INTEGRATED REPORT

GRTgaz, in motion

INCLUDING THE STATEMENT OF NON-FINANCIAL PERFORMANCE

2021

GRTgaz, IN MOTION TO BECOME A LEADER IN THE 3rd GAS REVOLUTION

— This is the first time that GRTgaz has opted to report and share with its stakeholders an integrated report which offers an assessment of its overall performance using the standards set by the *Value Reporting Foundation*. Adopting this demanding method means our company intends to demonstrate that the application of policies and best practices in terms of labour, environment and governance is not an obstacle to financial performance, but on the contrary, a means of generating added value for its employees, customers and partners.

This integrated report is also a demonstration of trust and transparency in relation to our stakeholders. It represents the logical continuation of the major orientations adopted in recent months. On 15 October 2020, GRTgaz published its compass – its corporate purpose – which directs its long-term strategy and its contribution to the common good: *"Together, enable a secure, affordable energy future that is climate-neutral"*. This corporate purpose will be implemented operationally over the 2021-2024 period in the form of the strategic transformation project (CAP24), a new materiality assessment and a revised corporate social and environmental responsibility (CSR) policy.

With the perspective of an in-depth examination of its business model, the company decided to accelerate the process and secure the means to become a leader in the third gas revolution, that of renewable gases and hydrogen. The road ahead requires us to put everything into action so that gas infrastructures can support carbon-free molecules to replace fossil-derived gas, on a trajectory consistent with the Paris Agreement. 2021 has already clearly signalled the intentions of GRTgaz. While ensuring its historical missions of managing the gas system on a daily basis, the company has seen its investments related to the energy transition grow by 45%, driven notably by the doubling of biomethane injection stations on its network, or the launch of FenHyx, a unique test bench for the pipeline transportation of hydrogen in Europe. However, in the meantime, GRTgaz also joined forces with Teréga to widely consult players on the hydrogen market and bolstered its involvement in the "Grande region hydrogen" initiative, a cross-border project between France, Germany and Luxembourg to create an ecosystem and a hydrogen infrastructure (mosaHYc project).

These results are all the more significant that they have arrived in a difficult period due to the ongoing pandemic which saps the morale of employees. Our accident rate is also up, which prompts us to rethink our operation and our practices at all levels. Our core skills must be reasserted but we must also all simplify our processes, ensure that the essential requirements are taken in and applied, and trust more in our capacities to organise and take initiatives, such as the implementation of the Multiplex agreement, which redefines the conditions of remote working.

Together, enable a **secure, affordable** energy future that is **climate-neutral**

We have in front of us a challenge that commits us to future generations, that of contributing to the future of our planet by combating climate change and to preserve biodiversity. Renewable gases and hydrogen are unquestionably one of the necessary solutions, as underlined by the prospective scenarios on the French energy system published in late 2021, or the gas package on a European level. GRTgaz will play an active role over the coming months to continue to demonstrate their potential, so that national projects in progress (French strategy for energy and the climate / Multi-annual energy programme) acknowledge their rightful place in the mix.

I am proud to invite you to read this first Integrated Report published by GRTgaz, which offers a perspective of GRTgaz in the midst of the third gas revolution.

— THIERRY TROUVÉ
CHIEF EXECUTIVE OFFICER OF GRTgaz

ABOUT THIS REPORT

Why does GRTgaz publish an Integrated Report?

2021 marks a new step in terms of transformation at GRTgaz, the first year of deployment of its corporate purpose. At its general meeting of 15 October 2020, GRTgaz unanimously approved the integration, in its Articles of Association, its corporate purpose "Together, enable a secure, affordable energy future that is climate-neutral" and published its manifesto built on five pillars. For the period 2021-2024, GRTgaz will tangibly implement this purpose through its corporate social responsibility (CSR) policy for 2021-2024, which is integrated in its strategy and its CAP24 corporate transformation project.

For this new page in its history, GRTgaz has decided to publish its first Integrated Report. Consistent with its purpose, it reflects the company's common desire to succeed and share its transformation in order to participate in a changing world and to respond to the major environmental and social challenges.

What does the report contain?

The GRTgaz Integrated Report took inspiration from the reference framework recommended by the *Integrated Reporting Framework* (formerly the IIRC). It proposes a holistic vision of the company: its purpose, ambition, strategy, objectives, governance and different value generation options for the company and its stakeholders. Its contribution to the most tangible sustainable development objectives for the company are also included.

The Integrated Report of GRTgaz also includes its Statement of Non-Financial Performance (SNFP) with the publication of information about the main environmental, social and societal risks, alongside a description of its policies, action plans and their results[1].

How was it drawn up?

This report was co-authored by all GRTgaz departments under the supervision of the CSR department. Participative workshops on the different chapters of the Integrated Report were held to assist in its production.

1/ Please refer to chapter 5 for information on the SNFP. *SNFP concordance table.*

GRTgaz transmission networks

Profile of GRTgaz

French TSO, player in the country's energy safety and committed to future energy solutions.

Our corporate purpose:
"Together, enable a secure, affordable energy future that is climate-neutral".

— As a gas infrastructure operator serving the public interest, GRTgaz contributes to the balance, safety, and performance of the energy system, along with access to increasingly renewable energy which remains affordable. Given the climate challenge and the non-financial risks to which GRTgaz is exposed, the company considers that attentiveness to stakeholders, dialogue and working together to collectively develop the solutions to the challenges of ensuring a safe, affordable and climate-neutral energy system.

KEY FIGURES FOR 2021

Financial indicators
- Revenue: €1,846 M
- EBITDA: €1,099 M
- Net income: €335 M
- Investments: €457 M

Labour indicators
- 3,390 employees
- Feminization rate: 24.58%
- Share of women in Management committee: 37.9%
- Frequency rate: 2.5
- Number of research specialists: 97

Network
- 32,530 km of pipelines
- 6.4 TWh/year of connected capacity for injection of renewable gases into networks, including 806 GWh in GRTgaz networks
- Gas transmitted: 630.3 TWh

Environment KPI
- Carbon footprint of 566 ktCO_2eq in CO_2 emission (scopes 1 to 3 where manageable), or - 30.5% compared to 2019

Third gas revolution: GRTgaz committed to safety and energy solutions of the future

1.1/ Our mission to serve our stakeholders: *"Together, enable a secure, affordable energy future that is climate-neutral"*

— The result of a collaborative process and listening to all its stakeholders[2] for two years; GRTgaz adopted its corporate purpose on 15 October 2020: *"Together, enable a secure, affordable energy future that is climate-neutral"*, which now is part of its legal articles of association. A manifesto has been issued to guide interpretation and describes the commitments made by GRTgaz and its employees around five pillars. These five pillars drive the company's strategy and support its choices and decisions. They also underlied the development of the corporate culture and the new CSR policy.

2/ Employees, shareholders, customers, territories, public authorities, etc.

This corporate purpose drives the people of GRTgaz to act in favour of the environmental transition and explore new areas of responsibility for the future...

IN MOTION

PILLAR 1

...Because we serve the public interest,
we organise trade and flows to ensure the continuity of supply of gas to all consumers and to balance the national and regional energy systems. We facilitate the use of ever more renewable gases with the same requirements in terms of safety, quality and competitiveness.
To ensure the safety and performance of the energy system.

PILLAR 2

...Because we are responsible players,
we design and operate energy infrastructures with environmental footprints that are increasingly exemplary. In this way we contribute to reducing the impact of the whole gas chain. We offer new perspectives with locally-produced renewable gases as well as hydrogen, and more generally decarbonation solutions for energy uses.
To manifest our ambition to be carbon-neutral.

PILLAR 3

...Because we are convinced that the environmental transition depends on innovation,
we are committed to research, experimentation, to the development and diversification of our activities, to making daily progress and a greater contribution to facing the challenges of our customers, territories, and the whole planet.
To stimulate initiatives which serve future generations.

PILLAR 4

...Because we are guardians of human values,
we are committed to a caring and stimulating work environment, where skills are developed and all diversities included, because the challenges of transformation and the requirement for performance must be compatible with individual and collective fulfilment.
To blend well-being and performance, acting together for health, safety and quality of life at work for all.

PILLAR 5

...Because we are committed to our stakeholders,
We work with regional players to co-build future solutions and reconcile the interests of as many people as possible. We develop cooperation, ensure transparency of the positive and negative impacts of our activities, while providing all the essential data for forward planning and actions.
To make our corporate purpose the focus of all discussions.

**OUR DAY-TO-DAY VALUES:
INNOVATION, OPENNESS, RESPONSIBILITY, EXCELLENCE, TRUST.**

OUR CORPORATE PURPOSE IN ACTION IN 2021: HIGHLIGHTS

— In December 2021: the Caisse des Dépôts group (Caisse des Dépôts and CNP Assurances via SIG), which shares our public interest values in serving sustainable development, increased its stake in GRTgaz by acquiring 11.5% of ENGIE's stake in GRTgaz.

"As a player of the environmental transition, the Caisse des Dépôts group supports this transition by strengthening its cooperation with ENGIE and increasing its investment in GRTgaz in order to accelerate the diversification of the energy mix, and to rapidly align itself with the trajectory of the Paris Agreement." Éric Lombard, CEO of Caisse des Dépôts.

1 ...BECAUSE WE SERVE THE PUBLIC INTEREST

ENTRY INTO SERVICE OF CONNECTION (JUNE 2021) AND OF BRETAGNE SUD REINFORCEMENT IN DECEMBER 2021

The Bretagne Sud project consists in **reinforcing the natural gas transmission network** by laying a new 98 km-long pipeline between Pluvigner (56-Morbihan) and Pleyben (29-Finistère). The connection work was completed in June 2021 and the Landivisiau power plant will be able to start its tests in early 2022. The Bretagne Sud reinforcement was commissioned in late 2021. This structure is part of the Brittany electricity pact and aims to **secure the region's energy supply.**

GROSS CONSUMPTION OF GAS UP IN 2021

2021 was marked by an increase in gross gas consumption, estimated at over 4% in France.

This rise can be explained by lower temperatures than the previous year and by the economic recovery.

In 2021, GRTgaz transmitted 630 TWh of gas, down 1.4% compared to 2020.

2 ...BECAUSE WE ARE RESPONSIBLE PLAYERS

LOWER CARBON FOOTPRINT FOR GRTgaz IN 2021

GRTgaz reduced its greenhouse gas emissions on its manageable scopes by 30.5% in 2021 compared to 2019. These results are in line with the carbon trajectory that GRTgaz set itself, i.e. "Below 2°C", compatible with the Paris Agreement and France's national low carbon strategy.

SIGNATORY OF ENTERPRISE COMMITTED FOR NATURE – ACT4NATURE FRANCE IN SEPTEMBER 2021

The CEO of GRTgaz signed **the ten shared commitments of Act4nature** and has committed to deploying within one year **individual commitments** based on SMART objectives. A review every two years and a final assessment on expiry of the commitment will be submitted **to the steering committee led by the French Office for biodiversity,** which will assign and publish a score reflecting the maturity level shown by the business.

BIOMETHANE TASK FORCE: A CROSS-FUNCTIONAL TEAM TO DOUBLE THE EXECUTION OF BIOMETHANE INJECTION PROJECTS

Given the rapid deployment of biomethane, with 90 producer customer connections expected by 2023, **a cross-functional team dedicated to biomethane connections** was set up in January 2021 in Cormontreuil (51-Marne), in the heart of the "Biomethane valley". This multi-disciplinary team features several skills, such as supervision, operation, project management, networks, special techniques, etc. All are brought together with a single aim: handle the wave of biomethane units coming online on the GRTgaz network. A little under a year since its creation, the team completed 11 of the 25 commissioning projects in 2021. In 2021, GRTgaz reduced the costs of new biomethane injection and reverse flow facilities by 5%.

MAINTAINING OUR COMPETITIVENESS IN A BACKDROP OF RISING ENERGY PRICES

In a backdrop of significant rises in gas prices on gas markets, the French marketplace remains competitive in relation to its European counterparts. This is mainly due to the strong attractiveness of the *Trading Region France* area for LNG and that storage in France was filled earlier than in other European countries. The regulated tariff applied by GRTgaz remain stable overall, with an average cost of access to the gas transmission network of €0.44 per kWh/day/year.

3 ...BECAUSE WE ARE CONVINCED THAT THE ENVIRONMENTAL TRANSITION DEPENDS ON INNOVATION

INAUGURATION OF NEW FACILITIES FenHYx (FUTURE ENERGY NETWORKS FOR HYDROGEN AND MIX) IN ALFORTVILLE IN NOVEMBER 2021: INNOVATE TO MEET THE CHALLENGES OF THE ENERGY TRANSITION

The FenHYx project intends to develop a leading-edge test platform and resources to test and prepare gas networks to carry hydrogen. With FenHYx, RICE has established new test capacities for pressurised hydrogen in various fields: impacts on materials, mechanical strength of steels, analysis of corrosion phenomena, etc. The RICE test station is unique in Europe due to the extent of its test resources and its upstream connection to the transmission network, coupled with a downstream connection to the distribution network. Approximately 100 people work there, comprising engineers, engineering students, technicians and doctoral students. FenHYx received financial support from the Ile-de-France region as part of the "Innovation and structuring of the hydrogen sector" call for interest initiated in March 2020. Agreements have already been signed with other European TSO (Fluxys, *National Grid* etc.).

PRESENTATION OF THE mosaHYc AND "GRANDE REGION HYDROGEN" CROSS-BORDER INITIATIVES AT COP26 BY GRTgaz

At COP26, as part of the "Decarbonising the regions: building the French Hydrogen Sector" workshop in the French Pavilion, GRTgaz was invited to present the mosaHYc and "Grande Region Hydrogen" cross-border initiatives. These projects originate from the conversion of a pipeline to transport hydrogen and aim to create a regional ecosystem of hydrogen players, from production to consumption.

4 ...BECAUSE WE ARE GUARDIANS OF HUMAN VALUES

MULTIPLEX AGREEMENT ON THE NEW WORK PATTERNS AT GRTgaz IN MAY 2021

This agreement was signed by the three trade unions at GRTgaz in May 2021. It covers four main areas: the organisation of activities, in a multi-location work environment, team rituals and meetings, changes to management posture and for teams, increased telework up to three days a week and the right to disconnect, balance between work and home life, as well as the rules of use for the related digital tools. Its application is underpinned by the formal expression of a collective commitment for each team.

GAS PROFESSIONALS: RESPOND TO THE OBSERVED DETERIORATION IN RESULTS CONCERNING OCCUPATIONAL AND INDUSTRIAL SAFETY

This project was approved in late 2021 based on the results, incident analyses and employee consultation of 19 October 2021. Introduction to a "worthy cause" project for safety in 2022. This project for gas professionals is ambitious. It addresses training but also our business culture via our relationship with specifications, our behaviours, and the way we are organised to execute our technical work. It is also one of the pillars of the GEPP employment and professional career path management project that we wish to implement with our labour organisations.

5 ...BECAUSE WE ARE COMMITTED TO OUR STAKEHOLDERS

CONSULTATION OF PLAYERS ON THE LOW-CARBON AND RENEWABLE HYDROGEN MARKET IN 2021

On 1st June 2021, GRTgaz and Teréga launched a national consultation of players on the low-carbon and renewable hydrogen market. Results: 90% of respondents imagine hydrogen will be transmitted *via* a pipeline network, with 42% forecasting the use of road or rail networks, and a small minority by sea.

INITIATIVES BY GRTgaz TO PREPARE THE INFLUX OF INNOVATIVE BIOGAS TECHNOLOGIES, CONSOLIDATE THEIR INTEGRATION IN THE ENERGY LANDSCAPE OF REGIONS AND CONTRIBUTE TO DECARBONISING USES

March 2021: GRTgaz created the first national work group (WG) dedicated to hydrothermal gasification. The group now includes over 30 players in the sector. The aim of the work group is to consolidate the hydrothermal gasification sector, to ensure it can achieve a sustainable position in the French energy landscape by the end of 2023.

15 June 2021: A totally digital customer event dedicated to decarbonation drivers that are accessible with the existing gas transmission network (renewable gases, CO_2 capture and storage, hydrogen) with the participation of the minister representing the Ministry of Economy and Finance.

21 October 2021: At a **digital conference** organised by GRTgaz, several institutional and economic players reasserted their interest in **pyrogasification.** On this occasion, GRTgaz published a map of the 15 projects initiated in France, which illustrates the regional momentum of this future energy sector.

22 November 2021: First webinar on "Biomethane to decarbonise your products" for our industrial customers.

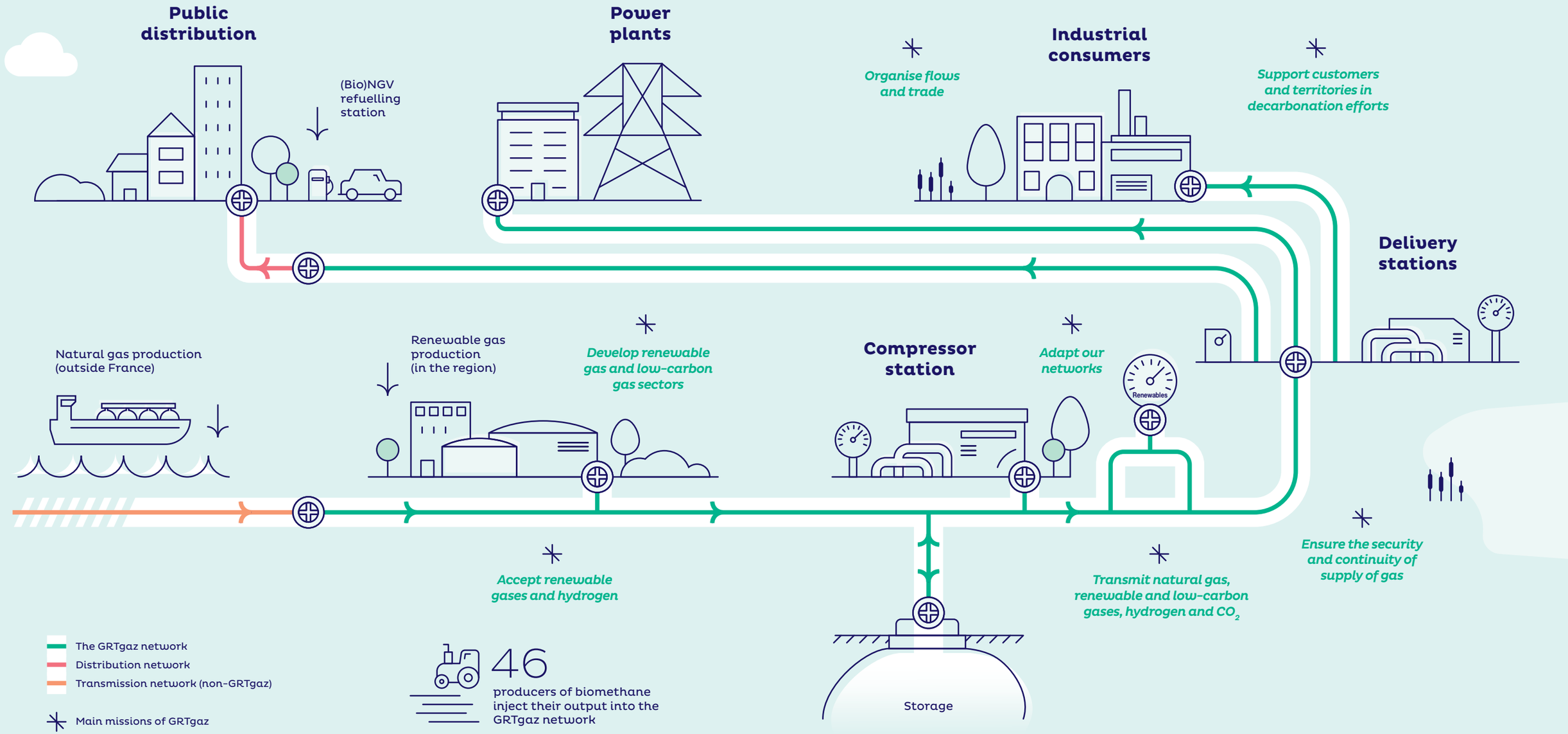
13 December 2021: Webinar on the decarbonation of the industry using gas and renewable gases, for our gas supplier customers and all other specifiers (associations, design offices, consultants).

INVESTMENT OF 100 MILLION EUROS IN THE CLEAN H_2 INFRA FUND BY THREE EUROPEAN GAS TSOs, ENAGÁS, SNAM and GRTgaz

16 December 2021: Three European gas TSOs, GRTgaz (France), Enagás (Spain) and Snam (Italy) invest 100 million euros in the Clean H_2 Infra impact fund, the aim of which is to support the development of the zero-carbon hydrogen infrastructure sector. With total investment amounting to between 1,500 and 1,800 million euros in partnership with industrial and financial investors, this is the largest investment platform in the zero-carbon hydrogen infrastructure sector. The three TSOs also joined the *European Hydrogen Backbone* project. This project presents a hydrogen pipeline network spanning almost 40,000 km by 2040, linking 19 Member States of the EU with the UK and Switzerland.

1.2/ GRTgaz in the value chain SNFP

REGULATED ACTIVITY WITH PUBLIC SERVICE MISSION



Our value generation model

OUR RESOURCES

HUMAN CAPITAL
3,390 employees
263 apprentices

FINANCIAL CAPITAL
- Reference shareholders (ENGIE, Caisse des Dépôts)

€8,563 M of capital
€3,998 M of debt

INDUSTRIAL CAPITAL
32,530 km of pipelines
26 compressor stations
11,320 isolation and delivery stations
€149 M OPEX on maintenance and development

INTELLECTUAL CAPITAL
97 research staff
€30.2 M invested in R&D
26 start-ups supported
- *Research & Innovation Center for Energy*

ENVIRONMENTAL CAPITAL
6,000 km of pipelines in protected natural spaces
1,315 GWh primary energy consumption
- Climate strategy in line with Paris Agreement (Net Ze ro initiative)
- Member of Act4nature France

SOCIETAL CAPITAL
€542 M purchases in France
91 partnerships associated with the ET

OUR ACTIVITIES SERVING OUR PUBLIC SERVICE MISSIONS AND OUR CORPORATE PURPOSE

- Transport gas, contribute to the safety and performance of the energy system
- Contribute to the aim of carbon neutrality for GRTgaz and the gas chain, by adapting our network and allowing access to renewable gases and hydrogen
- Support the development of renewable gas sectors and the decarbonation of our customers and regions

TRENDS AND CHALLENGES

- **Decarbonation of energy and its uses**
- **Performance and resilience of the energy system**
- **Lower consumption and sobriety**
- **Decentralisation and new cooperative projects**
- **Availability of resources**
- **Social acceptability of projects**

OUR CORPORATE PURPOSE

"Together, enable a secure, affordable energy future that is climate-neutral"
CAP24

OUR STRATEGY TO ACCELERATE OUR TRANSITIONS

- Roll out natural gas replacements
- Reinvent our business activities and our practices
- Diversify our activities
- A corporate transformation project
CAP24

CSR FOCUSED ON THE IMPLEMENTATION OF OUR CORPORATE PURPOSE

- Support affordable net zero carbon
- By rising to the challenge of the environmental transition with our employees and stakeholders
- While conducting our business responsibly

VALUE GENERATED (2021) AND CONTRIBUTION TO SDGS

HUMAN CAPITAL
2.5 FR for employees
9.4 FR for service providers
74% Employee commitment rate
≥ 94 Gender equality index
72 QLW perception index

FINANCIAL CAPITAL
€1,846 M in revenue
€1,099 M EBITDA
€335 M in net income
€330 M in dividends
€457 M total investment
€73 M committed to the Eiffel Fund and Clean H_2

INDUSTRIAL CAPITAL
€152 M of CAPEX dedicated to the corporate purpose
93.70% Customer satisfaction level
5 partnerships with customers on decarbonation projects
630.3 TWh of gas transmitted
6.4 TWh/year production capacity of renewable gases
46 producers of biomethane inject their output into the GRTgaz network
5 distribution - transmission reverse flows in service
0.08% security of supply index

INTELLECTUAL CAPITAL
77 patent categories
350 industrial property rights covering thirty or so countries
79.60% of employees trained
2 pilot projects and demonstrators for tangible support to the emergence of new gases in regions

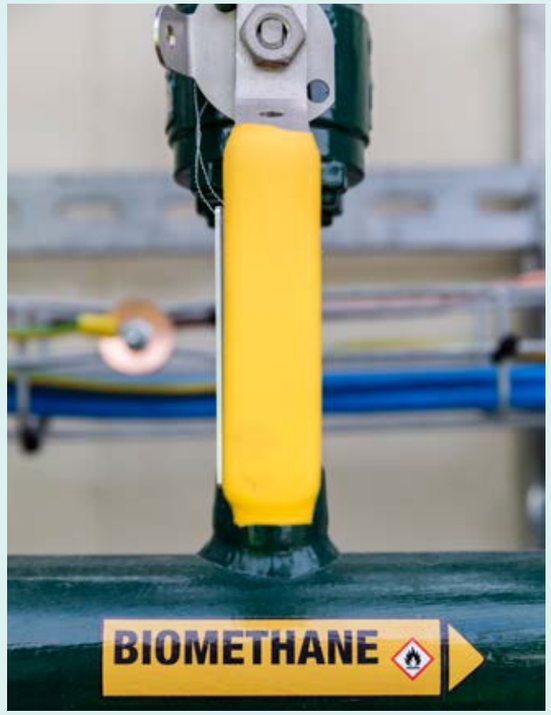
ENVIRONMENTAL CAPITAL
54% of sites converted to zero pesticides
98.30% of waste recovered
30.5% drop in our carbon footprint – manageable scopes (in relation to 2019)

SOCIETAL CAPITAL
€184 M in taxes and duties
57% of French SME amongst suppliers
258 partnerships, memberships and sponsorships, representing a total amount of €3.2 M
91% of decision-makers regard GRTgaz as useful

1.3/ Challenges creating risks and opportunities for tomorrow SNFP

— In 2020, GRTgaz worked with its internal and external stakeholders to review its materiality analysis and non-financial risk assessment. The aim was to identify and prioritise its challenges involving social, societal and environmental risks.
The risk identification method was based on a robust analysis, integrating the GRTgaz risk map and its corporate purpose.

