

Annual report 2022

Staying on course in turbulent times



Index

MANAGEMENT REPORT		
01	Value creation at Gasunie	3
02	Foreword by the Executive Board, and key figures	5
03	Strategy	11
04	External economic value creation	26
05	External social value creation	35
06	Internal economic value creation	51
07	Internal social value creation	63
08	Dilemmas	82
09	Governance	84
FINANCIAL STATEMENTS		
	Consolidated financial statements	116
	Notes to the consolidated financial statements	123
	Additional notes to the consolidated financial statements	138
	Company financial statements	200
	Notes to the company financial statements	203
	Additional notes to the company financial statements	205
	Signature	219
	Other information	221
ADDITIONAL INFORMATION		
18	Additional information	225

01 Value creation at Gasunie

'We believe in a sustainable future with a balanced energy mix and a lasting role for diversified gases. We believe that we serve our customers best with innovative infrastructure solutions for gas and other energy-carriers.'

Gasunie is a leading European energy infrastructure company. Gas transport, transmission and storage have been the core of our business for 60 years now.

We serve the public interest and facilitate the energy transition by providing integrated infrastructure services.

We focus on value creation for our shareholder and other stakeholders and apply the highest safety and business standards used in the sector.

The value we create

External economic value

We create value for society by carrying out our energy infrastructure functions

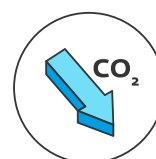
The value of the energy we transport is immense. The energy we transport and store ensures economic production and general wellbeing. Gasunie is at the service of its customers. Market parties lease capacity in our gas networks and use our services like gas storage, contract trading, quality conversion, and certification. Added to this last year were Gasunie's major efforts in the area of LNG.



External social value

We create value for society by facilitating the energy transition

We aspire to make major strategic investments this decade in networks for the transmission and storage of hydrogen, CO₂, heat and green gas. With our Vision 2030 programme we are helping society become climate-neutral by 2050. In addition, through our quality conversion efforts we are facilitating the phase out of gas extraction from the Groningen field.



Internal economic value

We create value while performing our core natural gas infrastructure functions

While managing our infrastructure, financial value is created for suppliers, financiers and our shareholder. In addition, the company is worth more because we invest responsibly and carry out maintenance, minimise costs and risks, improve our business processes and accumulate knowledge.



Internal social value

We create value for society by making our day-to-day operations more social and sustainable

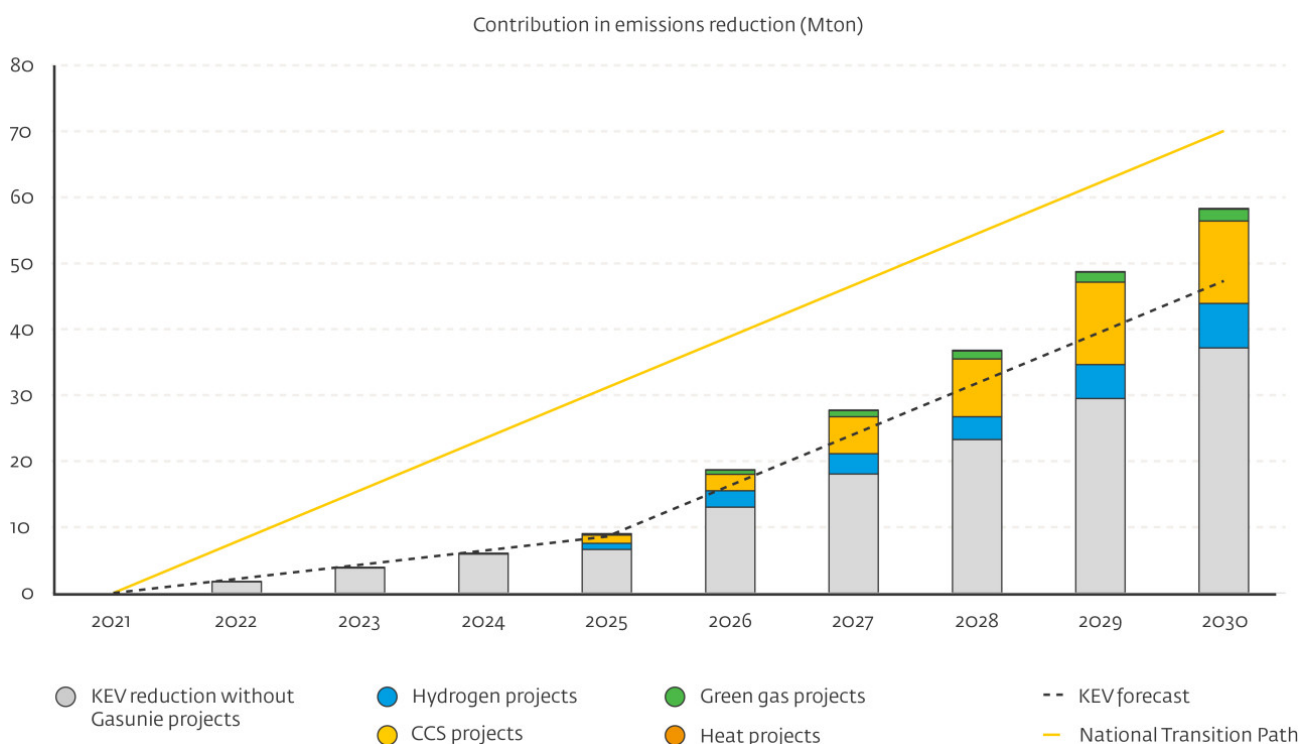
Gasunie is working continuously on improving its business operations. A safe working environment, equal opportunities and a pleasant company culture and leadership style are the mainstays of a successful company. In addition, we endeavour to make our procurement, energy consumption and location management more sustainable.



