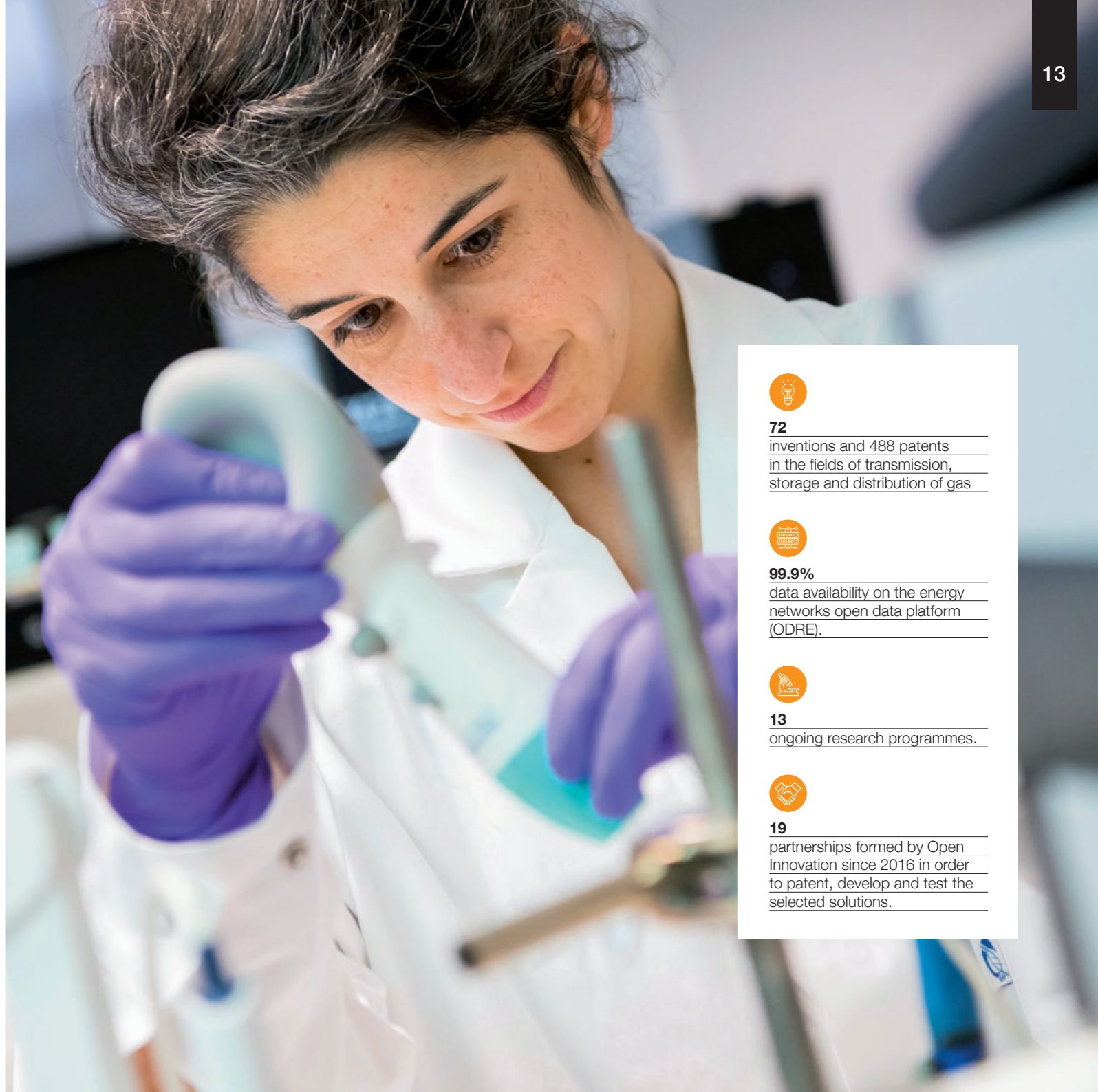
The Green Deal is one of the major topics on the office's agenda. This "green pact", aiming to reconcile our economy with the planet, is structured around ten pillars. For GRTgaz, the aim is to support the role of gas in an energy mix that aims to achieve carbon neutrality by 2050.