The internal stakeholders interviewed spoke about the level of financial risk, security of supply, reputation and regulatory compliance that poor handling of the subject could cause GRTgaz. External stakeholders reported on the potential impact that poor handling of the subject by GRTgaz could have on their own organisation. Around fifty stakeholders were interviewed.



— The results appear in the materiality and risks chart, showing the 13 main non-financial risks. GRTgaz sees four CSR issues as opportunities. They are: environmental protection and biodiversity, attractiveness and skills development, diversity and shared value. These thirteen risk-bearing issues and four issues with opportunities are covered in the 2021 statement of non-financial performance included in this report.

INTEGRATED REPORT 2021 COMMITMENT

Description of risks

Risks / Opportunities	CSR risks	CSR commitment	Policies / Principal resources implemented	For more details
R: Carbon footprint	→ Non-alignment with the Paris Agreement and the national low-carbon strategy → Methane emission leaks on the network and compressor stations	No.1: Reduce our carbon footprint	→ Low-carbon strategy compatible with Paris Agreement and the national low-carbon strategy → Energy policy	See section 4.2.1 Reduce our carbon footprint See sub-chapter 2.5 Our climate strategy
R: Energy transition	→ Insufficient development of renewable gas activities (biomethane, hydrogen, syngas / low-carbon gas, NGV) to cope with demand and expectations → New law / regulation unfavourable to natural gas or renewable gases (including syngas / low-carbon gas) → Insufficient financial support to develop new activities → Lack of competitiveness of new gases → Failure to recognise CO_2 gains made by renewable gases in current policies → Failure to compensate the lost revenue due to lower gas transportation activity by opportunities created by the energy transition	No.2: Speed up the energy transition by developing green gases	→ Renewable gases programme (biomethane, hydrogen, pyrogasification, hydrothermal gasification, etc.) → Create / participate in work groups representing renewable gas sectors	See section 4.2.2 Reduce our carbon footprint See sub-chapter 2.5 Our climate strategy
R: Affordable energy	→ Overinvestment in terms of price objectives → Non-observance of price objectives → No contribution to the competitiveness of the biomethane sector → Insufficient resources to be a renewable gas player	No.3: Enable access to affordable and sustainable energy	→ "ATRT7" tariff for using the natural gas transmission network → Investment and cost control → Performance plan (2021-2024)	See section 4.2.3 Enable access to affordable and sustainable energy
R: Sustainable growth and resilience	→ Insufficient resilience of company's business model in light of CSR risks → Insufficient planning of targeted investment to succeed in the company transformation (renewable gases and compliance with carbon objectives) → Insufficient capacity to innovate in response to the company's challenges → Insufficient diversification	No.4: Grow sustainably	→ 3-year investment programme → R&D innovation → Performance plan (2021-2024)	See section 4.2.4 Grow sustainably
O: Attractiveness and skills development	→ Employee disengagement → Skills unsuited to the transformation of the Group	No.5: Encourage the development of skills, diversity and quality of life at work for our employees	→ Human aspects of CAP24 corporate culture: development of feedback, skills vision, managerial communities, experiments → LMS platform (Learning Management system) → Work/study programme → Employee engagement survey	See section 4.3.1 Encourage the development of skills, diversity and quality of life at work for our employees
R: Health, safety, and well-being at work	→ Insufficient quality of life at work → Inadequate labour relations		→ Employee sounding (CAP24 human project): periodical surveys measuring quality of life at work, adoption of strategy → Implementation of agreement on new work patterns (rites/rituals, postures, right to disconnect, adaptation of workspaces, increase in telework up to three days a week) → Internal communication: introduction of discussions and dialogue for managers (regional meetings, Live Managers) and employees (Live)	
O: Diversity	→ Discriminatory practices		→ 2020-2023 professional gender equality agreements → Gender equality index → 2019-2021 agreement to encourage the integration and ensure equal professional career opportunities for people with disabilities → RQTH policy on recognition of workers with disabilities: Hagir mission	
R: Support for customers	→ Insufficient quality of service → Poor image of gas in decarbonation of uses by our customers	No.6: Support our customers in their energy requirements and converting their activities to net zero carbon	→ Customer attentiveness and annual customer satisfaction survey → Gas consultation → "Customer at heart" approach aiming to develop a customer-centric culture in employees → Roadmap to support customers in their decarbonation needs	See section 4.3.2 Support our customers in their energy requirements and converting their activities to net zero carbon
R: Support for regions	→ No acknowledgement of GRTgaz as a player in the energy transition → Inadequate support for projects to develop experiments in regions → Poor image of natural gas and renewable gases	No.7: Co-build sustainable energy solutions with local players	→ Inter-department regional strategic plans to develop renewable gas projects in regions and boost the acceptability of GRTgaz activities over time	See section 4.3.3 Co-build sustainable energy solutions with local players
R: Reputation and communication	→ Inappropriate communication on the assets and externalities of renewable gases for institutional decision-makers → Hyped statements by detractors of the sector → Poor image of natural gas		→ Roadmap for communication on renewable gases → Communications campaign in favour of renewable gases → Media policy on press relations, social media, digital communications	

INTEGRATED REPORT 2021 COMMITMENT

Risks / Opportunities	CSR risks	CSR commitment	Policies / Principal resources implemented	For more details
R: Health and safety at work	→ Serious and fatal accident involving an employee or service provider	No.8: Ensure the safety of people and infrastructures, and the continuity of our services	→ Policy: "Our collective safety and industrial safety ambitions" → Safety inspection system (safety walkarounds and safety inspections) → Shared safety challenge to promote departments that are involved in risk prevention and control throughout the year → Awards ceremony to reward GRTgaz service providers whose safety performance on GRTgaz projects were remarkable	See section 4.4.1 Ensure the safety of people and infrastructures, and the continuity of our services
R: Network safety	→ Industrial accident → Incidents relating to work by third parties near to GRTgaz network → Incidents relating to lack of inspections and maintenance of network → Harm caused to health and safety of stakeholders (local residents, public works contractors)		→ Prevention, maintenance and monitoring policy under the Multi-fluid Order (governing the integrity of gas transmission pipelines) → 2017-2026 ten-year inspection programme for all structures → R&D work on techniques enabling the optimisation of GRTgaz maintenance activities (detection, analysis and repair of defects detected on pipelines), in particular in cluttered subsoils → Single online portal containing TSO data provided to receive work requests from all those planning such work *via* a declaration of intent to start work (DICT form) and inform GRTgaz to set an appointment for contractors to precisely set the boundaries of the GRTgaz pipelines and provide mandatory safety instructions.	
R: IT system security	→ Risk of cyber attack		→ Security management system (ISO 2700x) → IT system security policy	
R: Risk management and security of supply	→ Loss of security of supply to our customers → Non-suitability of infrastructures given the climate risks (heat waves, floods, etc.)		→ Security of supply policy and action plan	
R: Business ethics and compliance	→ Refrain from acting independently in relation to ENGIE production and supply activities (compliance with Third directive) → Failure to provide transparency of conditions of access to the transmission network → Discriminatory application of the rules of access to the transmission network → Failure to preserve the confidential nature of commercially sensitive information → Conflicts of interest → Corruption → Supplier practices in contravention of GRTgaz ethics charter → All forms of discrimination and harassment → Fraud → Disclosure of any confidential information	No.9: Conduct our business with suitable ethics and compliance	→ Code of good conduct → GRTgaz ethics charter → Supplier ethics charter and due diligence procedure for suppliers most at risk of contravening human rights, health & safety and environmental protection requirements	See sub-chapter 3.4 The ethics and independence system
O: Environmental protection and biodiversity	→ Pressure on biodiversity resulting from our activities → Lack of consistency with our commitments to combating climate change → Failure to apply the regulations concerning waste sorting by type	No.10: Protect the environment (excluding carbon) and biodiversity from the impacts of our activities	→ Business committed to nature via Act4nature France → Partnerships with Regional Natural Parks → Progressive conversion of delivery or isolation stations to zero pesticides → Experimental maintenance of easements to respect the green and blue grids → Construction site and job site waste management procedures	See section 4.4.2 Protect the environment (excluding carbon) and biodiversity from the impacts of our activities
R: Integration and acceptability of infrastructures	→ Impacts of works and facilities on agriculture, the environment, urban development, etc. → Legal opposition to projects due to the poor image of natural gas		→ Structured process to manage impacts and stakeholder relationships implemented for each construction project → Implementation of compensatory measures	

1.4/ Dialogue with our stakeholders SNFP

— In the spirit of SDG 17, at the centre of its corporate purpose and pillar 5 of its manifesto, GRTgaz puts dialogue, attentiveness to stakeholders and cooperation first to make a collective contribution to the deployment of a safe and affordable energy system that is climate-neutral. This is also done to respond to the expectations and the positive and negative impacts of our activities on our seven categories of key stakeholders. The map below provides an overview.

Employees

- 3,390 employees
- Trade unions and staff representative bodies

Challenges for GRTgaz

- Drive our employees to carry out our missions with excellence and make our transformation successful to serve our corporate purpose

Dialogue arrangements

- Permanent dialogue between managers and employees, annual appraisals
- Regular social dialogue with trade unions and staff representative bodies
- Regular surveys (employee satisfaction survey, diversity survey, etc.)

Expectations vis-à-vis GRTgaz

- Improved quality of life at work
- Shared values and explanations of company strategy
- Protection against discriminations
- Develop employability
- Suitable acknowledgement of employee commitment

GRTgaz responses to expectations in 2021

- CAP24 Human project and agreement on new work patterns
- Allodiscrim, AlloSexism, PsyFrance hotlines
- 3-year collective agreements on equality and disabilities
- Signature of the L'Autre Cercle LGBT charter
- Introduction of a digital training platform
- Strategic seminar with staff representative bodies

Contribution to GRTgaz CSR commitments

- All commitments

Shareholders

- ENGIE – 60.8% stake
- Société des Infrastructures gazières (SIG) – 38.6% stake
- Employees – 0.5% stake

Challenges for GRTgaz

- Support GRTgaz commitments and actions in long-term efforts to deploy its corporate purpose and its transformation strategy
- Finance the growth and diversification of the company

Dialogue arrangements

- Board meetings and its committees
- Annual strategy seminar
- One-off meetings with department heads on strategic topics

Expectations vis-à-vis GRTgaz

- Achieve financial objectives and follow price trajectory
- Create value over the long term
- Ensure alignment with Paris Agreement
- Honour commitments to public service missions
- Propose priority development areas in line with the corporate purpose
- Be exemplary in terms of protecting the environment

GRTgaz responses to expectations in 2021

- Adoption of our corporate purpose and our CAP24 transformation project
- New 2021-2024 CSR policy
- Overall company performance on our financial and non-financial objectives

Contribution to GRTgaz CSR commitments

- All commitments

Customers

- Shippers
- Biomethane producers
- Industrial consumers
- Distribution network operators

Challenges for GRTgaz

- Secure customer loyalty and infrastructure use
- Build a carbon-neutral future alongside our customers with renewable gas and hydrogen solutions
- Develop new uses of gas and hydrogen

DIALOGUE arrangements

- Customer dialogue mechanisms
- Commercial information systems
- Gas consultation mechanism
- Trade events
- Customer satisfaction measurement mechanism

Expectations vis-à-vis GRTgaz

- Ensure the security of supply and facilities
- Be competitive in service offerings
- Support and facilitate customer efforts towards the energy transition and decarbonation
- Observe the code of good conduct

GRTgaz responses to expectations in 2021

- 93.7% of customers satisfied
- 46 biomethane injection points and 5 reverse flows
- 5 emblematic partnerships working on decarbonation
- Support for development of new uses for gas, especially mobility

Contribution to GRTgaz CSR commitments

- Commitment 2: Speed up the energy transition by developing green gases
- Commitment 3: Enable access to affordable and sustainable energy
- Commitment 6: Support our customers in their energy requirements and converting their activities to net zero carbon

European and national regulators and authorities

- French Energy Regulation Commission (CRE)
- European Commission
- State Agencies
- DGEC (Directorate-General for Energy and the Climate)
- DGPR (Directorate General for Risk Prevention)

Challenges for GRTgaz

- Ensure the independence of GRTgaz
- Define the adequate permitted revenue
- Identify the conditions enabling growth for GRTgaz
- Ensure proper execution of public service missions
- Secure the place of gas and the role of GRTgaz in the energy transition

DIALOGUE arrangements

- Participation in national and European think tanks on the energy system
- CRE: 4-yearly negotiations on tariffs, proposals of investment plans, etc.
- Meetings with DGEC on public service contract

Expectations vis-à-vis GRTgaz

- Contribute to energy security
- Reduce its greenhouse gas emissions
- Be exemplary in terms of industrial safety and impacts of our activities
- Support the vision for renewable gases and support their development
- Respect GRT* rules

GRTgaz responses to expectations in 2021

- Observe the code of good conduct
- Investment programmes
- Contribute to demand / production forecasts for green gases and gas / electricity couplings
- Support pilot projects to develop renewable gases
- Overall company performance

Contribution to GRTgaz CSR commitments

- Commitment 1: Reduce our carbon footprint
- Commitment 2: Speed up the energy transition by developing green gases
- Commitment 3: Enable access to affordable and sustainable energy
- Commitment 8: Ensure the safety of people and infrastructures, and the continuity of our services
- Commitment 9: Conduct our business with suitable ethics and independence
- Commitment 10: Protect the environment

* Transmission network operators

Elected officials, local authorities and delegated organisations

- Parliament
- Regional authorities
- Large urban agglomerations
- Public establishments
- Energy associations
- Regional competitiveness clusters, regional agencies, etc.

Challenges for GRTgaz

- Develop partnerships with regional players to co-build future solutions (renewable gases)
- Be recognized as a player and partner in the energy transition for regions
- Secure support for projects to develop experiments in regions

DIALOGUE arrangements

- Regular annual meetings with targeted executives and elected officials
- Active participation in board meetings and work groups
- Active contribution to bodies responsible for planning energy strategies
- Organisation of presentations and/or visits of our teams, our projects and our facilities

Expectations vis-à-vis GRTgaz

- Contribute GRTgaz expertise to develop local public policies in terms of energy transition and mobility
- Exhibit proof of the relevance of gas solutions in regional transition programmes
- Access *open data* on energy and mobility

GRTgaz responses to expectations in 2021

- Local delegations on hand to understand the environmental and social issues of regions, participate in and lead think tanks
- Two pilot projects to confirm the emergence of new gases in our regions: the mosaHYc* hydrogen project and the La Carene** project with hydrogen gas blends.
- 91% of decision-makers consider that GRTgaz is useful for the energy transition

Contribution to GRTgaz CSR commitments

- Commitment 2: Speed up the energy transition by developing green gases
- Commitment 7: Co-build sustainable energy solutions with local players

* mosaHYc: repurposing of pipelines to carry hydrogen between France, Germany and Luxembourg.
**La Carene: Hydrothermal gasification demonstrator project undertaken with Association of Saint Nazaire local communities.

Suppliers

- Engineering and maintenance suppliers – 46.6%
- Energy suppliers – 21.7%
- IT suppliers – 19.7%
- Other suppliers – 12%

Challenges for GRTgaz

- Develop a sustainable and ethical relationship with responsible suppliers
- Guarantee a balance between a quality relationship and suitable price
- Develop innovative solutions in the fields of energy transition and safety
- Contribute to local economic development

DIALOGUE arrangements

- Supplier satisfaction survey, carried out every two years
- Annual meetings with Top 100 suppliers
- Awards ceremony for safety performance organised with OPPBTP, the French agency for risk prevention in the construction industry
- Richelieu Committee and SME

Expectations vis-à-vis GRTgaz

- Develop a partnership approach in an open dialogue culture
- Ensure visibility on development perspectives for coming years
- Observe supplier payment periods

GRTgaz responses to expectations in 2021

- 77% supplier satisfaction
- 98.4% of supplies paid on time
- Total purchases 2021: €542 M
- Charter on responsible supplier relations
- Open Innovation: 7 new awards in 2021
- 57% of French SMEs amongst suppliers
- €1.5 M to the protected employment sector

Contribution to GRTgaz CSR commitments

- Commitment 1: Reduce our carbon footprint
- Commitment 3: Enable access to affordable and sustainable energy
- Commitment 4: Grow sustainably
- Commitment 8: Ensure the safety of people and infrastructures, and the continuity of our services
- Commitment 9: Conduct our business with suitable ethics and independence

Civil society

- NGO/Associations
- Higher education establishments involved in the energy transition

Challenges for GRTgaz

- Promote the role of gas in the energy transition
- Contribute to project acceptability
- Attract new talented individuals
- Create partnerships to implement our corporate purpose, our objectives, our business activities
- Generate positive impacts for society

DIALOGUE arrangements

- Regular annual meetings with targeted establishments and communities
- Organisation of events in higher education establishments and visits to projects and facilities
- Membership and participation in the work of multiple professional associations
- Deployment of partnership (FNE*, FPNRF**, Régions de France, Décider ensemble, etc.)

Expectations vis-à-vis GRTgaz

- Benefit from the expertise and commitment of GRTgaz departments
- Reduce environmental impacts and protect biodiversity
- Contribute to local social and economic development

GRTgaz responses to expectations in 2021

- Climate strategy
- 260 partnerships, memberships and sponsorships for an annual budget of €3.18 M (excluding RICE)
- Active participation in school training programmes
- Payment of apprenticeship tax to partner educational establishments
- Work/study programme rate 8.41%

Contribution to GRTgaz CSR commitments

- Commitment 1: Reduce our carbon footprint
- Commitment 2: Speed up the energy transition by developing green gases
- Commitment 5: Encourage the development of skills, diversity and quality of life at work for our employees
- Commitment 7: Co-build sustainable energy solutions with local players
- Commitment 10: Protect the environment

* FNE: France nature environnement.
** FPNRF: Federation of Regional Natural Parks of France

The stakeholder council (CPP)

— Introduced in 2016, the stakeholder council brings together eight people from a variety of backgrounds:

- **Gilles BŒUF,** Professor at Pierre-et-Marie-Curie University, member of the Scientific committee on natural heritage and biodiversity advising the French minister for Ecology, Sustainable Development and Energy
- **Claude CONRARD,** Director of public affairs France, Solvay
- **Olivier DAUGER,** Chair of France gaz renouvelables and Vice-president of FNSEA (French national federation of farming unions)
- **Paul DUPHIL,** General Secretary of OPPBTP, the French agency for risk prevention in the construction industry
- **Pascale HEBEL,** Director of the Consumer Department of CREDOC (Centre for research on the analysis and observation of living conditions)
- **Nicolas IMBERT,** Executive director of Green Cross France & Territoires
- **Bertrand PETIT,** President and founder of Innocherche
- **Blanche SEGRESTIN,** Chair of Business theory at Mines ParisTech
- **Jean-Arnold VINOIS,** advisor on European energy policy

— The CPP meets twice a year and meetings are attended by the CEO, the General Secretary and the CSR Director of GRTgaz. The viewpoints of the CPP supplement those of the internal instances and provide input for a different outlook from the perspective of civil society, expressing external opinions on the corporate purpose of the company and conditions of fulfilment of its societal responsibility. The stakeholder council was closely involved in the creation of the corporate purpose, the materiality analysis and the new CSR policy adopted by the company. In 2021, its work and discussion focused on the deployment of the CSR policy, the creation and content of this Integrated Report, as well as the possible developments of the role and place of the CPP in the spirit of the Pacte law and the mission committees.

Dialogue topics to make our corporate purpose possible

— GRTgaz is working on dialogue and partnerships to "render possible" the tangible expression of its corporate purpose based on three primary challenges: the safety and performance of the energy system, the development of renewable gases, and decarbonation / biodiversity.

SAFETY AND PERFORMANCE OF THE ENERGY SYSTEM

Topic	Key stakeholders
Defend a balanced energy mix	EU Commission, public authorities, RTE, NegaWatt
Role of methane and hydrogen networks in safe and competitive access to gas energy	ENTSOG, GIE, AFG, CSF NSE (strategic sectoral committee on new energy systems)
Foresee the energy future (ten-year development plan, Gas outlook, etc.)	Public authorities, CRE, GRDF, public consultations
Gas market design (acting as a "control tower")	EU Commission, ENTSOG, GIE, *Hydrogen Europe*, *Gas for Climate*, Eurogas, FSR

OUR CORPORATE PURPOSE

"Together, enable a secure, affordable energy future that is climate-neutral"

DEVELOPMENT OF RENEWABLE GASES AND LOW-CARBON GASES

Topic	Key stakeholders
Integration of renewable gases (network access)	Public authorities, France gaz renouvelables, renewable energy associations, France Hydrogène, biomethane & hydrogen producers
Advocate the potential of renewable gases	Solagro, Ademe
Foster the creation of a favourable ecosystem	• Chambers of agriculture, PNR, NGO (FNE, Fabrique écologique, *Green Cross*) • ATEE • Cerema • Biomethane injection WG, H_2 injection WG
Promotion of ecosystem services for renewable gases (sustainability, externalities)	CSF NSE, FGR, SER, ATEE
Waste management: role of gas production	
Competitive decarbonation solutions	Members of pyrogasification and hydrothermal gasification WG

DECARBONATION AND ENVIRONMENT

Topic	Key stakeholders
Development of renewable gas uses by our customers:	Uniden, CSF NSE
• in industry	AFGNV, NGVA, local authorities
• in heavy-duty mobility	
Reduction of GRTgaz methane emissions	• *Gas Infrastructure Europe* (GIE) and Marcogaz • OGMP 2.0 (*Oil & Gas Methane Partnership*) • *The Methane Guiding Principles*
Decarbonation of GRTgaz energy uses	CRE, public authorities
Biodiversity	• Linear infrastructures and biodiversity club, Club B4B+ (*Business for Positive Biodiversity*) • French office for biodiversity, Federation of Regional Natural Parks of France, FNE

AFG: French gas association, AFGNV: French NGV association, ATEE: Technical association on energy and environment, CSF NSE: strategic sectoral committee on new energy systems, CRE: Energy Regulation Commission, ENTSOG: European Network of Transmission System Operators for Gas, FGR: France gaz renouvelables, FNE: France nature environnement, GIE: economic interest grouping, PNR: Regional national park, SER: Renewable energies association, FSR: *Florence School of Regulation*.

Speed up our transformation towards carbon neutrality: our integrated strategy

AN INTEGRATED STRATEGY TO SPEED UP OUR TRANSFORMATION TO SERVE CARBON-NEUTRALITY

Given the trends touching the gas industry, the GRTgaz response is to speed up its transformation and its development, principally in favour of zero-carbon gases and new gas uses such as mobility. Our CAP24 corporate culture is aligned with our CSR policy and bodes well for the coming transformations to serve a fully renewable, low-carbon gas mix by 2050.

2.1/ Identify and respond to TSO trends SNFP

GRTgaz has identified six macro-trends that have an influence on its activities. Because they are interdependent, GRTgaz responds to these six challenges globally through its transformation strategy, its CSR policy, its dialogue with stakeholders and its business model. In this way, each trend is also a source of opportunities and GRTgaz is adapting to deliver sustainable solutions to society's challenges underpinning these macro-trends.

132 TWh
Storage capacity of gas infrastructures in France

+160 GW
Power of gas transmission network

Safety, performance and resilience of the energy system

OPPORTUNITIES

- → Power and storage capacity of gas network
- → Adaptability of infrastructures to accept renewable and low-carbon gases
- → Energy continuity and complementarity in response to the intermittent nature of renewable energies

RISKS

- → Inadequate place of renewable and low-carbon gases in public policies
- → Insufficient pace of growth in renewable gases in relation to climate emergency

2030
−55%
in CO_2 emissions in relation to 1990

Decarbonation of energy

OPPORTUNITIES

- → Deployment of renewable gases, low-carbon gases and hydrogen in industry, mobility and buildings
- → Development of a European hydrogen infrastructure
- → Innovation and R&D
- → Diversification
- → Gas storage capacity (intermittent nature of renewable energies)
- → New industrial sectors

RISKS

- → Under-estimate the relevance of renewable gas solutions in complement to electricity
- → Insufficient pace of adapting skills and technologies
- → Insufficient supply of renewable gases in terms of demand and expectations for acceleration
- → Excessively high renewable gas prices

Sources: MTES, European Green Deal (2021) presented by the European Commission, 2020 Multi-year energy programme, IFOP study for renewable energies association SER in October 2021, 2019 Multi-year energy programme, France Stratégie.

Lower consumption and sobriety

OPPORTUNITIES

- → Reduction of impacts associated with energy
- → Diversification and innovation requirements
- → Positive externalities of renewable gases: local employment, agro-ecosystem, waste management, circular economy, etc.
- → Development of clean mobility via bio(NGV) and hydrogen

RISKS

- → Drop in income on regulated portion
- → Sustainability of prices
- → Failure of renewable gases to be competitive

2030
−20%
in natural gas consumption in relation to 2012

87%
of French people consider it useful to develop renewable energies to combat climate change

Social acceptability

OPPORTUNITIES

- → Positive externalities of renewable gases (clean mobility, circular economy, energy efficiency, local employment, etc.)
- → Develop quality labels and sustainability certification
- → Develop stakeholder dialogue on issues surrounding development, integration and environmental protection

RISKS

- → Sustainably high energy prices
- → Legal opposition to projects
- → Rejection of renewable energies by society

2030
40%
decentralised renewable energies

New cooperation methods

OPPORTUNITIES

- → The network, a source of energy solidarity between regions
- → Digital technology, *Smart Grid*, data needs
- → Support for sectors and regions in decarbonation efforts and new business models
- → Partnerships in academia, R&D, energy transition, etc.