Our contribution to creating a carbon-neutral world

The Netherlands aims to be climate-neutral by 2050. To get there, as a country the Netherlands must cut its carbon emissions every year over the coming decades: it needs to follow what's called the National Transition Pathway (see the yellow line in the visual below). However, as can be seen in the Climate and Energy Outlook published by PBL Netherlands Environmental Assessment Agency, we are lagging behind on this pathway (see the dotted line). If Gasunie were to be facilitated in implementing its Vision 2030 programme completely and without delay, we in turn would be able to facilitate the Netherlands in closing a significant part of the gap between the Climate and Energy Outlook and the Transition Pathway. If other sectors in the economy play their part, the rest of the gap can be closed, too, and we will stay on track to become carbon neutral in 2050. We provide a more detailed explanation of this in the section External social value creation.

Gasunie can make a substantial contribution to achieving carbon neutrality



02 Foreword by the Executive Board, and key figures

Staying on course in turbulent times

In 2023 Gasunie is celebrating its 60th anniversary. It's reached an age when, were it a person, it would be slowing things down a bit. But that's certainly not the case with us. Gasunie is really being put to the test. While we are busy shaping our new role in the energy transition, in our existing role – ensuring that sufficient natural gas can continue to reach our core markets – we are facing unprecedented challenges.

In 2022, the European gas market entered a new era. By invading a sovereign neighbour and causing untold suffering there, Russia has sidelined itself as a major energy supplier. Europe has since found new suppliers, but the price is high. How long can our energy-intensive industries keep up with their international competitors? Can the local bakery pass on its higher costs to its customers? And will consumers be able to pay those higher prices *and* keep on top of their own energy bills?

At the same time, in times of darkness it's often easier to see the points of light. We are proud that we succeeded in doubling the Dutch import capacity for LNG in record time. With this we have been able to make a contribution to the security of supply in Europe, a contribution that should not be underestimated. From the drawing board to commissioning, the EemsEnergyTerminal took less than six months to create thanks to the collective, unified efforts of Gasunie employees, customers, contractors and government bodies. Though not the only LNG capacity expansion project in Europe, EemsEnergyTerminal was the only one that came 'on grid' before the start of winter.

It can be done!

The key lesson from EemsEnergyTerminal is that energy transition projects in the area of CCS, hydrogen, green gas and heat can be realised quickly by connecting the right parties and then everyone getting together to consider how to make it possible, rolling up their sleeves and seeing it gets done. The impossible becomes possible once everyone is aware of the importance and the urgency. By building smartly on what we have, Gasunie can support the expansion of the electricity infrastructure with the transmission and storage of green molecules and help make the manufacturing and chemical industries more sustainable.

A second lesson is that the EU will have to meet part of its future green energy needs through production within its own region. The other part will need to be imported from many different countries so that energy can never again be used as a pressure card. Gasunie is preparing for this in its hydrogen strategy, by developing infrastructure for both parts.

In 2022, it also became clear that it pays to be a hub for international energy flows – with robust connections with surrounding countries – and to pay attention to transport by ship in addition to pipeline transmission. Without our interconnectors, quality conversion capacity and the knowledge and skills of our colleagues at the Gate terminal, our starting situation in February 2022 would have looked very different.