Based on GRTgaz's plans for the future, the office seeks to highlight the contribution of natural and renewable gases to carbon neutrality, while sharing GRTgaz's vision of the role of gas infrastructures in connecting the energies of the future.

SUPPORTING REGIONAL AUTHORITIES

Strengthened cooperation

GRTgaz is putting its expertise at the service of local players to support them on issues of ecological transition with the development of renewable gases (methanisation, gasification of solid waste and sludge from wastewater treatment plants, hydrogen transport, decarbonisation of industry, clean mobility, etc.). The objective is to respond to energy challenges in a way that is compatible with the different local ecosystems.



72 inventions and 488 patents in the fields of transmission, storage and distribution of gas



99.9% data availability on the energy networks open data platform (ODRE).



13 ongoing research programmes.



19 partnerships formed by Open Innovation since 2016 in order to patent, develop and test the selected solutions.

Contributing to the development of renewable gases and moving towards carbon neutrality

CIRCULAR ECONOMY AND REGIONAL ENERGY

The new regional energy source

Pyro-gasification

Pyro-gasification makes it possible to treat solid waste that is currently little or poorly recovered, such as plastics, used wood, tyres or solid recovered fuels. It consists of heating this waste at very high temperatures (between 800 and 1,500°C), with little oxygen and without combustion, in order to decompose the material into different gaseous molecules.

Anaerobic digestion

Methanisation enables organic materials such as livestock waste, green waste, crop residues or household biowaste to be recovered. It consists of the degradation of organic matter in the absence of oxygen. This process produces a renewable gas, the biogas, which can be injected into the network after purification and the digestate, a residue that can be substituted for chemical fertilizers.



Hydrothermal gasification

Hydrothermal gasification makes it possible to treat liquid biomass waste and residues such as wastewater treatment plant sludge, effluents from industrial activities (paper mill, food processing, etc.), livestock waste or digestates from methanisation. It consists of heating the liquid biomass at high pressure (250 to 300 bars) and at high temperature (between 400 and 700°C). The chemical reaction in this process converts the carbon in the biomass into a renewable, methane-rich gas.

Hydrogen

A significant future role in the gas mix

GRTgaz is preparing the conditions for injecting a significant volume of hydrogen into the gas networks, with limited adaptation costs. A network linking the different European hydrogen valleys could also reach 6,800 km by 2030 and 23,000 km by 2040. This network would then consist of 75% existing converted natural gas pipelines and 25% new hydrogen pipelines. In early 2020, GRTgaz successfully carried out the first injections of hydrogen produced by Jupiter 1000, the first *Power to Gas** demonstrator on an industrial scale, located in Fos-sur-Mer.



100%
renewable gas in 2050*.

20%
renewable gas by 2030**.

* A 100% renewable gas mix in 2050?, ADEME, GRDF, GRTgaz study
** Objective of the 2015 Energy Transition Act

GAS MOBILITY

New environmentally friendly and competitive fuels

Natural gas for vehicles (NGV) and bioNGV make an excellent fuel in compressed or liquefied form. An efficient solution for reducing greenhouse gas emissions and improving air quality in urban areas. Based on mature technology and a vehicle offering that is expanding in particular in the heavy goods vehicle, bus and coach segment, it is also a competitive and

flexible solution for all fleet managers. As an active member of the gas mobility industry, GRTgaz contributes to the emergence of these alternative fuels by promoting the development of the necessary infrastructures.

INDUSTRY

The challenge of decarbonisation

GRTgaz's industrial customers want to reconcile economic and environmental performance.

Working alongside them on the energy efficiency and decarbonisation of their processes, GRTgaz offers solutions in line with circular economy and relocation policies.

* *Power to Gas* makes it possible to transform unconsumed electricity, particularly surpluses produced by intermittent energies such as wind or solar power, to produce hydrogen by electrolysis of water.