RISKS

- → Time to market
- → Inconsistency between national policies and local visions

2030
160-180 TWh
biomass potential for biomethane production

Availability of resources

OPPORTUNITIES

- → Support for sustainability of new multi-player, multi-profit sectors
- → Development of new destinations for waste and circular economy loops
- → Technical and usable potential of inputs consistent with forward-looking supply and demand scenarios

RISKS

- → Control over impacts of our land occupation
- → Growing regulatory requirements
- → Occasional competition on inputs and unfavourable prioritisation of renewable gases

2.2/ From the development of renewable gas and hydrogen sectors to carbon neutrality: our prospective vision for the future

— France has committed to the path to becoming carbon-neutral by 2050. By developing renewable gas activities (anaerobic digestion, pyrogasification, hydrothermal gasification, Power to Gas and methanation) and hydrogen, GRTgaz is on course to achieve this objective. With a stated objective in the Energy code of 10% of renewable gases consumed in France in 2030, the mature and frequently used technology of anaerobic digestion will be a key driver in helping the French economy achieve net zero carbon by 2030. The initial industrial production from new technologies (pyrogasification, hydrothermal gasification, methanation) are expected by 2030. Under the current proactive political efforts, hydrogen use will soar before the end of the century, contrary to previous forward-looking visions which imagined it would emerge later. These different forms of methane and renewable, low-carbon hydrogen production are firm features of the environmental transition and the circular economy initiatives seen across regions.

Renewable gases: forward-looking solutions for our regions

Hydrothermal gasification

Hydrothermal gasification makes it possible to treat wet biomass waste and residues such as wastewater treatment plant sludge, effluents from industrial activities (paper mill, food processing, etc.), livestock waste or digestate from anaerobic digestion. It consists of heating the wet biomass at high pressure (250 to 300 bar) 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.

Renewable and/or low-carbon hydrogen and methanation

Today, several technologies are under study:

- Water electrolysis using renewable and decarbonised electricity: **Power to Gas**.
- Biogas steam reforming.
- CO_2 capture and storage technologies, hydrogen production using natural gas steam reforming.
- Pyrogasification, which generates a mixture of methane and hydrogen. **Methanation** can be used to combine CO_2 and H_2 to produce synthetic methane which can be injected into networks.

Anaerobic digestion

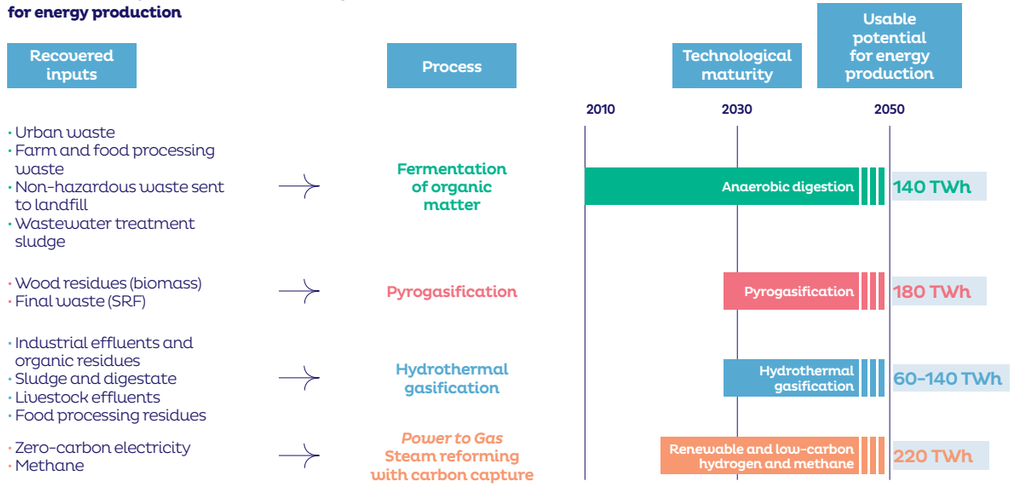
Anaerobic digestion enables organic materials such as livestock waste, green waste, crop residues or household biowaste to be recovered. It consists of the decay of organic matter in the absence of oxygen. This process produces a renewable gas, biogas, which can be purified into biomethane and injected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

Pyrogasification

Pyrogasification makes it possible to treat currently unrecovered or under-recovered solid waste, such as plastics, used wood, tyres or solid recovered fuels. It consists of heating this waste to very high temperatures (between 800 and 1,500°C), with little oxygen and without combustion, to break down the material into different gas molecules.

Renewable gases

Specific aspects of renewable and low-carbon gas sectors and comparison with their usable potential for energy production

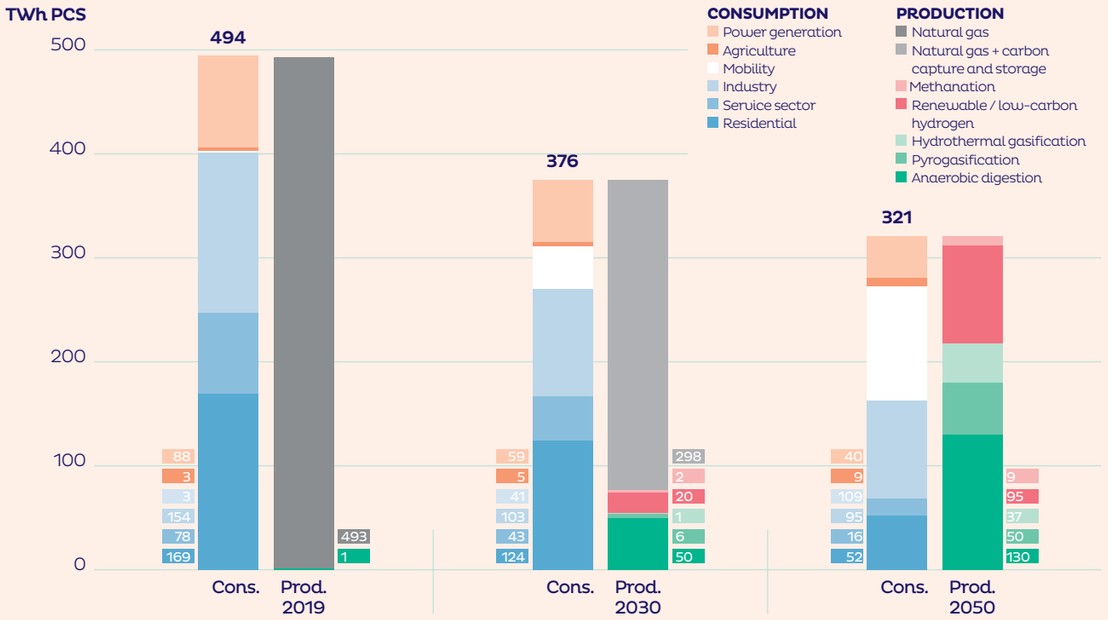


— In cooperation with other gas network operators, GRDF, Teréga and SPEGNN, GRTgaz has worked on three forward-looking scenarios of renewable and low-carbon gas production and consumption, presented in a publication from June 2021 and completed in late 2021 with a more detailed regional vision.

These three scenarios are compatible with achieving carbon-neutrality in France by 2050, i.e. by this time all gas consumed will be from a renewable or low-carbon source, in respect of available sources of biomass as confirmed by several recent studies (Solagro, France Stratégie, Ademe). GRTgaz has founded its forward-looking vision on the "Territories" scenario developed as a consolidation of objectives expressed by France's 12 metropolitan regions in the SRADDET5 document and as part of the national low-carbon strategy adopted in early 2022. It does not pre-judge the future contributions of operators in terms of revising the French climate-energy strategy, on which GRTgaz has committed to contributing.

Changes in gas consumption and supply in relation to 2019

RENEWABLE AND LOW-CARBON HYDROGEN AND METHANE



— In this forward-looking scenario, gas consumption will drop by 17% by 2030 under the combined effect of energy efficiency measures and transfers to other energies, thereby respecting the objective of the Multi-year energy programme, according to which the primary consumption of fossil-derived methane must drop by 22% by 2028 in relation to 2012 levels.

In the construction sector, the widespread adoption of very energy-efficient systems, compliance with retrofit objectives set by the national low-carbon strategy and the development of hybrid heat pump systems will result in a 31% fall in consumption.

In the industry sector, gas consumption will fall by 11% between 2019 and 2030, a consequence of improvements in energy efficiency and also electrification. A part of methane consumption (15 TWh) is replaced by renewable, low-carbon hydrogen.

In the mobility sector, gas use will develop notably for heavy-duty applications, as it will represent over 60% of market share in 2030 (NGV/(bio)NGV and hydrogen).

In terms of gas supply and demand, the Territories scenario materialises an acceleration of the momentum for renewable gases confirmed across all production sectors. Concerning anaerobic digestion, local public consultations and the zoning procedure confirm the consistency of the potential identified in the Ademe study "100% renewable gas mix in 2050." The creation of a financing mechanism by the French Climate and Resilience Law to supplement purchase tariffs and the implementation of quality labels across the sector support this acceleration. For other renewable and low-carbon gas production technologies, numerous industrial demonstrators (for pyrogasification, hydrogen, methanation, etc.) are currently under development with high potential for replication elsewhere. The studies also show high levels of potentially usable inputs which significantly exceed needs for forecast methane consumption at this time, given the efforts in terms of energy sobriety and efficiency, enabling a secure and resilient response. A national hydrogen strategy is under development with network operators in parallel working on adapting their infrastructures to a future involving 100% renewable gases in 2050.

↗ IN MOTION

2030
17% DROP IN GAS CONSUMPTION

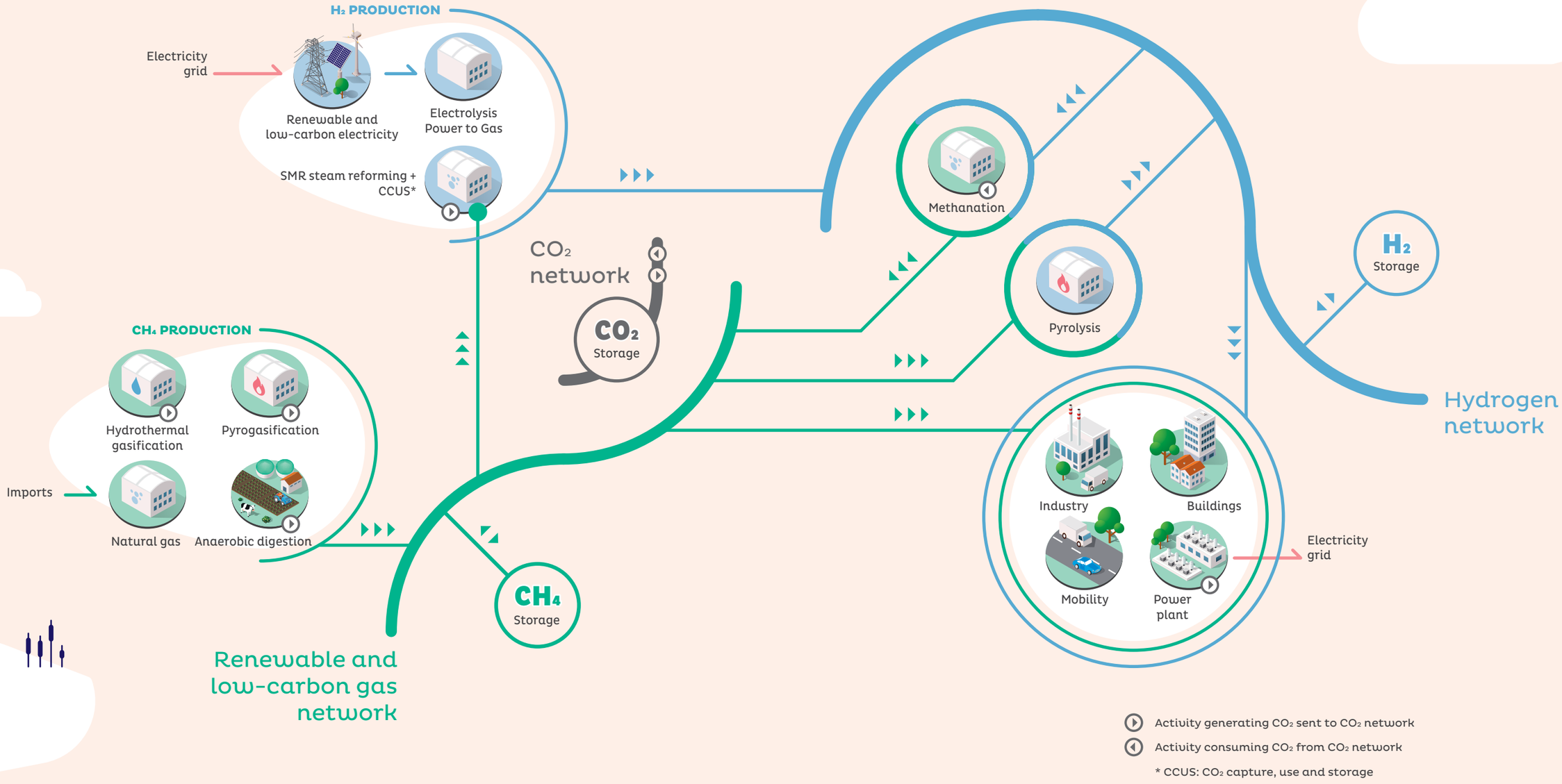
→ Two main reasons:
- Increasing importance of other energies (notably renewables)
- Advances in energy efficiency

→ Sectors affected:
-31% in construction and
-11% in industry

→ Strong increase in demand for heavy-duty mobility: 60% of market share for gas

"The Territories scenario materialises an acceleration of the momentum for renewable gases confirmed across all production sectors"

Our vision of gas infrastructures by 2050

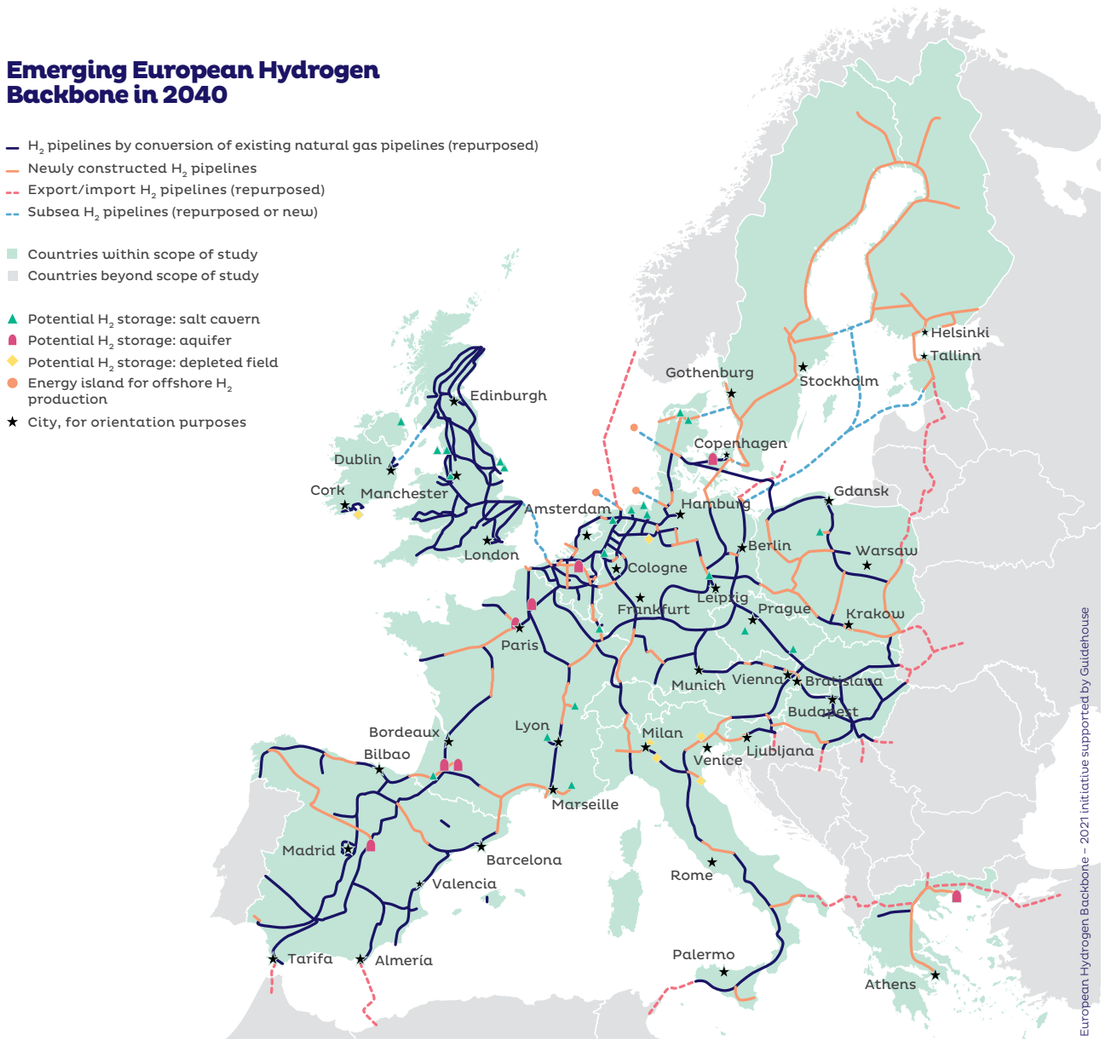


— This vision of 100% renewable gases by 2050 is dependent on changes to the transmission network, which will become a network only transmitting renewable gases or low-carbon gases, and capable of connecting multiple production and consumption points with storage locations.

It is also a network that is developing its complementary aspects with other networks. The development of hydrogen from renewable or low-carbon electricity provides a means of storing this electricity.

Lastly, it is a network partly repurposed into a transmission network for renewable or low-carbon hydrogen. GRTgaz and 22 other European TSOs have developed a shared vision of a 40,000 km hydrogen backbone network by 2040, of which 70% depends on repurposed current gas networks: the European Hydrogen Backbone. Moreover, a study conducted for the strategic sectoral committee on new energy systems under the auspices of the Minster for Industry, has demonstrated the relevance of developing such infrastructures (CSF NSE Guidehouse study). By scaling-up production capacities, the deployment of hydrogen infrastructures between industrial catchment areas could reduce the cost of the renewable, low-carbon hydrogen supplied by 10% by 2030, in relation to a scenario without hydrogen infrastructures.

Emerging European Hydrogen Backbone in 2040



European Hydrogen Backbone – 2021 initiative supported by Guidehouse

2.3/ Our transformation strategy: CAP24

— Given the trends touching the gas industry and as part of the forward-looking vision developed earlier, our strategic response is to speed up our development, principally in favour of zero-carbon gases and new gas uses such as mobility. Natural gas has a vocation as a transition energy, to be gradually replaced by renewable gases and hydrogen as part of a trajectory for contributing to carbon neutrality by 2050, in accordance with the Paris Agreement.

The redefinition of our business activities and our practices, cost control and the integration of new skills are the watchwords for the coming transformations, in order to meet the long-term challenges and ensure the sustainability of the gas system, serving the energy transition and the security of supply of renewable and low-carbon energies to the regions and to customers.

Our new CAP24 strategic project forms part of this process. For our employees, it transposes our strategic objectives for speeding up our transitions during the 2021-2024 period into a human project and two goals: to roll out natural gas replacements (the 'what'); and to reinvent our business activities and our practices (the 'how'). Seven strategic objectives that are emblematic of this transformation stem from this, which are highly integrated with our CSR policy.

Speeding up our transitions

A HUMAN PROJECT

OUR MOBILISATION SERVING THE COMPANY'S TRANSFORMATION

→ Unleash initiative, facilitate innovation, allow experimentation and the right to make mistakes and learn from one another

→ Maintain and develop our technical and behavioural skills

→ Define together the many future ways of working, both remotely and on site: Multiplex approach

TWO GOALS (seven strategic objectives)

1 ROLL OUT NATURAL GAS REPLACEMENTS

Secure customer loyalty and develop new gas uses

Build a carbon-neutral future alongside our customers, prospects, regions and partners with gas solutions

Speed up the development of renewable gas activities (see 4.3.2)

Broaden the scope of GRTgaz's activities and find sources of growth

2 REINVENT OUR BUSINESS ACTIVITIES AND OUR PRACTICES

Supply more renewable gases at lower cost and prepare for the arrival of hydrogen

Significantly reduce our carbon footprint

Reduce our costs for meeting our objectives and stay on the price trajectory

A HUMAN PROJECT

To create a favourable context for these transformations so that we can adapt, we need the commitment of our employees to innovate and invent new ways of working, and more modern, agile and collaborative management methods. We need to build a new performance and the GRTgaz of tomorrow.

FIRST GOAL: ROLL OUT NATURAL GAS REPLACEMENTS

This goal is based on speeding up the development of renewable gases and new uses of natural gas, and on opening up new fields of activity, including in the unregulated market (e.g. hydrogen transmission).

SECOND GOAL: REINVENT OUR BUSINESS ACTIVITIES AND OUR PRACTICES

This goal signals the scale of the transformations to be undertaken: the need to question and innovate in our business activities, practices and operating modes to enable the company to keep increasing the renewable gases it supplies and to keep reducing its carbon emissions, while we continue to perform our public service roles and maintain the competitiveness of our services and prices in a context of diminishing gas consumption.

"The CAP24 project bodes well for future transformations supporting a 100% carbon-neutral gas mix in 2050, mainly from renewable sources. At this point, GRTgaz is preparing a fundamentally different dual transmission network for significantly lower consumption volumes. All the gas transported will be of renewable or low-carbon origin, and a portion of the current pipelines will have been converted specifically for hydrogen."

— THIERRY TROUVÉ
CHIEF EXECUTIVE OFFICER OF GRTgaz

2.4/ Align CSR and transformation to serve the energy transition SNFP

— GRTgaz's new corporate social responsibility policy for 2021-2024 and its action plan were based on the **13 risk issues** and **4 opportunities** identified in the GRTgaz materiality/non-financial risk matrix. These risks were transposed into three focus areas and ten commitments in the CSR policy: ***support affordable net zero carbon (A) and rise to the challenge of the environmental transition with our employees and stakeholders (B), while conducting our business responsibly (C).*** Each commitment contributes to one or more sustainable development goals (SDGs); SDGs 7, 9, 13 and 17 in focus area A are the core business SDGs and the corporate purpose of GRTgaz.

A SUPPORT AFFORDABLE NET ZERO CARBON

Commitment 1:	Reduce our carbon footprint
Commitment 2:	Speed up the energy transition by developing green gases
Commitment 3:	Enable access to affordable and sustainable energy
Commitment 4:	Grow sustainably

B RISE TO THE CHALLENGE OF THE ENVIRONMENTAL TRANSITION WITH OUR EMPLOYEES AND STAKEHOLDERS

Commitment 5:	Encourage the development of skills, diversity and quality of life at work for our employees
Commitment 6:	Support our customers in their energy requirements and converting their activities to net zero carbon
Commitment 7:	Co-build sustainable energy solutions with local players

C CONDUCT OUR BUSINESS RESPONSIBLY

Commitment 8:	Ensure the safety of people and infrastructures, and the continuity of our services
Commitment 9:	Conduct our business with suitable ethics and compliance
Commitment 10:	Protect the environment (excluding carbon) and biodiversity from the impacts of our activities

The CSR policy and the CAP24 transformation project were developed at the same time. The dovetailing of a large number of the CAP24 and CSR policy objectives is evidence of our integrated management approach.

Chapter 4 reports on the first year of implementation of this new integrated CSR policy.

2.5/ Our climate strategy SNFP

— GRTgaz's climate strategy lies at the heart of its corporate purpose and its CSR policy. It has been transposed directly or indirectly into seven CSR policy commitments:

Commitment 1	Reduce our carbon footprint
Commitment 2	Speed up the energy transition by developing green gases
Commitment 3	Enable access to affordable and sustainable energy
Commitment 4	Grow sustainably
Commitment 6	Support our customers in their energy requirements and converting their activities to net zero carbon
Commitment 7	Co-build sustainable energy solutions with local players
Commitment 10	Protect the environment (excluding carbon) and biodiversity from the impacts of our activities

NET ZERO INITIATIVE

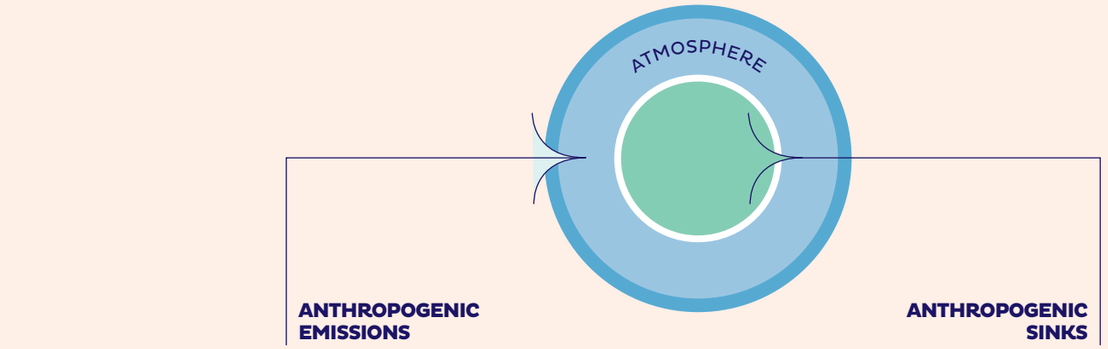
A signatory and active member of the Net Zero Initiative since 2020, GRTgaz describes and organises its climate strategy in accordance with the Net Zero Initiative matrix and **its three separate pillars for organisations to contribute to global carbon neutrality.**

↗ IN MOTION

TO REDUCE ITS CLIMATE IMPACT,

GRTgaz is using all the levers: by reducing its own greenhouse gas emissions (down 20% by 2024 and down 40% by 2030), but also by supporting others to reduce theirs (development of renewable gases and new gas uses). It is also exploring virtuous solutions for the compensation, capture, storage or use of future greenhouse gas emissions.