Wake-up call

Where we used to take for granted that energy would always be cheap and abundantly available, this view changed on 24 February 2022. Let this be a wake-up call for all of us. There is still a lot of work to be done to ensure that sufficient natural gas will be available over the winters to come. And above all, let it be our cue to drastically accelerate the energy transition, the sign that all parties involved need to recognise the importance, seek collaboration, strive for the common 'optimum', and dare to distribute the risks fairly. Let's do this so that we can look back in 2050 and see that, in terms of the energy transition, 2022 and 2023 were a turning point for the better.

For Gasunie, 2022 was a year of extremes. Our social relevance has increased, as has our workload. Higher auction revenue resulted in higher profits, which will be returned to the market while we are also faced with the increased purchase price of energy. What was disappointing was the severe delay in the completion of the Zuidbroek nitrogen plant. We welcomed many new employees, people who are ensuring that, even after six decades, Gasunie is still a book in which the next chapters of the energy sector will be written. At the same time, reining in the gas crisis and seeing that our transition projects were built demanded a lot from our people. We are extremely proud of the dedication, creativity and perseverance of our staff. They are the unifying force referred to in our very name: Gasunie.

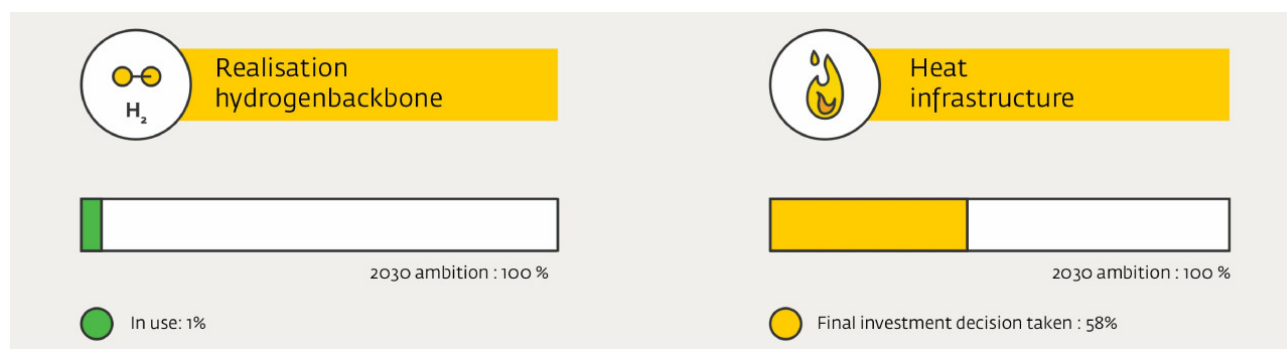
Han Fennema, Janneke Hermes, Bart Jan Hoevers and Ulco Vermeulen



The Executive Board of Gasunie. From left to right: Ulco Vermeulen, Janneke Hermes, Bart Jan Hoevers and Han Fennema.

Key non-financial figures

Transition monitor		2021	2022	2030
		Actuals	Actuals	Goals
Reuse of assets	% Hydrogen backbone made use of existing assets	0%	0%	83%
Reduction of own emissions	Reduction of CO2 equivalents	322 kton/ 1.108 TWh	390 kton/ 1.108 TWh	<=219 kton/1.085 TWh)
Green gas transported	% Biomethane of total methane	0.03%	0.04%	9.30%
Share of zero emission gas transported	% Zero emission gas of total gas transported	0.05%	0.04%	19.10%
CO2 emissions of 3rd parties facilitated	Reduction of CO2 in chain per TWh gas transported (base year 2020)	0,07MT	0,08MT	22MT



For more non-financial key figures, see our Value creation model and our Connectivity table.

Key financial figures

	Reported		Normalised		Underlying	
	2022	2021	2022	2021	2022	2021
<i>In millions of euros</i>						
Revenue	2,258	1,386	2,258	1,386	1,515	1,369
Total expenses	-1,529	-971	-1,369	-971	-1,423	-870
Operating result	729	415	888	415	92	498
Financial income and expenses	-43	-57	-43	-57	-43	-57
Share in result of participating interests	34	62	42	62	34	62
Result before taxation	721	420	888	420	84	503
Income taxes	-166	-109	-213	-109	-2	-131
Result after taxation	555	311	675	311	82	372

The year 2022 was an extraordinary year. The year's events also had an extraordinary impact on our bottom line, though much of the profit we made will be returned to our customers in future years in what's referred to as 'settlement'. To reflect the effect of this, we have corrected our results for future settlements of revenue and energy costs arising from the regulatory methodologies applied in the Netherlands and Germany. We have also made a correction for past settlements that are reflected in the 2022 tariffs. These adjusted results are shown in the 'underlying' column. This gives a better indication of the actual result for this year.