Expanding with its subsidiaries

ELENGY

Leader in LNG terminals in Europe

An expert in Liquefied Natural Gas (LNG), Elengy operates the three regulated LNG terminals in France, Montoir-de-Bretagne on the Atlantic coast, Fos Cavaou and Fos Tonkin in the Mediterranean. As the entry points for LNG in Europe, these three sites offer the market optimum flexibility for unloading or loading any type of LNG carrier, transshipping between LNG carriers, loading tankers with LNG or regasifying LNG for injection into the transmission network.

With LNG, a solution available at lower cost, Elengy is contributing to the energy transition of industrial operators, carriers and energy suppliers who are committed to reducing their environmental footprint. And Elengy is developing its services to expand the use of LNG and provide a carbon-neutral offering by 2050.

GRTGAZ DEUTSCHLAND

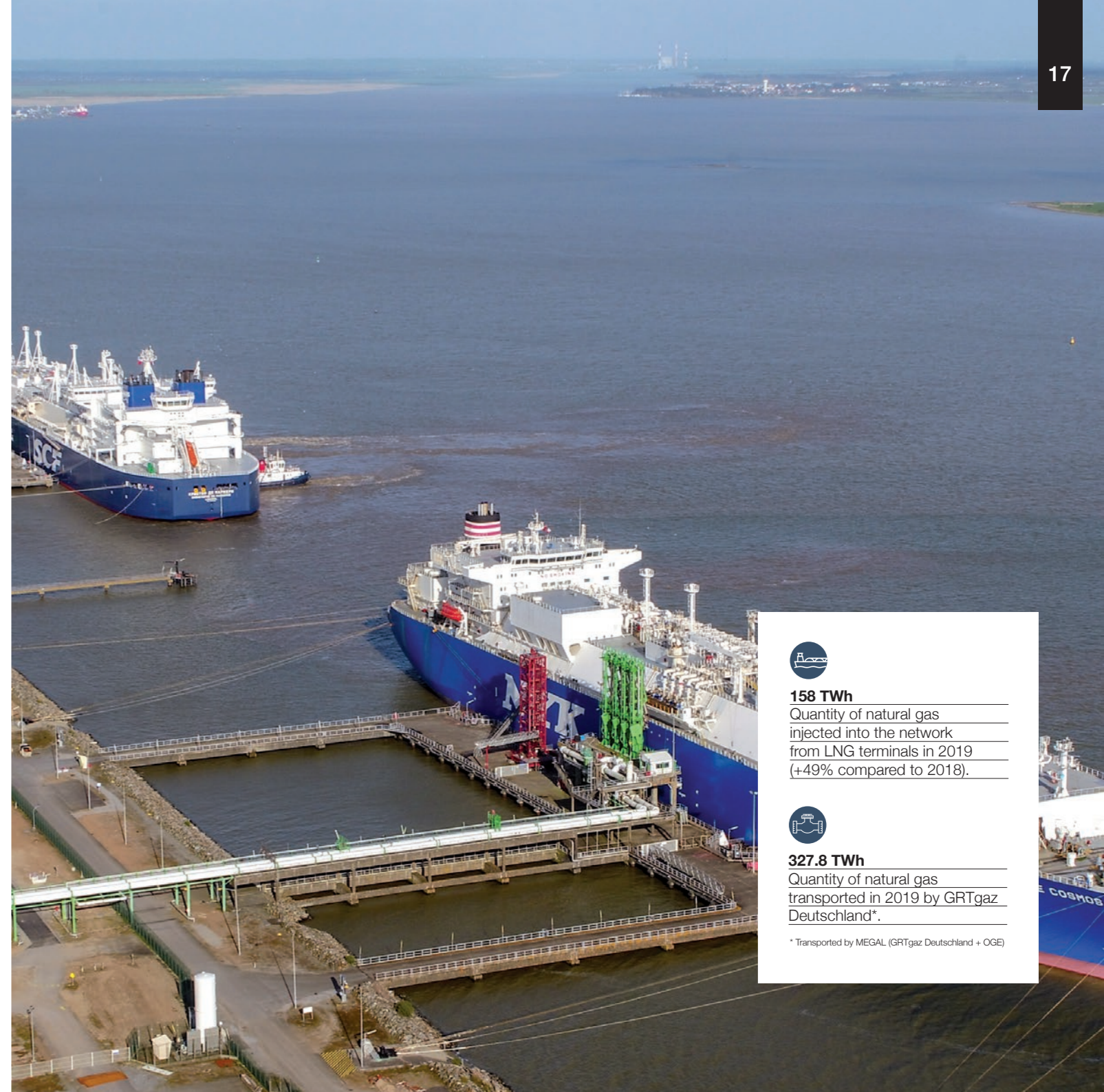
Connecting the energies of tomorrow: a vision relayed by our German subsidiary