GRTgaz's climate strategy



Reduction of carbon emissions in scopes 1 and 2 (linked to our industrial activities) and scope 3 where manageable (activities supporting our business)

- → 20% reduction by 2024 and 40% reduction by 2030 in GRTgaz emissions in absolute terms compared to 2019 (scopes 1, 2 and scope 3 where manageable)
- → fivefold and absolute reduction of its methane emissions by 2024 compared to 2016

Actions with our suppliers, customers and those working in the gas chain and renewable gas sector to cut the carbon footprint of the gas chain and reduce our climate risk

- → 12 TWh by 2024 and 40 TWh by 2030 in annual production capacity of renewable gases connected to the network
- → 20 partnerships with customers on decarbonation projects by 2024
- → 3 new demonstrators per new renewable gas production process
- → active member of the MGP and OGMP initiatives

Study and monitor the financing of compensation actions ensuring the development of carbon sinks, in liaison with the development of renewable gases and business opportunities linked to CCUS, BECCS, etc. (*Carbon Capture, Utilisation and Storage*)

Pillar A

REDUCTION IN GRTgaz'S EMISSIONS

Our commitments: reduce our carbon footprint

— In 2019, GRTgaz's carbon footprint represented 0.6% of emissions linked to gas consumption in France, at just over 800,000 tonnes of CO_2 emitted.

GRTgaz is committed to a strategy of reducing its carbon emissions in scopes 1 and 2 (linked to its industrial activities) and scope 3 where manageable (support activities linked to its business), in line with the Paris Agreement which aims to keep global warming well below 2 °C. This is the aim of its CSR Commitment 1, Reduce our carbon footprint[3].

-20%
between 2019 and 2024
over the manageable scope.
- 40% by 2030

Cut methane emissions by
5
between 2016 and 2024

"*The itinerary of its implementation plan takes into account the full technical, operational and economic complexity of the gas industry. And its reporting process is robust*", states the UNEP (United Nations Environment Programme).

Close-up on methane emissions

— **In 2020, GRTgaz joined the OGMP 2.0** *(Oil & Gas Methane Partnership)*. Managed by the United Nations Environment Programme, the OGMP provides a framework for international reporting to deliver transparent data on methane emissions from different segments of the *Oil & Gas* chain. Every year, GRTgaz will provide its methane emissions report based on this new international reporting framework.

Within this framework, GRTgaz has been awarded the ***Gold Standard* by the United Nations,** which recognises the credibility of GRTgaz's programmes to reduce its methane emissions. GRTgaz's commitment was praised in the 2021 report of the International Methane Emissions Observatory[4]. The company is described as having a clear commitment and ambitious goals for reducing its methane emissions.

In 2020, having cut its methane emissions by 66% between 2016 and 2020, GRTgaz launched an ambitious new programme to reduce its emissions by a further 40% by 2025. This target, which would lead to an overall reduction of 80% since 2016, makes it one of the most ambitious members of the United Nations initiative.

3/ For more information, see 4.2.1. Reduce our carbon footprint.
4/ https://www.unep.org/fr/resources/rapport/un-oeil-sur-le-methane-rapport-2021-de-lobservatoire-international-des-emissions

As a signatory of the **Methane Guiding Principles,** GRTgaz has committed to publish its methane emissions results[5] and to encourage others in the natural gas value chain, from production to final consumer, to adhere to these principles too. The reporting framework is based on five main principles: continually reduce methane emissions; advance strong performance across the gas supply chain; improve accuracy of methane emissions data; advocate sound policy and regulations on methane emissions; and increase transparency.

Pillar B

REDUCTION OF THE EMISSIONS OF OUR CUSTOMERS AND REGIONS

Our commitments: work with our suppliers, customers, regions, the gas chain, and those working in the renewable gases sector to cut the carbon footprint of the gas chain and help to reduce the climate risk

— Apart from GRTgaz's carbon footprint (scopes under the company's control), the company's climate risk relates mainly to the decarbonation of the transported product, which is currently nearly 99% natural gas, by reducing consumption and replacing natural gas with renewable and low-carbon gases (which account for just over 1% of the volumes transported at present, with a target of 10% minimum by 2030). To this end, through Commitment 2 of its CSR policy, GRTgaz has committed to speed up the development of renewable gases[6] by working alongside the renewable gas sectors and adapting its networks and offer so that it can supply an increasing number of renewable gases. This strategic objective is also accompanied by Commitment 3 on affordable, sustainable energy, which focuses on economic performance and the importance of contributing to ensure "natural" gas energy today and "renewable" gas energy tomorrow remain as affordable as possible for consumers. An increasing share of the company's resources are therefore being allocated to the fulfilment of its corporate purpose and to sustainable growth[7].

5/ To see the GRTgaz report, https://methaneguidingprinciples.org/wp-content/uploads/2022/01/GRTgaz_Methane-Guiding-Principles-Reporting-2022.pdf
6/ For more information, see 4.3.2. Speed up the energy transition through green gases.
7/ For more information, see 4.3.3. Enable access to affordable and sustainable energy and 4.3.4 Grow sustainably.

40 TWh
in annual production capacity of renewable gases connected to networks by 2030

Reduction by
30%
in the cost of injection and reverse flow equipment by 2030

20%
of GRTgaz's investment expenditure committed to renewable gases or to adapting the network by 2024

Development of
20
partnerships with customers on decarbonation by 2024

3
new demonstrators per new renewable gas production process by 2024

PARTICIPATION
with gas chain players in work and discussions on reducing methane emissions

In the case of natural gas, GRTgaz is also a driving force in the gas sector to reduce methane emissions across the whole value chain.

METHANE GUIDING PRINCIPLES

As part of its activities with the **Methane Guiding Principles**, GRTgaz contributed to the writing of two *best practice* guides in 2020:

- ***Reducing Methane Emissions: Best Practice Guide*** *Identification, Detection, Measurement and Quantification Guide*
- ***Reducing Methane Emissions: Best Practice Guide*** *Transmission, Storage, LNG Terminals and Distribution*

marcogaz

In 2021, as part of Marcogaz, GRTgaz contributed to the writing of a number of reference documents:

- *Recommendations on LDAR campaigns*
- *Recommendations on venting and flaring*
- *Emissions glossary*

GERG THE EUROPEAN GAS RESEARCH GROUP

In 2021 GRTgaz joined a **European scientific project on the use of new technologies to quantify methane emissions**.

The project is being run by the European Gas Research Group (GERG) and Spanish network operator Enagás, with the participation of GRTgaz and a number of European gas infrastructure operators and gas industry associations.

The aim is to improve the knowledge and use of new technologies for quantifying methane emissions from infrastructures and thus to improve action to reduce emissions. Twelve different technologies fitted to drones or to moving land vehicles or aircraft, or installed on sites, are being tested during the project to assess their accuracy and reliability.

↗

IN MOTION

A LEVER FOR REDUCING GRTgaz'S CLIMATE RISK

Substitution of the transported natural gas (99%) with renewable and low-carbon gases and hydrogen

Our forward-looking vision for 2030: more than 20% renewable and low-carbon gases and hydrogen in our networks

Pillar C

DEVELOPMENT OF CARBON SINKS

Our commitments: to study and maintain a watch on virtuous compensation solutions together with virtuous production of renewable energies (e.g. through low-carbon labels), and the business opportunities linked to technological carbon sinks (CCUS - *Carbon Capture, Utilisation and Storage*).

– Based on a prioritisation approach, GRTgaz is currently focusing its efforts and resources on reducing its own emissions (Pillar A) and those of its customers and regions, as well as on the production of renewable gases and on the upstream end of the value chain (Pillar B), since compensation should only be addressed once efforts to avoid and reduce emissions have been exhausted.

Although, at present, GRTgaz is not prioritising the purchase of carbon compensation products or investment in solutions including technologies that generate carbon sinks, the company is nevertheless standing by to act on Pillar C when the time comes. In 2021, GRTgaz trialled the purchase of biomethane guarantees of origin associated with the use of bio(NGV) for its vehicle fleet, and looked at the issue of emissions from compression. In the future, compensation products consistent with our corporate purpose, for example linked to low-carbon labels or sustainability certificates for renewable gases or the sustainable farming practices linked to their production, could be envisaged.

The responses to a consultation of the industrial market in 2021 on hydrogen and the decarbonation needs of industry, revealed expectations for the capture, transportation and storage of CO_2. In parallel, methanation projects are emerging where the biogenic CO_2 from biogas production can be reused. In line with the recommendations of the IEA (International Energy Agency), CO_2 value chains including CO_2 transport are likely to emerge in some industrial areas.

Finally, GRTgaz believes that it is necessary to introduce carbon pricing that acts as an incentive to stimulate energy efficiency and eventually support the development of renewable and low-carbon gas technologies, as well as carbon sinks. GRTgaz is already using the Quinet report's assessments of the value of action for the climate to guide some of its investment decisions, particularly in relation to its climate strategy. This report recommends a multi-annual price trajectory anchored to a value of €250 2018 /tCO_2 by 2030.

Governance serving the GRTgaz strategy

3

AGILE GOVERNANCE IN A CHANGING ENERGY ENVIRONMENT

GRTgaz aims to promote agile governance in an increasingly complex energy environment. Its Executive Committee oversees the strategic goals linked to transformation and performance, in keeping with the guidance shared with its Board of Directors. The company also retains a permanent link to civil society via the expertise of its Stakeholder Council (CPP), supporting the full range of ongoing relations with its various component groups.

3.1/ The Board of Directors and its committees

COMPOSITION OF THE BOARD OF DIRECTORS

Gender parity index: 1.42
Term of office of Board Members: five years

9

Board Members are appointed by the General Shareholders' Meeting on the proposal of ENGIE

Adeline DUTERQUE, Chair of the Board of Directors
CELIZAN, represented by **Christine DEHESDIN**, then **Raphaëlle CASTILLON** from 1 July 2021
ENGIE represented by **Édouard SAUVAGE**
ENGIE Home Performance represented by **Claire BRABEC-LAGRANGE**
GDF International represented by **Xavier PERRET**
SFIG represented by **Hélène VERBOCKHAVEN**
SOPRANOR represented by **Dominique BOURGEON**
SPERANS represented by **Caroline ADAM-PLANCHON**
VOCANIA represented by **Jean-Baptiste SÉJOURNÉ**

4

Board Members are appointed by the General Shareholders' Meeting on the proposal of Société d'Infrastructures Gazières

Gautier CHATELUS
Olivier GUIGNÉ
Olivier MAREUSE
Françoise TAUZINAT

1

independent Board Member is appointed by the General Shareholders' Meeting on the proposal of the shareholders

Michel DESTOT

3

Board Members represent employees

Gaëlle CABUT
Vincent de LAHARPE
Nicolas PERRY

GRTgaz is a transmission network operator that is part of a vertically integrated company (ENGIE). To ensure fair competition in the internal gas market, the law places restrictions on the Board of Directors' powers, particularly regarding third party access to the transmission network, and the planning of investment in gas infrastructure.

Christophe Poillion, GRTgaz Compliance Manager, attends all Board and committee meetings to ensure these regulatory requirements are met and there is no discrimination between the different network users.

WORK DONE BY THE BOARD IN 2021

In 2021, the Board of Directors met seven times and discussed the following topics:

- → **Strategy**
- → **Governance, appointments**
- → **Closure of the accounts**
- → **Investments**
- → **CSR**
- → **Remuneration**
- → **R&D and innovation**
- → **Human resources**
- → **Risks**

The eight Board Members whose appointment is not proposed by ENGIE form the 'minority' of Board Members as defined by Article L. 111-25 of the Energy Code.

BOARD OF DIRECTORS STRATEGIC SEMINAR

Every year, the Board Members meet to take part in a strategic seminar, the aim of which is to present and discuss the company's strategic orientations. In 2021 the seminar looked at the company's prospects for accelerating its carbon trajectory, and at possibilities and orientations for business diversification, as well as hydrogen transmission through pipelines.

THE THREE COMMITTEES OF THE BOARD OF DIRECTORS

The Board of Directors is assisted by three consultative committees: the Investment Committee, the Audit Committee and the Remuneration and Selection Committee. Their role is to examine issues relevant to their subject area and to give their conclusions and opinions to the Board of Directors.

INVESTMENT COMMITTEE

ROLE
This committee analyses the investment policy and gives an overall opinion on GRTgaz's investment proposals.
Number of meetings: **2**

AUDIT COMMITTEE

ROLE
This committee ensures that accounting methods are appropriate, and examines and delivers an opinion on the accounts and financial plans. It evaluates the efficacy and quality of the internal control process and examines significant risks and commitments, in particular with regard to the provisions applicable to an independent transmission system operator. The company's CSR commitments and non-financial performance are also analysed each year by the Audit Committee, along with the 'green' investments to support GRTgaz's low-carbon trajectory and the supply of renewable gases.
Number of meetings: **3**

REMUNERATION AND SELECTION COMMITTEE

ROLE
This committee examines and delivers an opinion on the remuneration of the Board Members and the CEO and on candidates for these positions.
Number of meetings: **1**

3.2/ The Executive Committee


1


2


3


4


5


6


7


8


9


10


11

ROLE OF THE EXECUTIVE COMMITTEE

— The Executive Committee takes decisions and arbitrates on strategic issues facing the company. In a changing energy sector, the Executive Committee of GRTgaz, chaired by the CEO, is structured in six departments and four main areas.

COMPOSITION OF THE EXECUTIVE COMMITTEE

1 **Thierry TROUVÉ** – CEO
2 **Catherine BRUN** – General Secretary, Head of the Strategy, CSR, Public Affairs and Territories Domain
3 **Pierre COTIN** – Commercial Director, Head of Marketing
4 **Anne-Sophie DECAUX** – Technical Director, Head of Industrial Performance
5 **Pierre DUVIEUSART** – Deputy CEO
6 **Olivier EDMONT** – Transformation & Performance Director (DTP)
7 **Virginie LE FOLL** – Chief Legal Officer
8 **Sandrine MEUNIER** – Chief Operating Officer
9 **Benoît MIGNARD** – Deputy CEO, in charge of Finance, Purchasing and Logistics
10 **Jean-François PLAZIAT** – Projects & Engineering Director - Head of Projects
11 **Hervé RAMBAUD** – Director of Human Resources

→ Gender parity index: **0.57**

THE SIX DEPARTMENTS

The Directorate General, the Legal Department, the Operations Department (DO), the Projects & Engineering Department, the Human Resources Department and the Transformation and Performance Department.

THE FIVE DOMAINS

The Marketing Domain, bringing together gas and a customer vision, building and delivering commercial solutions.

The Industrial Performance and New Technologies Domain, which includes innovation and R&D (RICE), and in particular oversees the changes driven by emerging and digital technologies to serve GRTgaz's strategic orientations, especially regarding the energy transition.

The Strategy, CSR, Public Affairs and Territories Domain, which guides strategic planning and CSR and supports their management and implementation, particularly in the regions through influence and communication. This Domain also hosts the renewable gas programme and the newly created hydrogen department.

The Finance, Purchasing and Logistics Domain, which contributes to the company's performance through integrated management of financial challenges and issues related to suppliers or real estate.

The Projects Domain, which covers the business areas necessary to create facilities that extend or adapt gas infrastructures.

A remuneration policy based on the company's financial and non-financial strategy

The remuneration of the Executive Committee members consists of a variable portion determined by demanding quantifiable and qualitative performance criteria linked to the company's financial and non-financial strategy.

Financial criteria
65%

They are composed of two indicators (total 100%, half each):

ROC (income from recurring operations) | FCF (free cash flow)

Non-financial criteria
35%

This overall evaluation takes account of the following targets:

→ Health & safety of employees and service providers
→ CSR action plan
→ Renewable gases R&D
→ Diversification

Employees' remuneration: profit-sharing and employee share schemes

Every year, the company's employees receive a payment in shares based on the financial result and a profit share linked to the non-financial results, on an equal basis.

A 2021-2023 three-year profit-sharing agreement has been signed. The chosen profit-sharing criteria ensure as many employees as possible are in the scheme. They are aligned with the aims of GRTgaz's transformation strategy and contribute to its CSR commitments.

Criteria	CAP24 and CSR link
Health and safety at work	CSR Commitment 8: Ensure the safety of people and infrastructures and the continuity of our services
Industrial safety	
Reduction in methane emissions	CSR Commitment 1: Reduce our carbon footprint CAP24
Recruitment	CSR Commitment 5: Encourage the development of skills, diversity and quality of life at work for our employees
Quality of service	CSR Commitment 3: Enable access to affordable and sustainable energy
Customer satisfaction and compliance with the code of conduct	CSR Commitment 6: Support our customers in their energy requirements and converting their activities to net zero carbon
	CSR Commitment 9: Conduct our business with suitable ethics and compliance
Evidential challenge	CSR Commitment 7: Co-build sustainable energy solutions with local players CAP24
Performance	CSR Commitment 3: Enable access to affordable and sustainable energy CAP24
Compliance with payment deadlines - Suppliers	CSR Commitment 9: Conduct our business with suitable ethics and compliance
Roll-out of innovation projects	CSR Commitment 7: Co-build sustainable energy solutions with local players CAP24

3.3/ CSR governance SNFP

BOARD OF DIRECTORS AUDIT COMMITTEE

→ Approves the CSR strategy
→ Gives its opinion on GRTgaz's CSR results

EXECUTIVE COMMITTEE

→ Directs and validates the CSR strategy

STAKEHOLDER COUNCIL

→ Gives its opinion on GRTgaz's CSR strategy and actions
→ Contributes to analyses of prospective issues

MANAGEMENT AND INTEGRATED REPORTING CSR COORDINATION COMMITTEE

1 Integration of the CSR policy into the management system and maintenance of ISO 14001 and ISO 50001 certifications.

2 Overall management of each of the CSR commitments: commitment managers, an action plan, resources, KPIs for each commitment.

3 A CSR Director manages non-financial performance and coordination and reporting arrangements, CSR continuous improvement initiatives and stakeholder involvement.

— Monitoring of the implementation of the CSR policy is shared by the 10 commitment managers tasked by the Directorate General, with coordination and aggregation performed by the CSR Director.

Each commitment has its own oversight bodies, some of which form part of the company's governance committees. The CSR Coordination Committee provides cross-company coordination and overall coherence.

Each department is given responsibility in parallel and monitors the implementation of the CSR policy within its perimeter. The policy is integrated into every management contract and roadmap, in coordination with the transposition of the CAP24 corporate culture.

— The operation of GRTgaz also relies on an integrated management system:

MANAGEMENT SYSTEM

Safety

Management of health and safety at work, industrial safety and security. This system meets the requirements of the safety management system (SMS), in accordance with the order of 5 March 2014.

MANAGEMENT SYSTEM

Environment

ISO 14001-certified for its natural gas compression infrastructure design, construction, operation and maintenance activities.

MANAGEMENT SYSTEM

Integrated

MANAGEMENT SYSTEM

Quality

ISO 9001-certified principles and methods of operation of GRTgaz for its gas odorisation activities.

MANAGEMENT SYSTEM

Energy

ISO 50001-certified for its gas transmission and delivery, odorisation and tanker transport activities.

3.4/ Ethics and independence SNFP

— Ethics and independence are among the CSR risks identified in the new materiality analysis and are therefore grouped together under CSR Policy Commitment 9, discussed here.

What does ethics cover at GRTgaz?

All forms of discrimination, all forms of harassment, fraud, corruption, conflicts of interest, and the disclosure of any confidential information.

Why do ethics matter for GRTgaz?

To increase the trust of our stakeholders, protect our reputation and comply with Law No 2016-1691 (known as Sapin II) of 9 December 2016 on transparency, fighting corruption and economic modernisation.

How are ethics managed at GRTgaz?

By committing to a risk prevention approach based on management leading by example, and by living up to our five corporate values: innovation, openness, responsibility, excellence and trust.

BOARD OF DIRECTORS
AUDIT COMMITTEE
Ethical performance monitoring

EXECUTIVE COMMITTEE
Validation of the ethics strategy

COMPLIANCE OFFICER
Organisation of ethics procedure

ETHICS COMMITTEE
(one representative from the Management Committee of each department)
Preparation of the programme of prevention, implementation and procedure monitoring actions

ETHICS OFFICERS
(representatives and organisers in each department)

EMPLOYEES MANAGERS STAKEHOLDERS

GRTgaz'S ETHICS COMMITMENTS

GRTGAZ ETHICS CHARTER

ETHICS CHARTER FOR SUPPLIERS

100% of teams given awareness training on ethics and compliance risks by 2024

LE CERCLE D'ÉTHIQUE DES AFFAIRES
ÉTHIQUE & CONFORMITÉ DES ENTREPRISES

EUROPEAN Business Ethics FORUM

A PREVENTION PROGRAMME *"OUR COLLECTIVE AIM FOR ETHICS"* 2021-2024

Dissemination programme on the ground to raise awareness and prompt discussion with employees on the various risks related to ethics.

Special training scheme (remote and classroom-based e-learning) for the employees most exposed to fraud and corruption risks, under the Sapin II law.

Due diligence procedure for the suppliers most at risk in terms of human rights, health and safety and respect for the environment.

Whistleblowing system: the Ethics Committee protects the anonymity of whistleblowers and the confidentiality of the information received. The ethique@grtgaz.com mailbox was set up to encourage the reporting of dilemmas, questions, weak signals and ethical alerts. It also ensures confidentiality for the sender.

The "Allo Discrim" and "Allo Sexisme" hotlines run by independent professionals and a counselling service are also available to employees.

2021 RESULTS

- Creation and trialling on 250 employees of an awareness training module, which will be deployed in all teams by 2024.
- 120 suppliers assessed by an external company (*due diligence*) since 2020, including 85 in 2021.
- New Ethics Charter in 2021.
- 10 ethics-related incidents were reported, nine concerning human rights issues (tensions, conflicts, racism). Handling of ethics incidents, particularly with the organisation of five disciplinary committees.

As an independent transmission system operator (TSO) certified by the French Energy Regulation Commission (CRE), GRTgaz must meet the obligations of independence and autonomy applicable to network operators controlled by a vertically integrated company.

GRTgaz'S COMMITMENTS AS AN INDEPENDENT TRANSMISSION SYSTEM OPERATOR

CODE OF GOOD CONDUCT OF NATURAL GAS TSO GRTgaz

ANNUAL SATISFACTION SURVEY OF CUSTOMERS ON COMPLIANCE WITH THE CODE OF GOOD CONDUCT

ANNUAL REPORT BY THE COMPLIANCE OFFICER*

TEN-YEAR DEVELOPMENT PLAN

GRTgaz must act completely independently of ENGIE's production and supply activities and ensure non-discriminatory, transparent conditions of access to the network, and preserve the confidentiality of commercially sensitive information.

The code of good conduct approved by the French Energy Regulation Commission (CRE) is the cornerstone of GRTgaz's certification package as an independent transmission system operator. It presents the internal organisational measures taken by GRTgaz to prevent the risk of discriminatory practices regarding third-party access to the natural gas transmission system, as required by Article L.111-22 of the Energy Code.

* https://www.cre.fr/Documents/Publications/Rapports-thematiques/rapport-2019-2020-sur-le-respect-des-codes-de-bonne-conduite-et-l-independance-des-gestionnaires-de-reseaux-d-electricite-et-de-gaz-naturel

MANAGEMENT OF COMPLIANCE WITH THE ENERGY CODE AND GRTgaz'S CODE OF GOOD CONDUCT

A compliance manager, whose independence is assured by the Energy Code, ensures compliance with these requirements. The officer reports regularly to the CRE and produces an annual report on GRTgaz's implementation of its code of good conduct, on the observance of the independence obligations and on the correct implementation of the ten-year development plan.

A manager responsible for the implementation of GRTgaz's code of good conduct, assisted by an operations manager at national level, liaises with the Compliance Officer. The manager draws up the reference documents and the corresponding inspection plan. They inform and advise GRTgaz's managers. They liaise with the CRE on the approval of contracts and services with entities in the ENGIE group.

A code of conduct correspondent within each department is responsible for disseminating the code of good conduct in their department, managing the annual action plan and reporting on results.

Observance of the code of good conduct is assessed in the course of an **annual satisfaction survey of shippers and industrial customers.**

2021 RESULTS

- No significant non-compliance with the code of good conduct in 2021.
- 99.4% of customers are satisfied with regard to GRTgaz's compliance with the code of good conduct.
- 98.7% of employees have received the e-learning training on the code of good conduct.