Revenue

Revenue increased by € 872 million on the same period last year. This increase can mainly be attributed to a change in the gas flows: where, in recent years, the gas mainly flowed from Russia to Western Europe, we saw a shift in 2022, with the gas now largely flowing from Western Europe. This resulted in higher capacity sales (approximately € 350 million) and higher revenue from capacity auctions (approximately € 200 million) at Gasunie Transport Services and Gasunie Deutschland. Furthermore, as a result of the regulatory methodology applied, the tariffs also rose, adding another approximately € 100 million to the total revenue. The change in the gas flows has also resulted in more capacity being reserved for transport from the UK to Western Europe, which led to higher revenue at BBL. To increase security of supply in Europe, Gasunie has opened a new LNG facility at the port of Eemshaven; this, too, has generated additional revenue.

Given that over 85% of the revenue generated falls under the frameworks of the regulatory authorities – ACM (in the Netherlands) and BNetzA (in Germany) – we will be passing on a large part of the additional revenue to our customers, meaning their tariffs will be lower in the coming years. When the revenue to be offset is deducted from the revenue achieved, € 1,515 million remains, € 146 million more than last year.

Operating result

The reported operating result is € 729 million, an increase of € 314 million compared to last year. This figure includes an impairment of the assets of Gasunie Deutschland following the publication of new resolutions relevant to the determination of Gasunie Deutschland's future revenues in the 2023-2027 regulatory period (€ 109 million) and the assets of BBL following a change in the long-term assumptions with regard to natural gas demand in the UK and the resulting need for transport capacity between the UK and Europe (€ 50 million). When normalised for this the operating result is € 888 million. There are a number of other factors that also have an impact on the operating result. Firstly, there are the personnel costs, which have increased mainly due to the need for more staff to carry out the energy transition activities. We also formed a provision of approximately € 50 million for the removal of decommissioned sections of pipeline. The energy costs associated with gas transmission and transport and gas quality conversion (low-to-high and high-to-low calorific gas) also play a major role in the development of the operating result. These costs rose by about € 300 million compared to 2021, mainly due to the higher energy prices. Under the current regulatory methodology that applies in the Netherlands, Gasunie Transport Services may not offset these higher energy costs in future tariffs, unlike in Germany, where we are allowed to do so. In the underlying result, we have deducted the offset energy costs from the reported result.

The underlying net result, i.e. the result after taking into account revenue and costs that we need to settle in the future, was € 290 lower than in 2021. The underlying operating result is € 637 million lower than the reported operating result.

Result after taxation

The balance of the financial income and expenses decreased by € 14 million compared to 2021, mainly due to the foreign exchange results. The result of participating interests was down € 28 million, mainly as the result of having received no dividend from Nord Stream this reporting year. After the invasion of Ukraine, Gasunie largely suspended its Nord Stream activities. On 26 September 2022, both Nord Stream transport pipelines were seriously damaged by a number of explosions, with the result that they could no longer be used to transport gas. Based on a risk assessment, including our expectations regarding future dividends, we have decided to set the value of our interest in Nord Stream at year-end 2022 at € zero (year-end 2021: € 508.1 million). This value adjustment comes in the form of a direct balance sheet change and does not affect the result.

The underlying net result, i.e. the result after taking into account revenue and costs that we need to settle in the future, was € 290 lower than in 2021. The reported result after taxation increased by € 244 million compared to the last reporting year.

<i>In millions of euros</i>	2022	2021
Balance sheet		
Fixed assets	10,076	10,135
Equity	6,304	6,429
Balance sheet total	11,105	10,480
Capital invested	9,869	9,877
Cash flow statement		
Cash flow from operating activities	1,415	676
Cash flow from investment activities	-514	-314
Cash flow from financing activities	-505	-341
Net cash flow	397	20
Ratios		
ROIC	6.2%	3.9%
ROE	8.8%	4.8%

Investments

The increase in investment cash flow is mainly due to the investments in the LNG terminal at the port of Eemshaven and in energy transition projects, like WarmtelinQ (heat grid in Zuid-Holland) and Porthos (CCS). The cash flow from investment activities also concerns regular and current projects, such as the nitrogen plant in Zuidbroek.

Financial outlook

Gasunie Transport Services has lodged an appeal against the current methodology decision. The future financial outlook depends on the outcome of this appeal. If Gasunie Transport Services' appeal regarding offsetting its own energy costs in future tariffs fails, we expect Gasunie's profit to decline in the coming years given that, unlike the own energy costs, a large part of the additional revenue achieved in 2022 *will* be offset in the tariffs over the coming years.