The subsidiary GRTgaz Deutschland operates the MEGAL pipeline, which extends GRTgaz's network in Germany while connecting it to the Czech Republic and Austria. This high-capacity pipeline system crossing Germany from east to west plays a major role in routing gas towards France. The large volumes transported contribute to security of supply for both countries.

GRTgaz Deutschland is also contributing to the energy transition and the development of decarbonated gas transmission by cooperating with the other German transmission system operators to build a transmission infrastructure for hydrogen and green gases.

An app dedicated to gas networks

With its "appygas" web application, which displays key information on Europe's gas transmission networks in near-real time, the entrepreneurial start-up company of GRTgaz Deutschland has created an innovative digital platform that meets the transparency requirements of our branch-specific data.



158 TWh
Quantity of natural gas injected into the network from LNG terminals in 2019 (+49% compared to 2018).



327.8 TWh
Quantity of natural gas transported in 2019 by GRTgaz Deutschland*.

* Transported by MEGAL (GRTgaz Deutschland + OGE)

2019 key figures: GRTgaz Group scope

FINANCIAL RESULTS

Financial data



€2,275 million revenue

€1,246 million EBITDA

€353 million Net income from recurring operations



€439 million investment

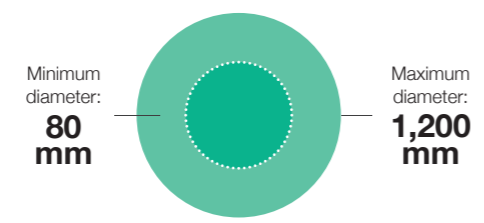
NETWORK

Pipelines

On 31 December 2019

33,688 km

Total length of the network



Compression



32 compressor stations

HUMAN RESOURCES



3,427* employees

2,627 men 800 women

* including 369 Elengy employees and 36 GRTgaz Deutschland employees

GRTgaz France scope

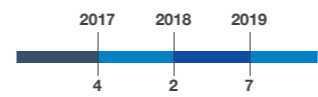
SAFETY OF PIPELINES

Control of third party work*

90,400 proposed works and intentions to start work received and processed by GRTgaz

83,700 proposed works and intentions to start work concerning GRTgaz

Incidents due to third party work:



* Third-party works = works in the vicinity of GRTgaz's facilities

CUSTOMERS



733 active industrial customers

in 2019, including 13 power-generating plants consuming natural gas at end 2019

158 shipper customers at end 2019

19 network operators for connected distribution systems

HEALTH AND SAFETY AT WORK (2019)

0.9 Frequency rate

0.04 Severity rate



OPEN DATA

26 Data sets
GRTgaz available externally

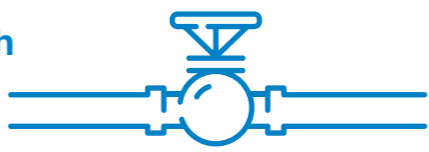
30,894 downloads

GAS CONSUMPTION

451 TWh* in 2019 (+ 2% compared to 2018)
* GRTgaz scope total consumption

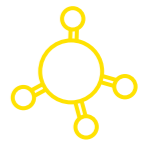
QUANTITIES OF NATURAL GAS TRANSPORTED

701 TWh in 2019



TRADING ON THE FRENCH MARKET

936 TWh traded at Gas Trading Points



Contact us

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