2021 ACTIONS

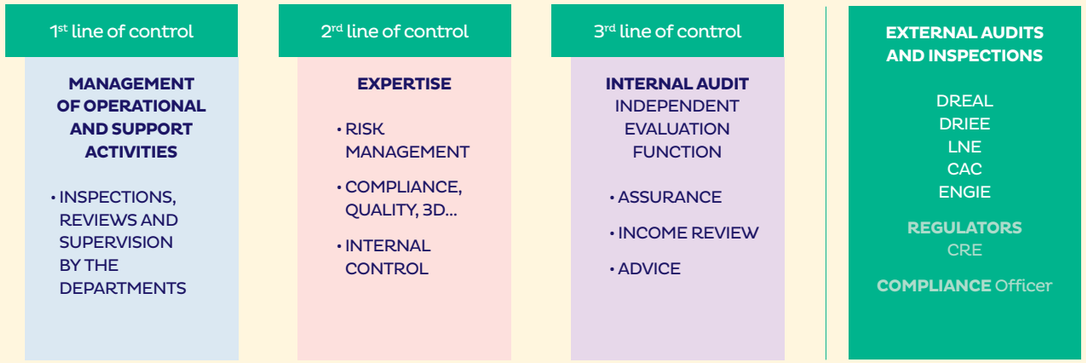
- Deployment of a refresher *e-learning* course on the code of good conduct (to be taken after five years), in addition to the e-learning course on the code of good conduct for new employees.
- Approval and launch of the 3D Inspections Plan procedure.
- Consolidation of the indicators and KPIs in this domain as part of continuous improvement.

3.5/ Risk management system

— In a changing energy context where the future is uncertain, risk management is a key element of company management in terms of both financial and non-financial results and resilience to crises. Risk management provides information for the company's strategic dashboard and helps to give it the agility it needs for its long-term sustainability and development.

A system covering all levels of the company based on the three lines of control

→ The risks for GRTgaz both **operationally** and **strategically** are identified.



→ GRTgaz's risk management system is consists of an overall system based on **the three lines of control.**

THIS WELL-DEVELOPED SYSTEM CONTRIBUTES TO PERFORMANCE IMPROVEMENT AND THE MEETING OF GRTgaz'S TARGETS

— Every year, GRTgaz uses the COSO ERM method to identify and assess risks according to impact and probability, on a six-year horizon to identify events that could threaten the company's long-term sustainability and the success of its strategic objectives. There is extensive overlap between the company's major risks identified by this analysis and the risks and opportunities identified by the materiality analysis, which takes account of stakeholders' perceptions.

Major risks for GRTgaz and CSR materiality

Criticality	Risk	Trend	Link with the 2021-2024 CSR policy	Link with stakeholders
High	**Industrial accident**	→	**Commitment 8:** Ensure the safety of people and infrastructures and the continuity of our services	Employees, local communities, customers
	Cyber attack	↗	**Commitment 8:** Ensure the safety of people and infrastructures and the continuity of our services	Employees, suppliers, customers
	Economic regulation	→	**Commitment 3:** Enable access to affordable and sustainable energy	Employees, suppliers, investors, customers
	Safety	↘	**Commitment 8:** Ensure the safety of people and infrastructures and the continuity of our services	Employees, suppliers, customers
	Social crisis	→	**Commitment 5:** Encourage the development of skills, diversity and quality of life at work for our employees	Employees, customers, suppliers
	Role of gas in the energy transition	→	**Commitment 2:** Speed up the energy transition by developing green gases **Commitment 4:** Grow sustainably **Commitment 7:** Co-build sustainable energy solutions with local players	Customers, suppliers, planet, employees, investors
	Pandemic	↘	**Commitment 8:** Ensure the safety of people and infrastructures and the continuity of our services	Employees, suppliers
Moderate	**Ethics**	→	**Commitment 9:** Conduct our business with suitable ethics and independence	Suppliers, employees, investors, local communities, media
	3D non-compliance	→	**Commitment 9:** Conduct our business with suitable ethics and independence	Regulator, suppliers, employees, customers
	Emerging risks: carbon emissions, sustainable growth, respect for biodiversity, recycling	↗	Includes all the commitments in the CSR policy	

Methodology

- Risk identification and assessment is based on a methodology known as **COSO ERM.**
- This method is used to **structure the approach** to risk management.
- The **trend** shows the **change** in criticality between 2020 and 2021.
- **Criticality** is assessed on the basis of the impact and probability.
- The impact assessment includes the **financial impact** (as a % of total EBITDA over six years) **and the non-financial impact** (human, reputational, environmental, legal, social).

Make our performance sustainable and value-generating for all

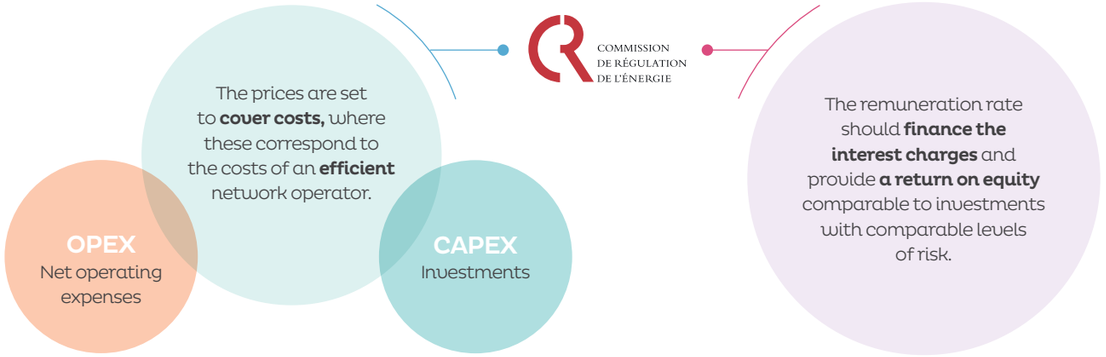
A SUSTAINABLE PERFORMANCE-GENERATING VALUE FOR OUR STAKEHOLDERS

After the first year of implementation of its new CSR policy (2021-2024), GRTgaz reports on the results of its non-financial performance, in view of its CSR policy "to support affordable net zero carbon, rising to the challenges of the environmental transition with its employees and stakeholders, while conducting its business responsibly". The contribution to GRTgaz's sustainable development goals is also published here.

4.1/ Our financial performance: applying the price trajectory, preparing the future and sharing the created value

A REGULATED BUSINESS MODEL

De facto monopoly → our prices our set by an independent administrative authority



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IN MOTION

INVESTMENT INCREASES, BETTER AIMED AT THE ENERGY TRANSITION

+ 19%
The rise in GRTgaz's investment expenditure between 2020 and 2021, up from 385 to 457 million euros.

+ 47%
The rise in the share of investment in renewable gases and in the decarbonation of GRTgaz's infrastructure over the same period.

— **While it continues to pursue its strategic objectives and observe the price trajectory of the ATRT7, GRTgaz's financial performance remained particularly robust in 2021, as did the company's balance sheet**.

GRTgaz posted revenue of €1,846 M in 2021. This was down (by €31 M) on 2020 (€1,877 M).

Income from transmission was €1,738 M (compared to €1,786 M in 2020), representing 94% of total revenue. **Regarding diversification, €4 M invested in the Eiffel Gaz Vert fund and €20 M** in supplementary services were invoiced and account for 1% of total revenue. They consist mainly of technical services and R&D.

	2020	2021
Revenue	**1,877**	**1,846**
Transmission income	*1,786*	*1,738*
Other income	*90*	*108*
EBITDA	**1,053**	**1,099**
Income from recurring operations	**511**	**561**
Net income	**283**	**335**
Investments	**387**	**457**
Net debt	**4,032**	**3,807**

EBITDA for the 2021 financial year was €1,088 M (€1,053 M in 2020), up by €35 M on the previous year. This change is explained mainly by a net reduction in energy costs, linked to very low compression energy needs in 2021, and a reduction in operating costs due mainly to lower production taxes.

The net profit after tax was €335 M (€283 M in 2020), up by €52 M euros on 2020. This change is the result of the effects mentioned for EBITDA and a reduction in the cost of debt, as well as a reduction in the corporate tax rate in France.

Investment expenditure was €458 M in 2021, compared to €387 M the previous year. As explained in 4.3.4, the share of investment spent on supplying renewable gases and on the decarbonation of our infrastructure (activities eligible for the new EU Taxonomy) increased significantly by 47% compared to 2020, to €63 M.

At the end of December 2021, GRTgaz's net debt was €3,807 M compared to €4,032 M at the end of 2020.

EFFECTS OF THE COVID-19 PANDEMIC

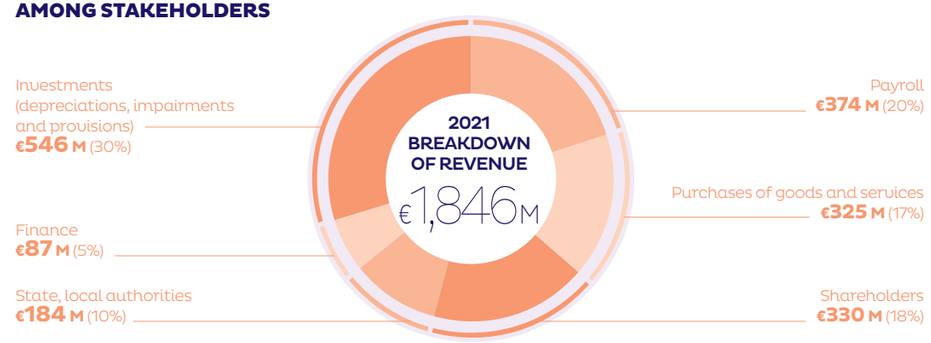
The COVID-19 pandemic necessitated the introduction of measures and action plans to ensure business continuity, and a very high level of commitment and adaptation from our employees.

It did not have a significant impact on GRTgaz's operational and financial performance in 2021.

All flows contribute, through their redistribution both geographically and by stakeholder family, to general economic activity and to the development of the regions, helping to deliver on the aim of CSR Policy Commitment 4.

Investment in the maintenance and development of assets not only ensures increasing volumes of renewable and low-carbon gases can be delivered, but also contributes to the long-term sustainability of managed assets and to a gradual increase in the positive impacts of our activities for the climate and society.

BREAKDOWN OF REVENUE AMONG STAKEHOLDERS



INTEGRATED REPORT 2021 MOMENTUM

4.2/ Our non-financial performance to contribute to the United Nations Sustainable Development Goals SNFP

CSR focus area	CSR commitment	CSR risks/ opportunities	KPI	Reference year	2021 result	2021 objective	2024 objective	2030 objectives	Contribution to SDGs
A- Support affordable net zero carbon	1: Reduce our carbon footprint	R: Carbon footprint	Drop in our carbon footprint – manageable scopes	2019: 810 $ktCO_2eq$	- 30.5% (566 $ktCO_2eq$)	- 8%	20% reduction in our CO_2 emissions (manageable scopes)	40% reduction in our CO_2 emissions (manageable scopes)	Goal 13.2: Integrate climate change measures into national policies, strategies and planning
			Reduction in our methane emissions	2016: 30.8 million m^3	10.3 million m^3	9.8 million m^3	Fivefold reduction between 2016 and 2024 (6.16 million m^3)	Tend towards a 'leaktight network'	
	2: Speed up the energy transition by developing green gases	R: Energy transition	Annual production capacity of renewable gases connected to the network in TWh per year	2020: 4.1 TWh/year	6.417 TWh/year	8 TWh/year	12 TWh/year	40 TWh/year (38 TWh anaerobic digestion, 1 TWh pyrogasification and 0.5 TWh hydrogen)	Goal 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix. Goal 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships
	3: Enable access to affordable and sustainable energy	R: Affordable energy	Decrease in injection and reverse flow facility costs	2020	- 6%	- 5%	- 20%	- 30% by 2028	Goal 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services
			Average cost of access to the gas transmission network (euro cents per kWh/day/year)	2019: €0.45	€0.44	€0.44			
	4: Grow sustainably	R: Sustainable growth and resilience	Share as % of investment spending (Capex) dedicated to renewable gases and the carbon trajectory	2020: 11%	13.5%	13%	20%	30%	Goal 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable
B- Rise to the challenge of the environmental transition with our employees and stakeholders	5: Encourage the development of skills, diversity and quality of life at work for our employees	O: Attractiveness and skills development	Trained employee rate	2020: 63%	79.6%	80%	80%		
			Employee commitment rate	2020: 77 (benchmark in France: 76)	74 (benchmark in France: 78)	≥ benchmark	≥ benchmark	≥ benchmark	
		R: Health, safety, and well-being at work	QLW index	2020: 75 (benchmark in France: 69)	72 (benchmark in France: 73)	≥ benchmark	≥ benchmark	≥ benchmark	Goal 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
		O: Diversity	Feminization rate	2020: 24.2%	24.58%	24.70%	25.5%	27%	Goal 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
	6: Support our customers in their energy requirements and converting their activities to net zero carbon	R: Support for customers	Number of partnerships with our customers (in industry and mobility) related to decarbonation	NA	5	5	20		Goal 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services
	7: Co-build sustainable energy solutions with local players	R: Support for regions	Number of pilot projects and demonstrators to support concrete progress in the emergence of new gases in the regions	NA	2	Identify prospects for prioritisation	3 new pilots/ demonstrators (*at least* 1 per new sector)		Goal 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships
		R: Reputation and communication	% of decision-makers considering GRTgaz useful to the energy transition (survey conducted every other year)	2019: 74%	91%	74%	77%		

CSR focus area	CSR commitment	CSR risks/ opportunities	KPI	Reference year	2021 result	2021 objective	2024 objective	2030 objectives	Contribution to SDGs
C- Conduct our business responsibly	8: Ensure the safety of people and infrastructures, and the continuity of our services	R: Health, safety, and well-being at work	Employee accident frequency rate	2020: 1.6	2.5	≤ 1.9	≤ 1.7		Goal 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
			Contractor accident frequency rate	2020: 6	9.4	≤ 7	≤ 7		
		R: Network safety	Number of km of pipelines that have undergone a fitness for service renewal	From July 2021	2,720 km	2,450 km	9,750 km	31,750 km	Goal 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
		R: IT system security	Number of employees receiving cybersecurity training per year (CS *e-learning* rate)	NA	80%	100% of new hires	100% of new hires		
		R: Risk management and business continuity	Delivery station supply interruption rate	2020: 0.08%	0.08%	< 0.2%	< 0.2%		
	9: Conduct our business with suitable ethics and compliance	R: ethics and compliance	% of teams trained in ethical risks	NA	Testing of module on 250 employees	Testing of module	100% of employees trained	100%	
	10: Protect the environment (excluding carbon) and biodiversity from the impacts of our activities	O: Environmental protection and biodiversity	% of sites converted to 0 pesticides	2020: 29%	54% of sites converted	55% of sites converted	55% of sites converted	100% of areas converted	Goal 15.1: Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
			Percentage of waste recovered	NA	98.50%	> 90%	> 90%	> 90%	
		R: Integration and acceptability of infrastructures	Share of active projects affected by legal action	NA	0	NA	NA	NA	

4.3/ Our performance for an affordable and climate-neutral energy future SNFP

4.3.1 Commitment 1
REDUCE OUR CARBON FOOTPRINT

Targets for reducing our carbon emissions (manageable scopes) *vs* 2019
2024: -20% → 2030: -40%

Achieve a fivefold reduction in our methane emissions compared to 2016
→ Tend towards a 'leaktight network'

Given the climate challenge and as part of the climate strategy defined in 2.5, GRTgaz has adopted some ambitious carbon targets for its own needs and those of the gas industry, aiming to keep to a carbon trajectory *well below 2°C*, compatible with the Paris Agreement and the national low-carbon strategy for emissions, within its manageable scopes.

GRTgaz has set two objectives for 2024 and 2030. The first is to reduce emissions within its perimeter (scopes 1, 2, and 3 where manageable, excluding the network development project) by 20% then 40%. This perimeter covers all emissions on which GRTgaz can act (compression energy, methane emissions, purchasing and investments, ways of working) and excludes from the manageable scopes any emissions associated with other links in the gas chain. In its climate strategy, GRTgaz is still committed to taking action and to contributing to decarbonation both upstream and downstream in the gas chain. The second objective is to increase projects to develop renewable gas solutions[8] while reducing their carbon intensity.

POLICIES AND RESOURCES IMPLEMENTED TO REDUCE RISK

GRTgaz has put together a roadmap to reduce emissions within its manageable scopes by 2024. In particular it covers:

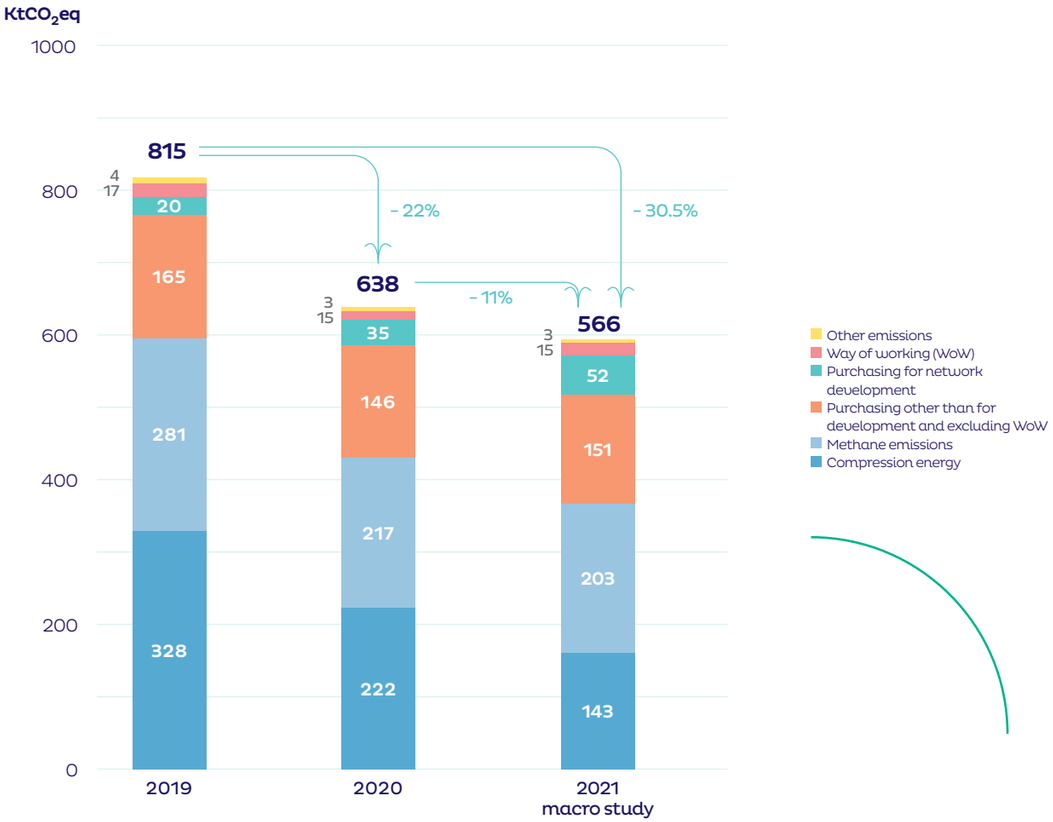
COMMERCIAL BUILDINGS, IT, VEHICLES AND TRAVEL	→ **Reduction of the carbon impact of our way of working:** energy consumption by tertiary sector activities, green computing, commuter journeys, work-related travel, etc. → **Raising staff awareness of climate challenges** to mobilise them in the process, particularly by working with La Fresque du Climat
PURCHASING, CONSTRUCTION SITES AND INDUSTRIAL ASSETS	→ Construction of a **low-carbon trajectory with strategic suppliers** → Use of **carbon criteria** (Quinet value) **in investment decisions**
METHANE EMISSIONS	→ **Detection and repair programmes for diffuse leaks** conducted at all network stations and at compressor stations → **Techniques (*gas booster*, burning) to avoid venting** during scheduled maintenance → **Investment programme** for compressor stations, replacement of valves and equipment that produce emissions
ENERGY CONSUMPTION (COMPRESSION)	→ Implementation of **energy performance plans** → **Adjustment and control of flows and exchanges** to start transits with little or no compression as soon as possible → **Projects to adapt compression facilities**

8/ See section 4.3.2. Speed up the energy transition by developing green gases.

2021 results

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2030	OBJECTIVES 2021	RESULTS 2021
Reduction in emissions within manageable scope	2019 figure: **810 $ktCO_2eq$**	**20% reduction** in our CO_2 emissions	**40% reduction** in our CO_2 emissions	**8% reduction** compared to 2019	**30.5% reduction** (566 $ktCO_2eq$)
Reduction in our methane emissions	2016: **30.8 million m^3**	**Fivefold reduction** between 2016 and 2024 (6.2 million m^3)		**9.8** million m^3	**10.3** million m^3
INDICATORS					
Emissions linked to our ways of working	**17.7 $ktCO_2eq$** in 2019	**20% reduction**			**16 $ktCO_2eq$** (-9%)

CHANGE IN EMISSIONS WITHIN GRTgaz'S MANAGEABLE SCOPE
(SCOPES 1, 2 AND 3 EXCLUDING UPSTREAM AND FINAL USE OF TRANSPORTED GAS)

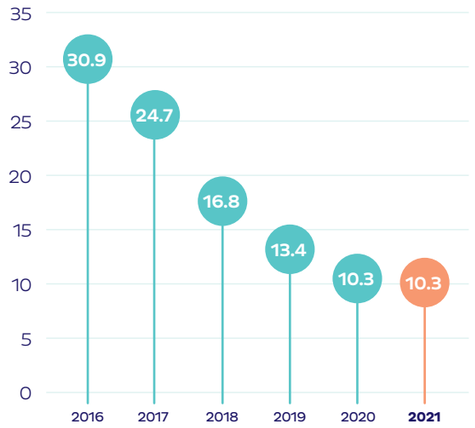


Close-up on methane emissions

As a signatory of the ***Methane Guiding Principles***, GRTgaz publishes its results for methane emissions[9].

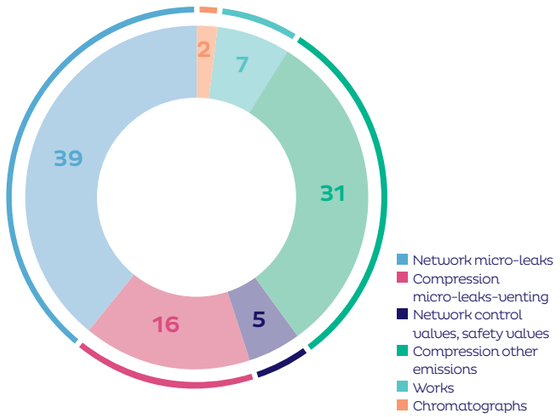
CHANGE IN EMISSIONS SINCE 2016

in millions of (n)m³



BREAKDOWN OF EMISSIONS BY CATEGORY IN 2021

in %



In 2021, the target for reducing CO_2 emissions within GRTgaz's manageable scopes was exceeded. Emissions linked to compression energy fell by 30.5% compared to 2019, which is explained situationally by the reduction in volumes of gas transmitted and by operation and transit arrangements that were favourable to reduced compression needs, and structurally by the implementation of energy performance plans and actions at the compressor stations.

In terms of methane emissions, 2021 was a year of consolidation for GRTgaz, following on a threefold reduction in its methane emissions between 2016 and 2020. The result was 10.3 million m³ emitted, which is slightly above the 2021 target. Research and repair campaign performance continues to strengthen, leading to a 15% reduction in micro-leaks compared to 2020 and 93% gas recovery during scheduled works. Infrastructure adaptation projects have been carried out, for example, an innovative nitrogen seal project at the Voisines compressor station, and re-compression and valve replacement projects. These good results for 2021 are accompanied by progress on methods for quantifying emissions, leading to slightly higher estimates for certain emissions.

To reduce CO_2 emissions related to purchasing, work began in 2021 to identify the purchases that produce the most emissions and to launch discussions with suppliers to identify their carbon reduction levers. The Projects & Engineering Department is also working on the development of a tool for estimating the carbon footprint of GRTgaz's projects. Ultimately this tool could be used to guide action to reduce the carbon footprint of assets to be built or renovated.

GRTgaz has also decided to compensate for the emissions of its vehicle fleet running on NGV with bio(NGV) based on the purchase of biomethane guarantees of origin, including for some of the gas used by the Vindecy compressor station. The aim is to test the use of this type of scheme as a contribution to a range of solutions for decarbonising tertiary or industrial carbon emissions, in line with the natural gas decarbonation strategy using renewable gases.

9/ To see the GRTgaz report, https://methaneguidingprinciples.org/wp-content/uploads/2021/01/Methane-Guiding-Principles_Reporting-GRTgaz.pdf

HIGHLIGHTS

TOWARDS 'ZERO-EMISSION' COMPRESSOR STATIONS: EXAMPLE OF THE VOISINES COMPRESSOR STATION

Emissions from compressor stations accounted for 40% of all of GRTgaz's methane emissions in 2020, and 11% of this was from the seals of compressors in operation or during pressurised shutdowns. To meet this challenge, at the Voisines compressor station GRTgaz deployed a zero-emission seal system designed by one of its historic suppliers. The system uses seals in which the injection of nitrogen can block natural gas flows, considerably reducing methane emissions.

"An employee-led initiative, without any prompting by the Executive Committee, which has managed to raise awareness among more than 365 people - that's the spirit of the CAP24 human project."

Olivier Edmont,
Transformation & Performance Director.

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IN MOTION

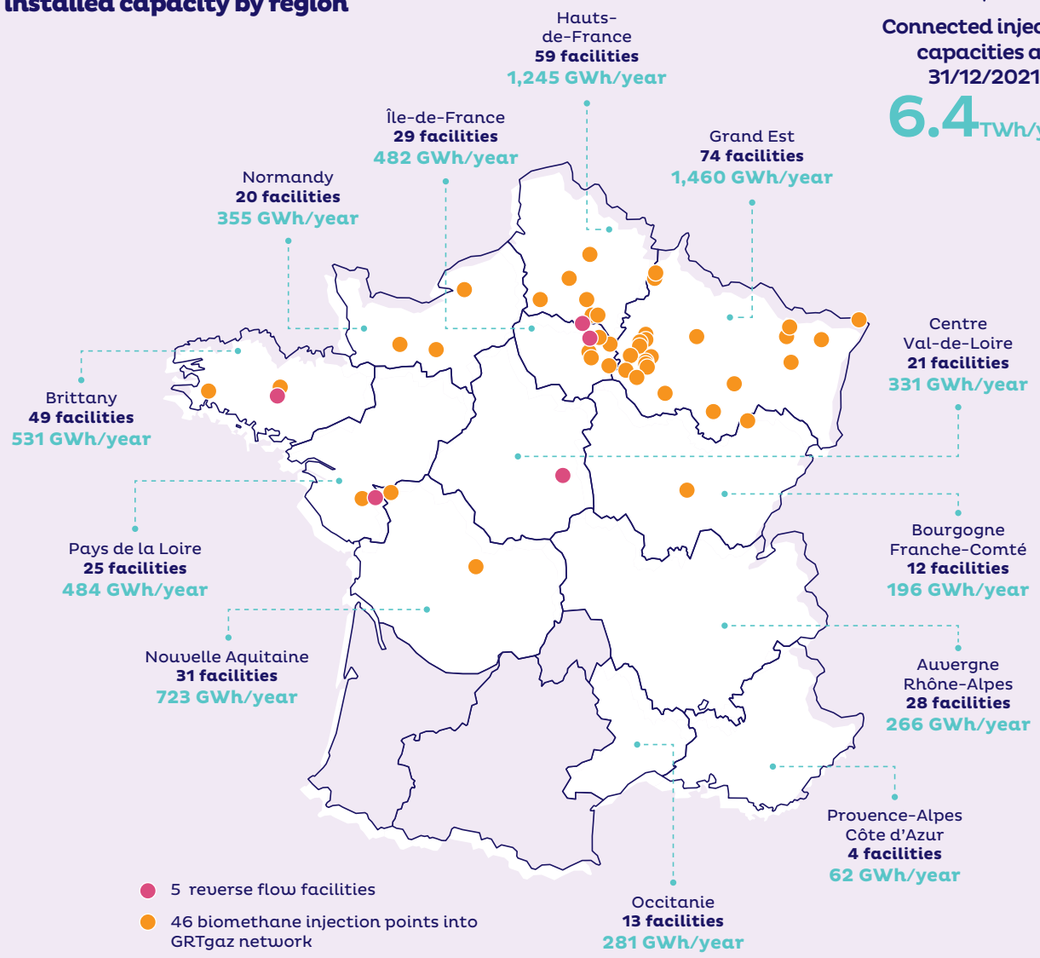
MORE THAN 365 VOLUNTEERS AND MORE THAN 60 WORKSHOPS FOR PARTICIPATION IN *LA FRESQUE DU CLIMAT*

With one aim: to mobilise more than half of employees by 2024. *La Fresque du Climat* is a teaching tool for understanding the causes, consequences and mechanisms of climate change. This educational itinerary, run as a collaborative workshop, enables attendees to stop, question and recognise the impact of their individual or collective actions on the climate.

4.3.2 Commitment 2

SPEED UP THE ENERGY TRANSITION BY DEVELOPING GREEN GASES

Biomethane injection and reverse flow facilities in GRTgaz's network and total installed capacity by region



Connected injection capacities at 31/12/2021

6.4 TWh/year

2024 Objectives: 12 TWh → 2030: 40 TWh
in annual renewable gas production capacity connected to French networks

As a player in the gas chain, GRTgaz is acting to reduce all emissions within scope 3 that are 'not directly manageable', consisting mainly of the upstream part of the gas chain and its international supply chains, and gas combustion by consumers (99.4% of natural gas emissions in France). GRTgaz is strongly committed to achieving carbon neutrality by 2050 and is promoting the development of renewable and low-carbon gases including hydrogen, and their recovery through the gas networks, as a replacement for natural gas.

POLICIES AND RESOURCES IMPLEMENTED

To accelerate the energy transition, two strategic areas have been developed by GRTgaz: adaptation of its industrial resources to maximise the supply of renewable gases, and support for the development of renewable gas production activities.

2021 results

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVE 2024	OBJECTIVE 2030	OBJECTIVE 2021	RESULTS 2021
Annual production capacity of renewable gases connected to the networks in TWh per year	**4.1 TWh**/year in 2020	**12 TWh**/year	**49 TWh**/year	**8 TWh**/year	**6.417 TWh**/year

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IN MOTION

X 12

Delivering a twelvefold increase in annual production capacity of renewable gases connected to the networks is the aim of GRTgaz between 2020 and 2030, raising this capacity from 4.1 TWh to more than 49 TWh in ten years.

ANAEROBIC DIGESTION

In 2021, the target for annual biomethane production capacity connected to the networks was not met, but the result achieved was still very satisfactory: 6.4 TWh compared to a target of 8 TWh. The delay in commissioning certain anaerobic digestion units, linked mainly to the Covid-19 pandemic, led to slippage in the timetable for starting projects, but this should not affect the target for 2024.

The annual production capacity connected to the networks in 2021, at 6.4 TWh, is evidence of an acceleration in the industrialisation of the biomethane sector, and for GRTgaz there is increasing standardisation of processes, equipment, commissioning methods and the establishment of a cross-functional multidisciplinary team. A further 25 anaerobic digestion units were connected to the GRTgaz network in 2021, doubling the number, and two reverse flow facilities[10] were commissioned. These facilities mean that surplus renewable gas can be transported to other regions or stored. Reverse flows are a concrete illustration of the cooperation between system operators to maximise the share of renewable gas consumed.

PYROGASIFICATION

Pyrogasification has reached a sufficiently advanced stage of technological maturity to plan for the construction of the first industrial-scale facilities in the next few years, with widespread roll-out after 2023. GRTgaz continues to support the sector by being a partner in certain regional projects such as Titan V[11] in Pays de la Loire and Plainénergie[12] in Auvergne-Rhône-Alpes.

HYDROTHERMAL GASIFICATION

Launch of the first national work group (WG) on hydrothermal gasification in 2021

Who? GRTgaz launched this work group (WG) in March with 26 multi-sector partners[13]. It is an open group that continues to expand, and now has more than 30 partners across the whole hydrothermal gasification value chain: developers, renewable gas producers, water and waste treatment companies, users, equipment manufacturers, associations, design offices, gas network operators, research laboratories and local communities.

Why?

- To contribute to the energy transition and circular economy objectives.
- To lead, structure and consolidate the hydrothermal gasification sector, to ensure it can achieve a sustainable position in the French energy landscape by the end of 2023.
- To create a multi-player and multi-use ecosystem to give the technology a regional anchor and to successfully bring it up to industrial scale.
- To refine the business model of the technology by assessing the cost of the different technologies, giving a value to positive externalities, and evaluating the gains in terms of waste treatment for a given input.

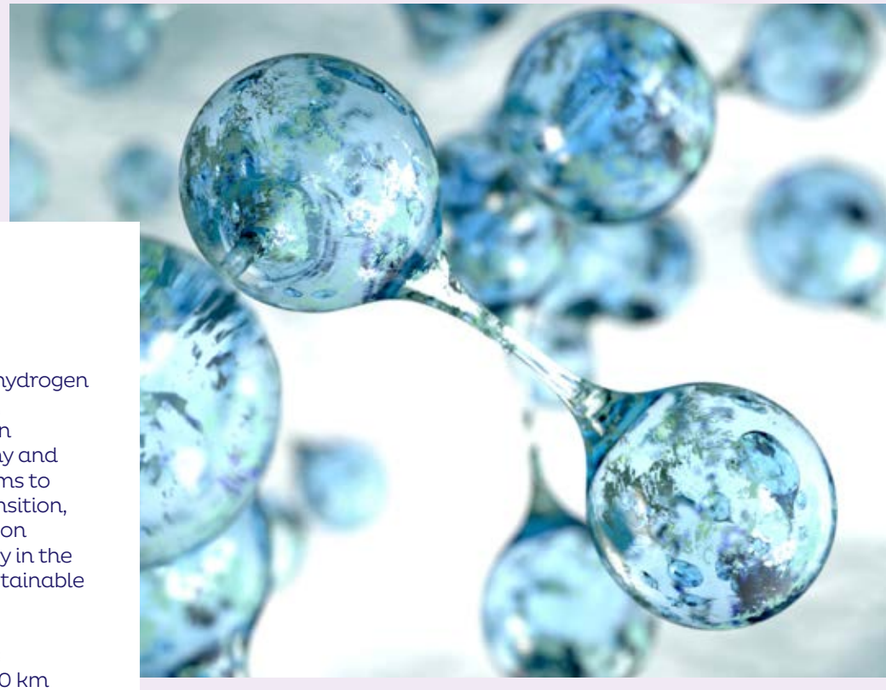
RENEWABLE AND LOW-CARBON HYDROGEN

GRTgaz is convinced that the development of hydrogen requires the availability of dedicated infrastructure that can carry and store large quantities of hydrogen. linking production and consumption areas locally, nationally and eventually at European level.

In 2021 GRTgaz stepped up its R&D to analyse the ability of natural gas networks to accommodate hydrogen injection projects where the hydrogen would be mixed with natural gas. The FenHYx test bench in Alfortville, developed with the support of the Île-de-France Region, is an illustration of this research programme.

In line with its CAP24 corporate culture, in 2021 GRTgaz also set up a hydrogen department to be a key contact for production and consumption partners to support the development of hydrogen consumption areas and the transmission systems to support them.

10/ A facility that directs surplus biomethane from the downstream distribution system to the upstream transmission system. The flow therefore becomes bi-directional. Reverse flow can maximise the injection of biomethane into gas networks.
11/ An industrial demonstration pilot to produce gas that is 100% made in France from waste. For more information, see https://www.grtgaz.com/medias/medias/communiques-de-presse/titan-v.
12/ First project in Europe to transform non-recycled waste into renewable gas, combining pyrogasification and biological methanation. For more information, see https://www.grtgaz.com/medias/communique-presse/plainenergie-transformer-nos-dechets-residuels-gaz-renouvelable.
13/ Agence de l'eau Loire Bretagne, Association française du gaz (AFG), Amorce, Arol Energy, Banzo, Carene, Cerema Ouest, CEA Liten, ENGIE, Greenmac, GRDF, GRTgaz, Ineris, Leroux et Lotz Technologies, Naldeo, Naskeo, Nevezus, Prodeval, S3D, SAUR, Suez, Syndicat des énergies renouvelables (SER), Top industrie, TreaTech, Veolia, VINCI Environnement, WeNext.



MOSAHYC
(Moselle Sarre HYdrogen Conversion)

The first cross-border hydrogen pipeline project in Europe, launched in March 2020, in cooperation with Germany and Luxembourg, mosaHYc aims to accelerate the energy transition, while decreasing the carbon footprint of heavy industry in the region and supporting sustainable mobility.

In concrete terms, this project will establish a 100 km hydrogen network (with 80 km of reconverted gas pipelines) between Völklingen, Perl (Sarre), Bouzonville and Carling (Moselle), for a maximum capacity of 75,000 m^3/h.
Its operation will produce no CO_2 emissions. It is expected to be commissioned as early as 2026. The dynamic partnership undertaking the project is further supported by the creation of a European economic interest group baptised the "Grande Region Hydrogen", bringing together industrial companies involved at various steps of the value chain: production (H2V, Steag, Gazel Energie), transport (Enceuo, Creos, GRTgaz) and consumption (Hydrogène de France Energy and SHS – Stahl-Holding-Saar GmbH). This group aims to develop the local hydrogen ecosystem.

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IN MOTION

100 KM!

This is the length of the hydrogen network created by the mosaHYc project, launched in March 2020, between Moselle and Sarre. To accelerate the energy transition, it will offer a maximum capacity of 75,000 m^3/h to be used for heavy industry and sustainable mobility.

4.3.3 Commitment 3
ENABLE ACCESS TO AFFORDABLE AND SUSTAINABLE ENERGY

2024 objectives: 20% decrease → 2028: 30% decrease in cost of injection and reverse flow facilities

2024 objectives: €0.48 on average for access to the gas transmission network

GRTgaz is doing its part to ensure its customers access to competitive and increasingly sustainable energy. With decreasing volumes transported and a decrease in the associated revenue over time, GRTgaz is implementing performance-boosting measures to optimise its costs in an effort to reduce the cost of biomethane facilities, thus allowing producers to connect to them under optimal economic conditions.

POLICIES AND RESOURCES IMPLEMENTED

GRTgaz must ensure all its customers **fair access to diversified supply sources, through a transmission network, at costs consistent with an efficient operator**. GRTgaz's business activity is part of a regulated monopoly. The tariffs, *set* according to the authorised revenue, are defined after negotiation every four years as part of the ATRT (access by third parties to the transmission network) tariff by the French Energy Regulatory Commission (CRE). The CRE monitors the economic efficiency of GRTgaz to ensure that consumers are getting the best service at a fair price.

With the planned decrease in energy and, in turn, the decrease in revenue, GRTgaz must somehow maintain margins allowing it to invest in adaptation of the network and connection of renewable gases. As part of this transformation, GRTgaz has undertaken a **performance plan** to be implemented until 2024, in response.

2021 results

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2030	OBJECTIVES 2021	RESULTS 2021
Decrease in injection and reverse flow facility costs	**2020**	**-20%**	**-30%** by 2028	**-5%**	**-6%**
Average cost of access to the gas transmission network (euro cents per kWh/day/year)	2019: **€0.45**	**€0.48**	Maintenance of acceptable capacity and costs, negotiated with the CRE	**€0.44**	**€0.44**

GRTgaz also plans to contribute to efforts in the renewable gas production sectors to reduce costs. For example, the biomethane sector has set a goal of 30% reduction of all production costs by 2030. GRTgaz is doing its part with investments related to injection and reverse flows.

The goal set for 2021 of a 5% decrease in the cost of injection and reverse flow facilities was exceeded. Various actions taken for performance with respect to the design and construction of structures, and injection and reverse flow, were carried out during the year to achieve this result.

At the company level, a reduction in costs was achieved thanks to the implementation of injection station order pooling and the establishment of a dedicated team. This task force *system* allows GRTgaz to commission several systems simultaneously, over a reduced time period, within a given geographic area. GRTgaz has optimised the operation of its injection stations to provide savings to producers. Performance- and simplification-focused actions have also been implemented for reverse flow facilities.

As part of regular dialogue with the CRE, GRTgaz is continuing in line with the tariff trajectory provided for in the ATRT7, while maintaining the level of interconnectivity and performance of its network, thus permitting users to optimise their gas sources.

As part of its 2024 performance plan, GRTgaz has defined an operating cost reduction objective, recorded in its business plan. In 2021, each department worked to develop a roadmap and performance plan to be implemented starting in 2022.

THE BIOMETHANE TASK FORCE

Commissioning of a biomethane injection station at Bar-sur-Seine

The biomethane team, created in January 2021 and located at Cormontreuil in the Marne, is a multidisciplinary team with various skills at its disposal. They include supervision, operation, project management, network and special techniques.

The biomethane task force was mobilised in March 2021 to carry out functional testing essential to the commissioning of the biomethane injection station in Bar-sur-Seine.

This crucial step checks all station functions, including the ability to measure and meter the gas flowrate, and ensures its quality, odorisation and the proper operation of alarms (flowrate, pressure, smoke, etc.). There are as many functional steps as there are skills needed in this sequence (operations management, technical management, project and engineering management)!

4.3.4 Commitment 4
GROW SUSTAINABLY

2024 objectives: 20% → 2028: 30% investment spending (Capex) dedicated to renewable gases and the carbon trajectory

In an overall context of accelerating transformation, GRTgaz will need to adapt to respond to environmental, technological and societal challenges. GRTgaz's commitments relating to the development of renewable gases are reflected in its redeployment of resources for projects linked to the energy transition and environment. They rely on innovation in all business activities and practices, employing experimentation, research and development. They are a testament of the transformation of the company's economic model, with a growing share of resources dedicated to building a model based on renewable gases, fully compatible with carbon neutrality, while preserving the value creation of the company over time.

↗

IN MOTION

13% OF CAPEX

This is the share of investment spending dedicated to renewable gases and the carbon trajectory of GRTgaz.

POLICIES AND RESOURCES IMPLEMENTED

The 2021 investment programme of GRTgaz focuses on three major areas: industrial maintenance of facilities, its low-carbon trajectory (reduction of methane emissions and development of renewable gases) and customer needs (in particular third-party connection and works). This programme is negotiated and validated each year with the French Energy Regulatory Commission (CRE).

When it comes to R&D, RICE (*the Research and Innovation Center for Energy*), GRTgaz's integrated R&D centre, is responsible for guiding the transformation of energy infrastructure to a safe, efficient and carbon-neutral future. RICE works in three research areas.

3 R&D AREAS TO SECURE, OPTIMISE AND PREPARE THE INTEGRATION OF RENEWABLE, LOW-CARBON ENERGIES

Industrial safety
- → Control impact on the safety of people and property
- → Ensure the integrity of infrastructures
- → Ensure the integrity of distribution structures*

** Service for third parties.*

Energy transition and environmental exemplarity
- → Prepare networks for the arrival of renewable methanes
- → Prepare the networks for the arrival of hydrogen
- → Foster the development of new efficient gas uses
- → Manage tomorrow's networks
- → Develop a forward-looking vision of the energy sector

Performance and operational excellence
- → Develop new work methods and organisations
- → Optimise the sizing and operation of infrastructures
- → Optimise asset management, infrastructure operation and maintenance
- → Reduce the impacts of gas-related activities
- → Develop new materials, monitoring systems and construction methods

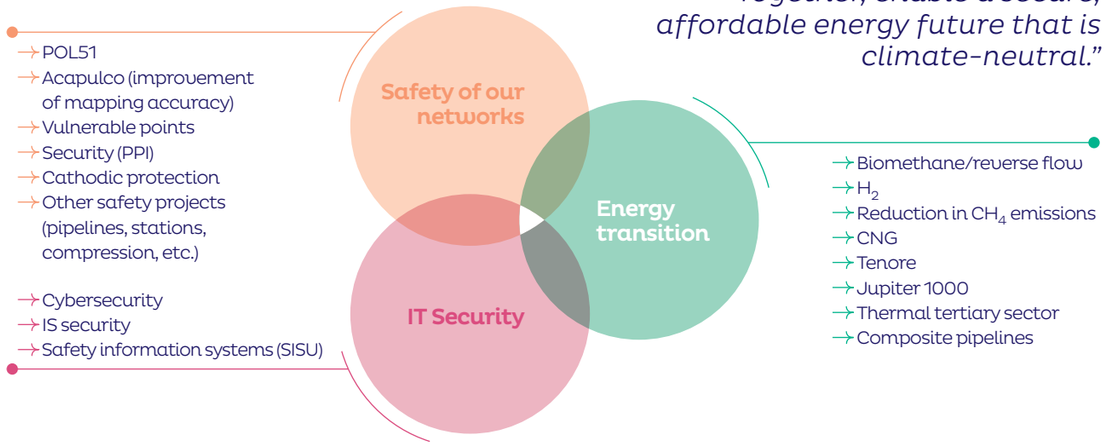
2021 results

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVE 2024	OBJECTIVE 2030	OBJECTIVE 2021	RESULTS 2021
Share (in %) of investment spending (Capex) dedicated to renewable gases and the carbon trajectory	**11%** in 2020	**20%**	**30%**	**13%**	**13.5%**

Of the 458 million euros of investment contributed in 2021, 33% was directly linked to the implementation of GRTgaz's corporate purpose *(see below)*, focused on a **secure** and **climate-neutral future.** This share amounted to a total of 152 million euros.

SCOPE

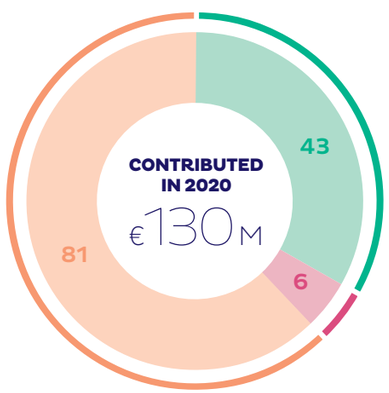
"Together, enable a secure, affordable energy future that is climate-neutral."

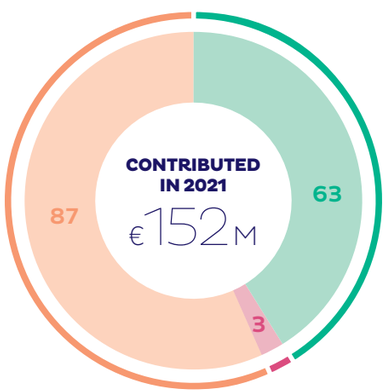


DATA IN FIGURES

Total investment: €457 M

- Energy transition
- Network safety
- Cybersecurity





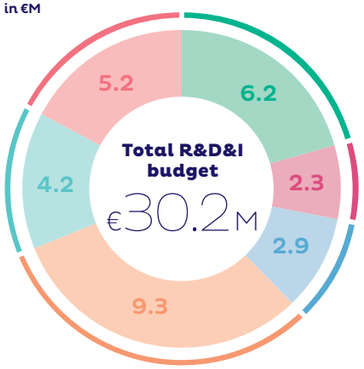
In 2021, 13.5% of investment spending (Capex), for a total of 63 million euros, was allocated to renewable gases and the carbon trajectory of GRTgaz, an amount well beyond the defined objective. The increase in Capex with respect to the previous year was mainly due to investment related to GRTgaz's biomethane injection and reverse flow. These 63 million euros correspond to capital expenditures that are EU taxonomy-eligible.

HIGHLIGHTS

CLOSE-UP ON R&D

HOW ARE GRTgaz's R&D efforts distributed?

in €M



- Prepare networks for the arrival of hydrogen
- Reduce the environmental impact of gas activities
- Prepare the networks for the arrival of new gases
- Optimise the operation and safety of the gas system
- Energy forecasting, network management and optimisation
- Innovation

THE INNOVATION DEPARTMENT OF GRTgaz

In 2020, a new entity was created to work in conjunction with RICE: **the innovation department**. Its goal is to accelerate and deploy concrete projects focusing on the major innovation challenges of GRTgaz, in the areas of performance, transformation and preparation for the future. Supported by a developing external ecosystem, it relies on *open innovation*, internal challenge, accelerator and innovation culture tools. More than 70 projects are already in progress. As an example, the "*Brûlage bleu*" (methane burning) project was selected in 2021 for the theme of reduction of methane emissions.

Methane burning

- **Objective:** prevent methane emissions during projects.
- **Principle:** complete combustion of methane to eliminate emissions, methane being a greenhouse gas with a significantly greater warming effect than that of CO_2. Designed in 2019 and 2020, 20 methane burning projects have been tested during maintenance operations in the four regions since 2020. Since 2020, these different methane burning operations have prevented more than 50,000 m^3 of methane emissions from being released to the atmosphere as compared to conventional burning processes.
- **Advantages:** reduced transport and installation times, complete combustion, nearly invisible flame, reduced noise and thermal flow, therefore fewer constraints in urban areas.

INAUGURATION OF THE NEW FENHYX FACILITIES IN ALFORTVILLE IN NOVEMBER 2021

INNOVATE TO MEET THE CHALLENGES OF THE ENERGY TRANSITION

The FenHYx project of the R&D platform aims to test the injection of hydrogen in gas infrastructures. FenHYx provides RICE new opportunities for testing in the presence of pressurised hydrogen in different areas, including impact on materials, mechanical strength of steels and the study of corrosion phenomena. A first ambitious research programme was launched by RICE for a consortium of several network operators, energy suppliers and manufacturers of European pipelines. A first series of ageing tests, performance measurement tests and safety tests on materials equipping gas networks (valves, regulators, meters, etc.) will begin at the end of November. FenHYx received financial support from the Ile-de-France region as part of the "*Innovation and structuring of the hydrogen sector*" call for interest initiated in March 2020.

EUROPEAN TAXONOMY

Regulation 2020/852 of 18 June 2020 provides Europe with a taxonomy listing activities defined as sustainable, to facilitate financial investment in sustainable activities and promote transparency in economic and financial activities. This regulation establishes a classification system based on scientific elements of activities considered environmentally and socially "sustainable", in terms of six major environmental objectives. It provides for the publication of KPIs (key performance indicators) used to calculate the percentages of revenue, operating expenses (Opex) and investment (Capex) related to activities corresponding to the definition and technical criteria of the Delegated Acts for eligibility and technical alignment of sustainable activities.

Activities of operators of infrastructures related to fossil fuels, including natural gas, are not taxonomy-eligible. However, the following are eligible:

Activity 4.14: Transport and distribution networks for renewable and low-carbon gases, including:

- **construction and operation of transport and distribution pipelines dedicated to the transport of hydrogen or other low-carbon gases;**
- **conversion, reallocation or adaptation of gas networks for the transport and distribution of renewable gases (such as biomethane) and low-carbon gases.**

Certain research, development and innovation activities are also eligible:

Activity 9.1 Research, development and innovation close to the market, including basic research, applied research and experimental development of solutions, processes, technologies, business models and other products intended to reduce, prevent or absorb greenhouse gas emissions.

On 2 February 2022, the Commission published a draft complementary delegated act making electricity generation using natural gas and nuclear energy eligible as "transitional activities", with a set of strict technical criteria for alignment.

Finally, upstream and downstream of GRTgaz's activities, eligible activities include renewable and low-carbon hydrogen and gas production and carbon capture, CO_2 transport and storage, generation of electricity, heating or cooling using renewable and low-carbon hydrogen or gases or low-carbon fuelling infrastructures (NGV, bio(NGV), hydrogen).

The regulatory system is awaiting complementary texts on four of the six environmental objectives defined by regulation 2020/852. The analysis and implementation of these regulations were still in progress at the time of publication of this report. GRTgaz will use 2022 to refine and define its methodological principles for calculation of KPIs.

It should be noted that, over time, given the transformation taking place in the sector with the development of renewable gases, the share of eligible activities will increase in proportion as renewable gas, low-carbon gas and hydrogen gradually replace natural gas.

4.4/ Our performance to take up the challenges of the environmental transition with our employees and stakeholders SNFP

4.4.1 Commitment 5

ENCOURAGE THE DEVELOPMENT OF SKILLS, DIVERSITY AND QUALITY OF LIFE AT WORK FOR OUR EMPLOYEES

2024 objectives

- **% of employees trained > 80% per year**
- **Gender equality index ≥ 94**
- **Commitment rate ≥ benchmark for France**[14]
- **Index of quality of life at work ≥ benchmark for France**
- **% of women in the workforce 25.5%**

GRTgaz's human values are the core of our company, which strives to serve the public, and are central to the implementation of our corporate purpose and the CAP24 corporate culture. GRTgaz is constantly confirming its overarching goal to promote the health of its employees, and more broadly their quality of life at work, by facilitating the development of skills and combating all forms of discrimination. Social dialogue is a crucial part of the company's social policy, leading to the creation of new multi-location working arrangements and management methods promoting initiative, progress and innovation. Providing work-study opportunities is also a key part of ensuring the transmission of knowledge acquired by our employees, promoting the employment of young people and preparing for the future. All of these initiatives strengthen the commitment of employees to the corporate purpose of the company and increase its attractiveness.

Recognized by the Diversity Label awarded by Afnor since 2015

Signatory of the L'Autre Cercle LGBT charter[15] (lesbian, gay, bisexual and transgender) inclusion **in 2018 Creation of a LGBT+ & allié.e.s (LGBT+ & allies) collective** in May 2020

For the 6th consecutive year, GRTgaz was ranked among the best companies at which to complete an internship or work-study programme

Winner of the Silver award in 2021, in the category of quality of life at work, in the 8th edition of "Victoires des leaders du capital humain" (Victories of human capital leaders) organised by *Décideurs Magazine*

14/ This benchmark is met with 150,000 employees for 150 companies. Benchmark source: Willis Towers Watson. The standard includes a weighted average of results of surveys conducted with employees from various sectors working in France.

15/ Four principles to which GRTgaz is committed: Create an inclusive environment for female employees and LGBT+ employees. Ensure equality in rules and treatment of all employees, regardless of sexual orientation and gender identity. Support employees who have been victim to discriminatory comments or acts. Measure progress and share best practices to foster positive changes in the general professional environment.

POLICIES AND RESOURCES IMPLEMENTED

To ensure the success of its transformation project, GRTgaz has structured CAP24 around a human project aiming to boost the attractiveness of the company, employee commitment and, more generally, improve the quality of life at work.

OBJECTIVES OF THE CAP24 HUMAN PROJECT	Resources implemented
Give free rein to initiatives, encourage innovation, allow experimentation, the right to make mistakes and to learn from one another	→ **Feedback** Support the development of a **Feedback culture** in each team → **Experimentation** Instil a mindset open to **experimentation** → **Listening to employees** **Measure employees' experience** over time, and in particular the impact of transformations on **commitment** and **quality of life at work**
Maintain and develop our technical and behavioural skills	→ **Vision of skills** Ensure that employees maintain a pragmatic operational **vision** that is multidisciplinary in terms of **skills** → **Soft skills** Develop each employee's understanding of the need for **soft skills** → **Managerial community** Develop **managerial learning communities** to ensure the widespread emergence and adoption of new practices
Define together the many future ways of working, both remotely and on site: MULTIPLEX approach	→ **Multiplex** **Together,** define the many ways to work remotely in the future **Negotiate, conclude and deploy a global agreement**

For many years now, GRTgaz has been fostering the professional development of its employees by offering a multitude of training opportunities, as well as functional and geographical mobility within the company and companies in the electricity and gas industries.

GRTgaz has also made diversity a key driver of its development, by supporting all employees with disabilities, improving the gender balance in the workplace, starting with recruitment and throughout one's professional career, and developing work-study options.

2021 results

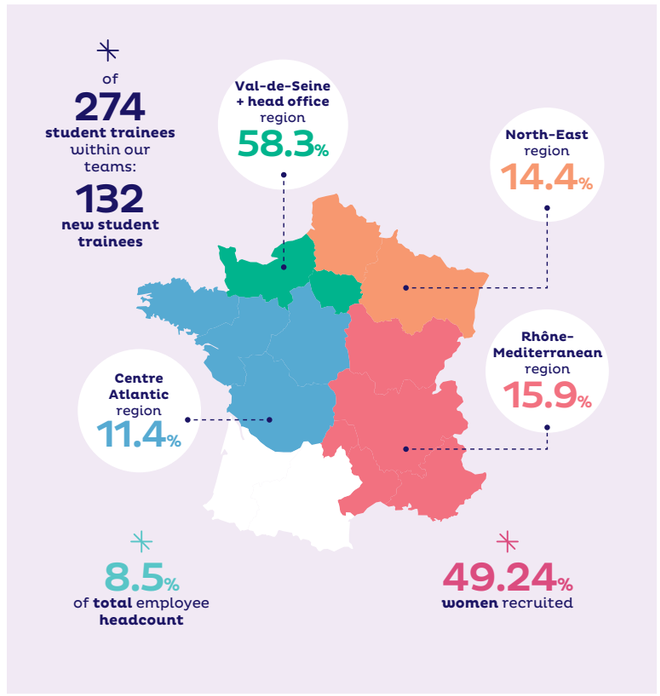
KPI	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2030	OBJECTIVES 2021	RESULTS 2021
Key performance indicators					
Percentage of employees trained[16]	2020: **63%**	**80%**		**80%**	**79.6%**
Employee commitment rate	2020: **77** (benchmark in France[17] 76)	**=** or **>** benchmark	**=** or **>** benchmark	**=** or **>** benchmark	2021: **74** (benchmark in France 78)
QLW index	2020: **75** (benchmark in France 69)	**=** or **>** benchmark	**=** or **>** benchmark	**=** or **>** benchmark	2021: **72** (benchmark in France 73)
Gender equality index	**≥ 94**	**≥ 94**	**≥ 94**	**≥ 94**	**= 94**
INDICATORS					
Feminization rate[18]	2020: **24.2%**	**25.5%**		**24.7%**	**24.58%**
Work/study programme rate	2020: **8.5%**	**8%**		**8%**	**8.41%**
Disabled worker rate[19]		**6%**		**4.6%**	**4.2%**

When it comes to training, the rate of employees trained (in %) has nearly been reached: 79.6%, for an objective of 80%, up significantly from its low point of 63% in 2020, linked to the health crisis. This small gap can still be explained by the health situation, which has limited the number of in-person training opportunities.

The commitment rate, based *on* a survey taken by all employees, decreased this year, with a percentage of 74 compared to 78 for the benchmark in France[20]. Items related to involvement and professional accomplishment increased, whereas product and service uptake decreased. This decrease is a result of uncertainty concerning the future of gas in the French energy mix. The quality of life at work also decreased 3 points, though the result remains above the 2018 result (69 points).

16/ Only permanent contracts are included (CDI).
17/ Benchmark source: Willis Towers Watson.
18/ Only permanent contracts are included (CDI).
19/ This result is for 2020, as the 2021 result only becomes available in the second half of 2021.
20/ Benchmark source: Willis Towers Watson.

2021 WORK-STUDY CAMPAIGN



As for the gender balance, GRTgaz had aresult of 94 points out of 100 for the gender equality index, which is 19 points above the minimum threshold set by the government and requiring the establishment of a corrective plan. The % of women working on a permanent contract (CDI) did not increase to that expected this year, due to less recruitment/mobility (a decrease of approximately 30% in flows). In terms of work-study programmes, the 2021 campaign was particularly complex, with a mass return to the market of employers who had not recruited in 2020. This competition for talent led to a large *turnover* (30 candidates withdrew after intended hiring on a fixed-term contract (CDD)). The situation in 2022 should be back to normal.

Since 2020, a new regulation has gone into effect, modifying the methods for calculating the financial contribution in relation to the obligation to employ disabled workers. This change led to a gap between the rate at GRTgaz and the legal rate (6%) that it will take several years to fill, with indirect hires no longer being taken into account. In 2021, three people on permanent contract (CDI), five people on fixed-term contract (CDD) and four interns or agency workers with disabilities were welcomed. As of the end of 2021, GRTgaz lists 115 employees (up from 110 employees in 2020) as having disabilities.

HIGHLIGHTS

THE MULTIPLEX APPROACH
AN AGREEMENT ON THE NEW WORK ARRANGEMENTS WAS SIGNED IN MAY 2021

https://www.grtgaz.com/medias/actualites/accord-nouvelles-modalites-travail-video

This agreement covers four major areas:
organisation of activities with multiple work locations, team and meeting practices, changes in the role of management and teams; increase in teleworking to three days a week for activities allowing this; issues related to the right to disconnect, work-life balance; and rules for the use of digital tools and workspaces associated with these new work arrangements.

LAUNCH OF A NEW E-LEARNING TOOL BY GRTgaz DURING THE EUROPEAN DISABILITY EMPLOYMENT WEEK IN NOVEMBER 2021

This training available to all employees helps them to understand the issues related to disability in the professional environment and to develop proper behaviours and good practices for working with a disabled person.

4.4.2 Commitment 6

SUPPORT OUR CUSTOMERS IN THEIR ENERGY REQUIREMENTS AND CONVERTING THEIR ACTIVITIES TO NET ZERO CARBON

2024 objective

→ **20 partnerships with customers on decarbonation projects**

GRTgaz supports its customers with concerted and flexible solutions adapted to their needs, as part of our approach based on permanent dialogue and partnership. When it comes to its public service missions, the company relies on consultation and listening to develop its infrastructure, facilitate market access, expand its offer, connect new customers and propose new services.

To accelerate the transition of the French energy system with renewable gases and hydrogen, GRTgaz has placed itself in a position to support its customers and co-create low-carbon gas solutions with them, based on tried and tested methods, in particular in industry, and to develop new uses, as is taking place in mobility with NGV (natural gas for vehicles) and bio(NGV).

POLICIES AND RESOURCES IMPLEMENTED

To support its consumer customers in their own decarbonation challenges and projects from now to 2024, GRTgaz has defined a roadmap that can be broken down into three areas: existence of a regulatory framework promoting decarbonation of use via gas (renewable gas, carbon capture and storage, hydrogen, etc.), adaptation of GRTgaz's business approach and offer to incorporate decarbonation, and reliance on "specifiers" (associations, suppliers, design offices, consultants) to promote gas solutions.

2021 Results

KEY PERFORMANCE INDICATORS	OBJECTIVES 2024	OBJECTIVES 2030	OBJECTIVES 2021	RESULTS 2021
Number of partnerships with our customers (in industry and mobility) related to decarbonation	**20**		**5**	**5**
INDICATORS				
Customer satisfaction rate[21]	**> 90%**	**90%**	**> 90%**	**93.7%**

21/ The methodology for calculating the satisfaction rate changed this year, now taking into account six items of the customer satisfaction survey (offers and missions, GRTgaz's image, customer relations, adherence to the code of conduct, information system and network operation), instead of one single item (GRTgaz's image) as in previous years.

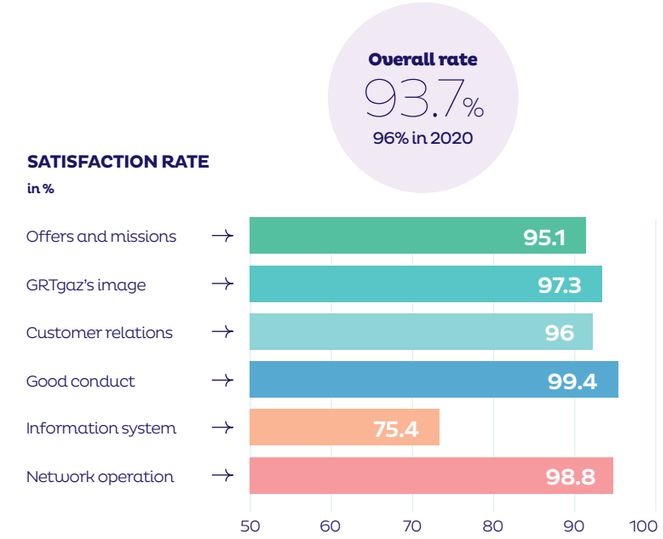
The customers of GRTgaz themselves are facing the issue of decarbonation of their carbon balance. To contribute to the demonstration of relevance of gas solutions (renewable and low-carbon gases, hydrogen, etc.) in the face of these challenges, five partnerships focusing on decarbonation were signed in 2021 with our customers. These projects concern the areas of gas mobility, metering of biogas and testing of hydrogen and renewable gas injection in industrial processes. GRTgaz also promotes the development of gas for mobility by offering the connection of fuelling stations to its network. In 2021, two new connection contracts were signed.

The year 2021 saw increased communication between the business development department and its customers, to define the role of gas solutions in decarbonation of industry and mobility. All employees working in the business development department were trained, at varying levels according to their job, in the issues involved in decarbonation and how to address these subjects with their customers (the "Campus" approach), to help them identify their investment decisions and ensure that gas solutions are taken into consideration in studies and the decision-making process. In addition, several events with customers and "specifiers" (webinars, communications) were organized, providing an opportunity to present and share the various gas solutions that can be used to support decarbonation.

The customer satisfaction rate[22] of GRTgaz in 2021 was 93.7%, which is greater than the objective of 90% initially set, thanks to the mobilisation of GRTgaz's different departments to address the challenges of its customers.

A drop in the average subscription level of transport capacities for industry was observed in 2021, with a decrease of 16 GWh/day/year, greater than the objective set for 2021 of a decrease of 10 GWh/day/year, due to effects linked to progress in efficiency and energy sobriety. This decrease is a result of the economic situation, with, in particular, closure of our customers' sites, as well as optimisation of subscriptions.

22/ From the annual customer survey.



In an effort to remain attentive to market needs and in the interest of continuous improvement, the "Gas consultation" held with customers continued in 2021: There were 12 working groups on subjects related to GRTgaz offers and services created in 2021. There was less activity than in previous years, but this may change in 2022 and 2023, in particular for preparation of the ATRT8 and implementation of the hydrogen and gas market decarbonation package presented in December 2021 by the European Commission.

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IN MOTION

CAPTURING, STORAGE AND RECOVERY OF CO_2

The development of the hydrogen sector will come through better complementarity between H_2 and CO_2. To ensure this, solutions to capture, store and recover CO_2 emitted by the industrial sector must be developed to accelerate the decarbonation of the sector. This opinion is shared by 46% of the industrial companies surveyed by GRTgaz, who believe coordinated planning of dedicated infrastructure is also important.

HIGHLIGHTS

THE AVICAFE* STUDY
A PARTNERSHIP TO DEPLOY CLEANER RIVER TRANSPORT ON THE SEINE AXIS CORRIDOR

GRTgaz, in partnership with VNF (Voies navigables de France [Navigable Waterways of France]), Haropa and the Caisse des Dépôts, decided to launch this project in 2021, to study the technical solutions for operation and fuelling using multiple fuels for river transport. The first results of this study are expected for mid-2022. The goals of this partnership on the Seine Axis, which sees a concentration of 60% of river traffic, are to identify the most relevant technical solutions for the different uses of the river, including gas, hydrogen, electricity and advanced synthetic fuels. For this, a fuelling offer deployment strategy will also be defined, based on the steps already taken by the regions and possible fuelling synergies between the different modes of transport (river, maritime, rail, road).

** Fuelling with low-carbon fuels for river and maritime transport in the Seine Valley.*

CONSULTATION OF PLAYERS
ON THE LOW-CARBON AND RENEWABLE HYDROGEN MARKET IN 2021

On 1 June 2021, GRTgaz and Teréga launched a national consultation of players on the low-carbon and renewable hydrogen market, collecting more than 130 responses to the consultation questionnaire.

What expectations were expressed by the players on the hydrogen market?

Of the respondents, 90% believe **hydrogen will be transported** from the production site to the consumption site ***via* a pipeline network, with 42% forecasting the use of road or rail networks**, and a small minority transport by boat. Hydrogen consumers also spoke of the need for security and diversification of supply. To provide this, the players expect:

- Transparent transport and storage infrastructures accessible to third parties, that are reliable, optimised and interconnected on the European scale, ensuring constant and non-discriminatory access to hydrogen at a competitive rate.
- Visibility of hydrogen infrastructure deployment, allowing hydrogen producers and consumers to plan their investments.
- A future need for the interconnection of the French hydrogen network with a future European hydrogen network.

An initial analysis of questionnaire responses identified the subject of CO_2-H_2 complementarity as a major concern of hydrogen market players. When it comes to this, **46% of industrial customers see CO_2 capture, storage and/or recovery as a solution for the decarbonation of their activity** and are in favour of a CO_2 market consultation, for coordinated planning of dedicated infrastructures.

Next steps

In 2022, regional workshops will continue, with the goal of studying existing or future complementarity on the local scale and consolidating needs and expectations of players when it comes to CO_2 transport infrastructures. Once all surveys and studies are complete, GRTgaz and Teréga will present a **consolidated and shared vision of the future low-carbon and renewable hydrogen market in 2022**.

4.4.3 Commitment 7
CO-BUILD SUSTAINABLE ENERGY SOLUTIONS WITH LOCAL PLAYERS

2024 objectives
- → **Three new pilots/demonstrators (*at least* one per new sector)**
- → **More than 77% of decision-makers consider GRTgaz useful to the energy transition**

For several years now, GRTgaz has been developing its cooperation with regional players, such as local authorities, but also including industrial companies, chambers of commerce, agricultural entities and training and research organisations. The company's goal is to contribute to the emergence of projects with regional players and to demonstrate the utility and relevance of solutions using renewable gases and hydrogen to take up the challenges of the ecological transition, such as decarbonation of uses and regional economy, support of agriculture, sustainable mobility, waste recycling and the circular economy.

Our four regional delegations facilitate and coordinate the actions of different departments within the company to strengthen our relationships with our local partners and support them in facing the challenges of the energy transition.

POLICIES AND RESOURCES IMPLEMENTED

After a specific diagnostic step, strategic inter-department regional plans were established to increase the acceptability of GRTgaz's activities over time and to contribute to the emergence of renewable gas and hydrogen projects in the regions.

GRTgaz is also bolstering its activities undertaken to provide information to stakeholders (national and regional decision-makers, customers, etc.) to support the image of gas in the energy transition and to demonstrate the advantages of renewable gases and hydrogen in the regions.

2021 results

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2021	RESULTS 2021
Number of pilot projects and demonstrators to support concrete progress in the emergence of new gases in regions[23]	**2021**	**3 new pilots/ demonstrators (at least one per new sector)**	**Identify prospects for prioritisation**	**2**
Percentage of decision-makers considering GRTgaz useful to the energy transition (survey conducted every other year)	**2019 74%**	**77%**	**74%**	**91%**

In 2021, GRTgaz's teams took action to develop two projects supporting the emergence of new sectors in regions: the mosaHYc project for hydrogen (Moselle Sarre HYdrogène conversion)[24] and the Ghama project for hydrothermal gasification in the Pays de la Loire region.

GRTgaz worked to promote an environment favourable to the development of these projects, by paving the path for financial and institutional partnerships.

23/ After supporting the regions in 32 projects for the future (studies, partnerships, regional projects, etc.) carried out in 2020, since 2021, GRTgaz has been concentrating on the demonstration of the technical and financial relevance of new renewable gas sectors, through pilot projects and industrial demonstrators.
24/ For more information, see 4.3.2. Speed up the energy transition by developing green gases.

To determine the awareness of the image of GRTgaz and gas fuel in general, GRTgaz conducted its 6th survey in 2021. Of the decision-makers questioned, 91% believe the company is useful to the energy transition, up from 74% in 2019. If we consider this significant increase relative to the decreasing awareness of the company (43% knew of the company *vs* 61% in 2019), we see that the 91% of decision-makers believing that GRTgaz is useful to the energy transition come from 258 decision-makers saying they know GRTgaz (*vs* 74% of 366 decision-makers knowing us in 2019), thus solidifying the positive impact of GRTgaz in the actions and projects it can support or lead.

HIGHLIGHTS

THE GHAMA PROJECT (GREATER SAINT-NAZAIRE AREA): A HYDROTHERMAL GASIFICATION DEMONSTRATOR

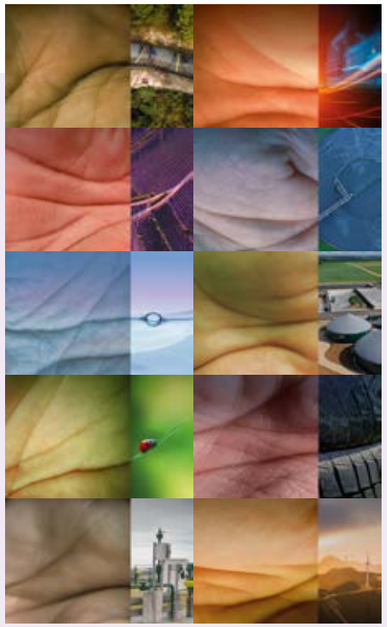
In the greater Saint-Nazaire area (CARENE), GRTgaz, with the community, launched a one-of-a-kind project in France for a hydrothermal gasification demonstrator used to transform and recover wastewater treatment plant sludge in the form of synthetic biomethane, fertilisers and water.

This innovative technology provides a response to future regulations on spillage and composting of wastewater treatment plant sludge. A multi-skill group of public and private entities has come together to support this project. 2021 was marked by the conduct of a feasibility study, which confirmed the suitability of this hydrothermal gasification technology to address needs in Saint-Nazaire. In 2022, the group will focus on consolidating and launching the project with a targeted commissioning date of the end of 2023.

THE ENERGY TRANSITION IS UP TO US! NEW COMMUNICATION CAMPAIGN RELATED TO THE COMMITMENT OF GRTgaz TO THE ENERGY TRANSITION

This campaign is a demonstration of the company employees' commitment to tackling current and future energy challenges. Through the testimony of 10 employees, it presents the changes within the company and its activities linked to the energy transition, in widely varying areas including instrumentation, automation, data, R&D and cybersecurity.

Ten topics are covered by taking a look at the different challenges GRTgaz has mobilised to address: decarbonation of the gas network, environmental respect at worksites, digital transformation, the regional focus of facilities and renewable gas or carbon-neutral technologies (anaerobic digestion, pyrogasification, hydrothermal gasification, Power to Gas and hydrogen).



4.5/ Our performance to conduct our activities responsibly SNFP

Safety, ethics and environmental protection are central to GRTgaz's activities.

4.5.1 Commitment 8

ENSURE THE SAFETY OF PEOPLE AND INFRASTRUCTURES AND THE CONTINUITY OF OUR SERVICES

Objectives 2024 → 2030
9,750 km → 31,750 km of pipelines checked for renewal of suitability for service

2024 objectives
- → **Frequency rate of employees ≤ 1.7 and contractors ≤ 7**
- → **100% of new hires trained on cyber security per year**
- → **Delivery station supply interruption rate < 0.2%**

For GRTgaz, the safety of employees and contractors, its facilities and its information systems is a permanent and crucial objective. This is a key factor in performance and risk prevention and control within the company.

POLICIES AND RESOURCES IMPLEMENTED

In health and safety, the company's goals are presented in an action plan: *"Our collective safety and industrial safety goals"*. This document, updated each year, highlights the main lessons learned from major events throughout the year related to health and safety, industrial safety and cyber security. It identifies priority areas for the next two years and the corresponding actions.

Industrial risk is controlled through the implementation of prevention, maintenance and monitoring policies under the ministerial order of 5 March 2014 (governing the integrity of gas transmission pipelines). The integrity of GRTgaz's structures is ensured *by* an inspection of structures carried out every 10 years, followed by any necessary repairs to ensure that they are suitable for service over time.

The cyber security risk is managed right at the top of the company. A cyber security management system based on ISO2700x is currently being deployed. The topic is regularly discussed at the GRTgaz Executive committee meetings. The information systems security strategy has four components: governance, asset management, user awareness and readiness for an attack.

The Covid-19 pandemic shed a light on the importance of continuity in our activities for our stakeholders. All policies and action plans implemented aim to maintain an excellent level of supply continuity for our customers, even when faced by extreme events (pandemics, climate events, etc.).

Results in 2021 for health and safety of employees and contractors

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2021	RESULTS 2021
Employee accident frequency rate	**≤ 1.6** 2020	**≤ 1.7**	**≤ 1.9**	**2.5**
Contractor accident frequency rate	**≤ 6** 2020	**≤ 7**	**≤ 7**	**9.4**
Prevention rate	**≥ 6** 2020	**≥ 0.6**	**≥ 0.6**	**0.54**

After a long phase of significant improvement since 2013, allowing us to slip to very low accident levels, since 2019, GRTgaz has observed a deterioration in its health and safety results. In 2021, the employee accident frequency rate was 2.5 and that of contractors 9.4, higher than the objectives. In response, GRTgaz has taken action to raise awareness on the risks linked to the recent accidents, such as: *"proximity between people and machinery"*, electrical risks involved in repairs and carrying a booklet of requirements for risk prevention personnel (electrical CPP), or, for example *"the use of grinding machines"*.

At the request of general management, a day was organised for discussion and rallying of teams around safety issues, allowing them time to reflect, during the week of 19 October 2021.

An analysis of recent accidents, concentrating on HIPOs (high-potential events) in particular, was undertaken by the prevention and risk management department, with corrective actions to be implemented based on findings. In September 2021, a HIPO industrial accident occurred on the Ars-sur-Formans interconnection station. During the start of gas supply on a new structure, an explosion in a part of the interconnection occurred, throwing two employees nearby to the ground, resulting in two minor wounds and significant material damage. This incident was followed by an in-depth analysis, feedback and adjustment of practices monitored at the very top level of the company.

With accidents having significantly increased in number with the health crisis, the year 2022 will make professionalism and gas culture the major cause of *"Our collective goals for 2022"*.

Network safety results

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2030	OBJECTIVES 2021	RESULTS 2021
Number of km of pipelines having undergone a fitness for service renewal	From July 2021	**9,750 km**	**31,750 km**	**2,450 km**	**2,720 km**
INDICATORS					
Number of incidents involving third-party attacks on pipelines	**2020: 7**	**< 2**	**< 2**	**≤ 3**	**5**

GRTgaz considers network safety its top priority. There is a risk of industrial accidents occurring during third-party works near the network or following a pipeline inspection and maintenance failure. The exceptional accident mentioned above that occurred at Ars-sur-Formans led to questioning of the implementation of methods used to restore the gas supply on complex structures.

When it comes to kilometres of pipeline for which suitability for service has been renewed, GRTgaz reached its 2021 target of 2,720 km of pipeline. This target will be gradually increased to around 3,700 km per year.

In terms of third-party work, the number of interferences recorded has fallen consistently over two decades. Five incidents related to third-party attacks were registered in 2021, compared to 35 incidents in 2000, and seven in 2020. Of these five incidents, four were in the Paris region. The majority of works managers completed their declarations of intent to start works (DICT), but did not follow the recommendations issued by GRTgaz during the systematic meeting on the worksite. To address these incidents, GRTgaz implemented an external communication mechanism (letter signed by the CEO of GRTgaz, brochure distributed on worksites) for companies in the Paris region having declared works since 2020, to highlight warnings regarding the need to follow all established rules[25] for safe completion of works and to prevent incidents on pipelines.

25/ Complete a declaration of intent to start works, hold an on-site meeting with the operator, follow regulations to prevent damage and operator requirements.

Information systems security results

KEY PERFORMANCE INDICATORS	OBJECTIVES 2024	OBJECTIVES 2021	RESULTS 2021
Number of employees who received cyber security training/year	**100% of new hires**	**100% of new hires**	**80%**
Number of serious information security incidents	**0**	**0**	**0**

2021 was marked by ever more complex and numerous cyber threats. The national agency for information systems security continuously underlined the very high surge of cyber attacks, particularly those involving ransomware. Despite a growing number of threats and attacks, no serious incident (major loss of IS) in terms of data security has occurred since 2017.

Asset securing is based on a compliance and risk reduction programme for infrastructures and new cyber security products and services.

Employee awareness training is an essential part of cyber security, ensuring everyone is accountable and actively involved in information systems security, as they are in the occupational health and safety goals. This is the objective of the awareness plan established at the beginning of each year.

New employees and contractors complete a series of *e-learning courses* to help raise their awareness. In 2021, 80% of new hires completed awareness training on cyber security risks through e-learning "Cyber security, the base", in an effort to reach the objective of 100% in the future. Regular personalised reminders for managers are planned in order to reach this objective.

Awareness training content on various topics is also freely accessible on our Learning Management System (LMS).

Several events are offered to employees and contractors: orientation for new hires, webinars, communications using internal channels (intranet, Yammer, press releases for executive committee members and cyber security contacts, etc.). GRTgaz also observes cyber security month, held in October. This year, there were 10 webinars that month, as well as events on Yammer and a 30-day cyber challenge. A cyber security contact network was also created at the management level of each GRTgaz department. These contacts act as cyber security sponsors within their departments.

Awareness training also includes phishing exercises. In 2021, four phishing campaigns were led to test and develop the proper responses of all users of the GRTgaz IT system. Lastly, a crisis exercise was organised.

Results for continuity of our activities

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2021	RESULTS 2021
Delivery station supply interruption rate	**2020: 0.08%**	**< 0.2%**	**≤ 0.2 %**	**0.08%**

Supply continuity is at the heart of the historical missions of GRTgaz. The health crisis highlighted the importance of business continuity plans and the company's ability to handle events complicating business continuity. The delivery station supply interruption rate in 2021 was better than the established objective of < 0.2%, at 0.08%.

HIGHLIGHTS

MOBILISATION OF TEAMS FOR PROMOTION OF OCCUPATIONAL SAFETY ISSUES
SAFETY DAY IN OCTOBER 2021

Faced with the increasing rate of accidents, general management took action by organising a safety day to allow teams to discuss safety issues and propose areas for improvement. The teams' proposals were summarised by the prevention and risk management department and examined by the executive committee. In the end, five measures were adopted relating to prevention, management of outsourced services and the workload of operations teams.

GRTgaz MEMBER OF THE CYBER CAMPUS

GRTgaz is now member of the Cyber Campus, a project initiated by the French president. Cyber Campus will be, for 2022, the emblem of cyber security, bringing together major national and international stakeholders in this area. It will provide a site where companies (large groups, SMEs), State services, organisations, research entities and associations can gather. The Cyber Campus foresees the implementation of actions to unite the cyber security community and to develop synergies between these different entities, to create a unified ecosystem and joint proposals.

CAMPUS CYBER

DEVELOPMENT AND DEPLOYMENT OF A NEW COMPUTER TOOL FOR MANAGEMENT OF STRUCTURE INTEGRITY

This new tool, the various components of which are to be deployed over time by 2023, aims to meet performance needs to assist with decisions concerning inspections, repairs and improvement of the cathodic protection of GRTgaz. It is also employed in the application of regulatory requirements relating to integrity. By reworking the integrity information system, this tool will allow the company to:

- improve the quality of pipework maintenance activity traceability by simplifying the data update and cross-referencing process;
- improve the relevance of data analysis to take into account geographic and environmental data;
- respond effectively to changes in the ministerial order of 5 March 2014.

4.5.2 Commitment 9
CONDUCT OUR BUSINESS WITH SUITABLE ETHICS AND INDEPENDENCE

(see 3.4. The ethics and independence system)

4.5.3 Commitment 10
PROTECT THE ENVIRONMENT (EXCLUDING CARBON) AND BIODIVERSITY FROM THE IMPACTS OF OUR ACTIVITIES

Objectives 2024 → 2030
55% → 100% of sites converted to use of techniques without pesticides

A signatory of the "Companies committed to nature" project piloted by the French office of biodiversity, GRTgaz has created a map of pressures[26] put on biodiversity and its dependence.

GRTgaz's biodiversity strategy can be broken down into three CSR commitments:

- ***"Reduce GRTgaz's carbon footprint"***[27]
- ***"Speed up the energy transition by developing green gases"***[28]
- and ***"Protect the environment (excluding carbon) and biodiversity from the impacts of our activities"***, the commitment covered in this sub-chapter.

A member of B4B+ (Business for Positive Biodiversity, the club of companies for positive biodiversity), GRTgaz participates in reflections concerning the measurement of impacts and *reporting* relating to biodiversity, using the *Global Biodiversity Score*[29].

A member of the Linear infrastructures and biodiversity club, GRTgaz continues to support knowledge in ecological and infrastructure issues and co-funds research in this area.

For several years now, GRTgaz has been working in partnership with the Federation of Regional Natural Parks of France and locally with regional natural parks to identify and test new approaches to preserving and maintaining ecosystems linked to the company's land occupation.

26/ According to the five pressures identified by the IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services): change in land use exploitation of resources, climate change, pollution and invasive exotic species.
27/ For more details on this commitment, see section 4.2.1. Reduce our carbon footprint.
28/ For more information on this commitment, see section 4.2.2. Speed up the energy transition by developing green gases.
29/ This is a business biodiversity footprint assessment tool developed by CDC biodiversité, for the club B4B+.

GRTgaz is aware of its dependence on biodiversity and the pressures it can place on living organisms with respect to the five pressure families identified by IPBES: A total 32,000 km of underground networks (with 90% in rural or natural areas), 6,000 above-ground industrial facilities and greenhouse gas emissions linked to its activities... We are responsible for these resources borrowed from nature, the regions and local residents, just as we are for the impacts of the product we are transporting.

POLICIES AND RESOURCES IMPLEMENTED

GRTgaz aims to reconcile the land occupancy of its pipeline network, of which 6,000 kilometres are located in protected natural areas, by ensuring the preservation and maintenance of ecosystems. Its ambition is to turn its network into a mesh of ecological continuities and to reconcile the right of way and upkeep of its network with the preservation and conservation of ecosystems. Its 26 compression stations are each equipped with an action plan and are maintained in accordance with the zero-pesticide policy.

For all projects involving the construction or modification of a structure, GRTgaz follows the "Avoid, reduce, compensate" approach, applying avoidance measures to the extent possible and systematically applying reduction and compensation measures. Depending on the project, GRTgaz holds consultations with the stakeholders concerned. The approach is formally defined in a process designed to manage the impacts and relationships with stakeholders, implemented each time a project so requires. Depending on the project, administrative and public enquiry processes are implemented. GRTgaz strives to secure the acceptance of each stakeholder before building infrastructures, to ensure the project is more easily accepted and integrated.

To ensure that maintenance conditions respect biodiversity, the company uses differentiated management for part of its easements[30], mainly located in sensitive natural areas. It also works to find alternative solutions to the use of pesticides for maintenance of its industrial sites.

GRTgaz shows its commitment to environmental conservation with its voluntary initiatives related to management of waste from its industrial and tertiary sector activities.

2021 results

KEY PERFORMANCE INDICATORS	REFERENCE	OBJECTIVES 2024	OBJECTIVES 2030	OBJECTIVES 2021	RESULTS 2021
% of sites converted to zero pesticides	**29% of industrial sites converted by the end of 2020**	**55% of sites converted (including % by revegetation)**	**100%**	**55% of sites converted to use of alternative techniques without pesticides**	**54% of sites converted to use alternative techniques without pesticides (13 sites are experimenting with revegetation)**
Share of active projects affected by legal action	**0**	**NS**	**NS**	**NS**	**0**
INDICATORS					
Percentage of waste recovered		**> 90%**	**> 90%**		**98.5%**

In 2021, GRTgaz nearly reached its objective to convert 55% of its industrial sites to be aligned with the pesticide-free policy, with a percentage of 54%.

There are currently two solutions: uprooting plants by hand or mechanically and products for biological control[31]. In order to implement increasingly humane and environment-friendly conditions, since last year, GRTgaz has been testing with revegetation projects on 13 industrial sites. At this stage, these trials do not allow us to draw any conclusion regarding the implementation of one technique on all sites. The attempts have achieved partial success, successful on certain sites, and less so on others where the vegetation did not correspond to that expected (predominance of species others than those planted, plant too tall or too dense). More time will be required for observation, and selective uprooting will be required, to allow what is currently a half-finished project to take root. New contractors were identified for the launch of new trials starting in 2021.

The estimated rate of waste recovery increased in 2021, to 98.5%[32]: 99% of non-hazardous waste (which represents 97.8% of the total volume) and 40.9% of hazardous waste were recovered in 2021. All departments contribute to waste management. The organisation for control of data on worksite waste of the project and engineering department (DPI) is still in the process of deployment.

These DPI worksites produce the majority of GRTgaz's waste (96%).

For a few years now, GRTgaz has noted increasingly strict inspections by government departments related to the integration and acceptability of structures. In 2021, GRTgaz was convicted of missing the deadline for remediation of certain reforestation areas, linked to the construction of the Arc de Dierrey pipeline in 2018. To avoid such rulings in the future and constantly striving for improvement, GRTgaz has initiated an inventory of regulatory obligations in this area, reviewing its practices.

In 2021, no new facility or structure projects were impacted by legal action.

30/ Strips of grassland above pipelines.
31/ They are defined in Article L. 253-6 of the rural and marine fisheries code as the agents and products using natural mechanisms in an integrated pest management approach.
32/ The waste management data collection tool is currently being deployed within the DPI, and the 2021 is thus not exhaustive for deduction of the relevant results. These quantities have been estimated *using* the typologies of invoiced work packages of framework agreements for engineering works. This overall recovery rate was mainly determined with the estimated quantities of recovered waste of regional projects (DPI): 84% of dirt and gravel, the recovery of which is considered to be 100% in quarries, the share of polluted land being marginal.

HIGHLIGHTS

GLOBAL BIODIVERSITY SCORE (GBS)
MEASURING THE BIODIVERSITY FOOTPRINT OF GRTgaz

The GBS is a biodiversity footprint assessment tool developed by the CDC biodiversité: its goal is to offer a biodiversity indicator equivalent to that of a tonne of carbon dioxide equivalent for climate change. After three years of development supported by the B4B+ team, of which GRTgaz is an active member, the tool is now available, though development continues to improve and adjust it.

Currently, GRTgaz can make a qualitative assessment of its pressures on biodiversity, but not a quantitative one. In the end of 2021, GRTgaz launched a study of the application of the GBS to its activities. The measure of its biodiversity footprint will help the company to fine-tune its biodiversity action plan and define its impacts. This measurement will then be used to assess the objective benefit of actions implemented.

REVEGETATION
NATURE-BASED SOLUTIONS TO REPLACE PESTICIDES?

GRTgaz has initiated a revegetation trial on 13 sites, using vegetation whose growth and upkeep are compatible with network operational requirements. If the trials are successful, the total elimination of pesticides could be rapidly envisaged. The efforts of coming years will enable GRTgaz to move from trials to the industrial roll-out of these best practices. The conversion of all the company's easements to zero pesticides is now being examined.

SNFP concordance table

CHAPTER	SUB-CHAPTER AND SUB-SECTION	SNFP
1 THE 3rd GAS REVOLUTION: GRTgaz COMMITTED TO SAFETY AND ENERGY SOLUTIONS OF THE FUTURE	1.2 GRTgaz in the value chain	SNFP
	1.3 Challenges creating risks and opportunities for tomorrow	SNFP
	1.4 Dialogue with our stakeholders	SNFP
2 SPEED UP OUR TRANSFORMATION TOWARDS CARBON NEUTRALITY: OUR INTEGRATED STRATEGY	2.1 Identify and respond to gas transmission trends	SNFP
	2.4 Align CSR and transformation to serve the energy transition	SNFP
	2.5 Our climate strategy	SNFP
3 GOVERNANCE SERVING THE GRTgaz STRATEGY	3.3 CSR governance	SNFP
	3.4 The ethics and independence system	SNFP
4 MAKE OUR PERFORMANCE SUSTAINABLE AND VALUE-GENERATING FOR ALL	4.2 Our non-financial performance to contribute to the United Nations Sustainable Development Goals	SNFP
	4.3 Our performance for an affordable and climate-neutral energy future	SNFP
	4.3.1 Reduce our carbon footprint	SNFP
	4.3.2 Speed up the energy transition by developing green gases	SNFP
	4.3.3 Enable access to affordable and sustainable energy	SNFP
	4.3.4 Grow sustainably	SNFP
	4.4 Our performance to take up the challenges of the environmental transition with our employees and stakeholders	SNFP
	4.4.1 Encourage the development of skills, diversity and quality of life at work for our employees	SNFP
	4.4.2 Support our customers in their energy requirements and converting their activities to net zero carbon	SNFP
	4.4.3 Co-build sustainable energy solutions with local players	SNFP
	4.5 Our performance to conduct our activities responsibly	SNFP
	4.5.1 Ensure the safety of people and infrastructures and the continuity of our services	SNFP
	4.5.2 Conduct our business with suitable ethics and independence	SNFP
	4.5.3 Protect the environment (excluding carbon) and biodiversity from the impacts of our activities	SNFP

Methods appendix

The statement of non-financial performance[33] sets out the approach adopted by GRTgaz in terms of corporate social responsibility and non-financial information meeting the requirements of articles L. 225-102-1 and R. 225-105-1 to R. 225-105-3 of the French Commercial Code.

The scope of the GRTgaz statement of non-financial performance covers France operations. GRTgaz produces two sets of financial accounts:

- company accounts for the parent company GRTgaz S.A. according to French standards, which meet the legal obligation (they are approved by ordinary general meeting of shareholders) and filed with the clerk of the commercial court (publication). It is for these accounts that we produce our management report (based on the company accounts) which is part of the statement of non-financial performance.
- consolidated accounts for the GRTgaz group (GRTgaz and its subsidiaries) according to IFRS standards, meeting a contractual obligation: these accounts are intended for our shareholders, but are not published and are not associated with a legal obligation.

In effect, under the 3rd directive, Elengy provides the financial information required to produce the consolidated accounts. GRTgaz has no operational control on how the business is managed.

Elengy is therefore excluded from the scope of the GRTgaz S.A. statement of non-financial performance. Subsidiary Deutschland GRTgaz responsible for operating a regulated asset in Germany, is also not included in the 2021 report.

DATA COLLECTION PROCEDURE

CSR indicator data are collected for France operations by the CSR director. Contributors report each indicator to the CSR director for the period from 1 January to 31 December 2021. A reporting *protocol* is formally defined.

TOPICS EXCLUDED

Concerning topics addressed by article R. 225-105-1 of the French Commercial Code, preventing food waste, preventing food insecurity, promoting animal welfare and a responsible, equitable and sustainable diet were considered as not applicable to GRTgaz. The activities of the company are not related to the production, sale or distribution of food products.

For the 2021 report, the procedures for *reporting* non-financial indicators were audited by an independent third party, Grant Thornton.

UPDATE ON METHODOLOGY OF THE "TERRITORIES" SCENARIO RETAINED BY GRTgaz IN ITS FORWARD-LOOKING VISION OF RENEWABLE GASES

Though the SRADDET[34] documents constitute the basis of the report, **some interpretation was necessary** to form a trajectory compatible with the objective of carbon neutrality and to ensure consistency of methods between regions.

This report is not intended to replace SRADDET, but to **encourage reflection on the future energy mix**, in connection with national climate objectives.

In addition to methane gas consumption, the scenario also includes consumption of **renewable and low-carbon hydrogen**, of which the expected boom due to the national hydrogen strategy will have significant impacts on methane consumption. This TERRITORIES scenario was **broken down at the regional scale in autumn 2021**, taking into account recent trends in renewable gas production.

33/ Tagged SNFP in the integrated report.
34/ Schéma régional d'aménagement, de développement durable et d'égalité des territoires [regional programmes covering land management, sustainable development and equality of territories].

Report of Independent Third Party

Grant Thornton

Report of Independent Third Party
on consolidated statement of non-financial performance provided in the management report

Year ending 31 December 2021

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Report of Independent Third Party on consolidated statement of non-financial performance provided in the management report

GRTgaz

Year ending 31 December 2021

To the shareholders,

In accordance with our status as a third party independent of GRTgaz, with COFRAC certification no. 3-1080[1], we hereby present our report on the consolidated statement of non-financial performance for the year ending 31 December 2021 (hereinafter the "Statement"), presented in the management report by virtue of the legal and regulatory requirements of articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code.

Responsibility of the company

It is incumbent on the Board of directors to draw up a Statement compliant with legal and regulatory requirements, including a presentation of the business model, a description of the main non-financial risks, a presentation of the policies implemented to control these risks and the results of said policies, including key performance indicators.

The Statement was prepared in accordance with the company's procedures (hereinafter referred to as "Reference Document"), significant extracts from which are presented in the Statement.

[1] The scope of certification is available on www.cofrac.fr.

Independence and quality control

Our independence is defined by the terms of article L.822-11-3 of the French Commercial Code and our professional code of ethics. Furthermore, we set up a quality control system integrating documented policies and procedures to ensure application of ethical codes, professional doctrine, applicable legislation and regulations.

Responsibility of the Independent Third Party

On the basis of our work, our role is to express a justified opinion, expressing a reasonably assured conclusion on:

- The conformity of the Statement with the requirements of article R. 225-105 of the French Commercial Code;
- The true and fair nature of the information provided by virtue of item 3° of section I and of section II of article R. 225-105 of the French Commercial Code, namely the results of policies, including key performance indicators, and actions taken to address the principal risks, hereinafter referred to as "the Information".

However, it is not our role to form an opinion on:

- the company's observance of other applicable legal and regulatory requirements, especially in terms of vigilance and the fight against corruption and tax evasion;
- the conformity of products and services with applicable regulations.

Nature and scope of our work

Our work described below was carried out in accordance with the requirements of articles A. 225-1 and subsequent of the French Commercial Code, determining the conditions under which the Independent Third Party conducts its mission and in accordance with the international standard ISAE 3000 - *Assurance engagements other than audits or reviews of historical financial information*.

We conducted work to assess the conformity of the Statement with regulatory requirements and the true and fair nature of the Information:

- we reviewed the activity of all the enterprises included in the scope of consolidation, and the expression of the main social and environmental risks associated with this activity;
- we assessed the suitability of the Reference Document in terms of its relevance, completeness, reliability, neutrality and understandability, taking into consideration best practices of the sector where necessary;
- we verified that the Statement covers each category of information stipulated in section III of article L. 225-102-1 of the French Commercial Code applicable to social and environmental data;
- we verified that the Statement includes a justification for the absence of information required by point 2 of section III of article L.225-102-1 above;

- we verified that the Statement presents the business model and principal risks associated with the activity of all entities within the scope of consolidation, including, when appropriate and proportionate, the risks generated by its business relationships, products or services, policies, actions and results, including key performance indicators;
- we verified, when relevant to the principal risks or policies presented, that the Statement presents the information as stipulated by section II of article R. 225-105 of the French Commercial Code;
- we assessed the process of selecting and validating the principal risks;
- we enquired into the existence of internal check and risk management procedures;
- we assessed the consistency of the results and applied key performance indicators with the principal risks and policies presented;
- we verified that the Statement includes a clear and qualified justification of the absence of policies concerning one or more of these risks;
- we verified that the Statement covers the consolidated scope, i.e all companies included in the scope of consolidation as required by article L. 233-16 with the limitations specified in the Statement;
- we assessed the data collection process used by each entity to ensure the completeness and true and fair nature of the Information;
- For the key performance indicators and other quantitative results we considered to be the most important, we implemented[2]:
  - analytical procedures consisting in verifying the correct consolidation of data collected and the consistency of their trends;
  - detail tests based on samples, consisting in verifying the correct application of definitions and procedures, and reconciling data with supporting documentation. This work covered all the consolidated data for the key performance indicators selected for these tests;
- we consulted documentary sources and held interviews to corroborate qualitative information (actions and results) that we considered to be the most important[3];
- we assessed the consistency of the whole Statement with our knowledge of the company.

We consider that the work completed while exercising our professional judgement enables us to form a reasonably assured conclusion on scopes 1, 2 and 3, where manageable, on CO2 emissions.

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[2] **Labour data**: total headcount; % of employees receiving training, employee accident frequency rate; gender equality index; % of women employed; % of work/study employees.
Environmental data: methane emissions; annual renewable gas production capacities connected to networks, in TWh per year; scopes 1, 2 and 3, where manageable, on CO2 emissions; number of sites converted to zero pesticides; rate of waste recovery.
Societal data: number of ethics-related incidents; number of active projects affected by legal action; number of third-party attacks on pipelines; % of decision-makers considering GRTgaz useful to the energy transition; number of suppliers assessed by an external service provider; average costs of access to gas transmission network.

[3] **Qualitative information**: "Reduce our carbon footprint"; "Speed up the energy transition by developing green gases"; "Grow sustainably"; "Co-build sustainable energy solutions with local players"; "Conduct our business with suitable ethics and compliance"; "Protect the environment (excluding carbon) and biodiversity from the impacts of our activities".

For other key performance indicators and quantitative results assessed[4], we offer moderate assurance. A higher level of assurance would have required more extensive verification work.

Means and resources

Our work required a 4-person team and was carried out between December 2021 and February 2022, with a total time spent of approximately four weeks.

To assist us in completing our work, we requested the assistance of specialists in sustainable development and corporate social responsibility. We held interviews with the persons responsible for preparing the Statement.

Conclusion

On the basis of our work, we did not detect any significant anomalies which could affect the compliance of the statement of non-financial performance with the applicable regulatory requirements and the recognition that the information as a whole is presented in a true and fair way in accordance with the Reference Document.

Neuilly-sur-Seine, 14 March 2022

Independent Third Party
Grant Thornton
French member of Grant Thornton International

Vincent Frambourt
Partner

Bertille Crichton
Partner

[4]**Labour data**: total headcount; % of employees receiving training, employee accident frequency rate; gender equality index; % of women employed; % of work/study employees.
Environmental data: methane emissions; annual renewable gas production capacities connected to networks in TWh per year; number of sites converted to zero pesticides; rate of waste recovery.
Societal data: number of ethics-related incidents; number of active projects affected by legal action; number of third-party attacks on pipelines; % of decision-makers considering GRTgaz useful to the energy transition; number of suppliers assessed by an external service provider; average costs of access to gas transmission network.

Photos: GRTgaz (Vincent Beneteau, Gregory Brandel, Jérôme Cabanel, Marc Da Costa, Benjamin Cochard, Franck Dunouau, Philippe Dureuil, Claire-Lise Havet, Vincent Kriéger, Jean Christophe Marmara, Hubert Mouillade, Pierre Olivier, Sylvère Visiedo), GettyImages, iStock, Unsplash (jana-muller, kid-circus, redd-5U, s-migaj, tan-kaninthanond, tomasz-wozniak) and X.

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GRTgaz February 2022..

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