In the upcoming years, we foresee an investment level of at least € 400 million and up to € 700 million a year. Once we have made investment decisions for our Vision 2030 projects, we could see an investment figure of up to € 8.5 million in total for the period from now to 2030.

03 Strategy

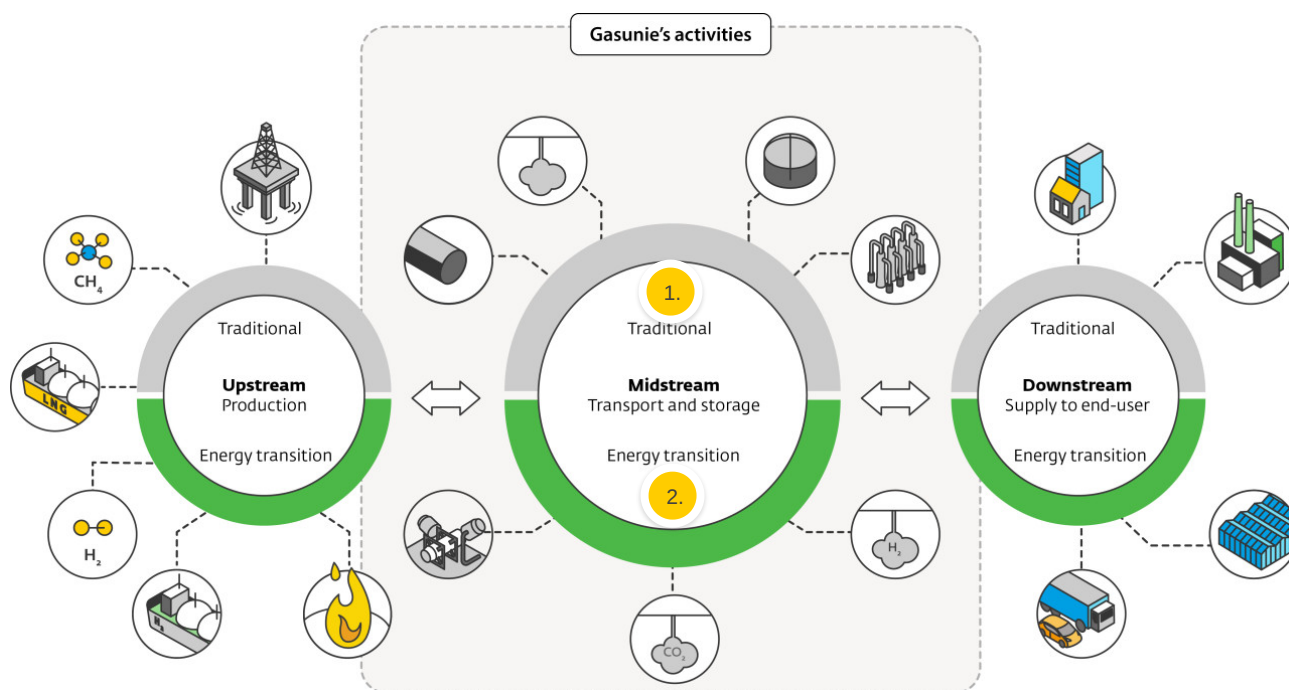
Who we are

In the heart of north-western Europe, Gasunie operates and maintains infrastructure for the large-scale transmission, storage and conversion of energy. At the moment, this is mainly natural gas, but with the energy transition this is increasingly shifting towards CO₂ and hydrogen. Besides this, we facilitate the development of the technology and feed-in of green gas, and we work on the construction and management of heat grids.

Our infrastructure services connect energy producers to energy consumers. We provide third parties non-discriminatory access to our services at non-discriminatory tariffs. Most of our activities (82% of our assets) are fully regulated, and for that part regulatory authorities – ACM (in the Netherlands) and BNetzA (in Germany) – set our revenue cap and, by extension, the tariffs every year.

The Dutch state is our sole shareholder. Our employees are spread over more than thirty locations in the Netherlands and northern Germany, with delegations in Brussels and Berlin. Our headquarters are in Groningen (the Netherlands), and our main German office is located in Hanover.

Our role in the energy supply chain in the Netherlands and northern Germany



1. Traditional as midstream

Our infrastructure functions as an international hub for the supply and transit of gas in north-western Europe. This enables us to contribute to a liquid, competitive and reliable European energy market.

2. Energy transition as midstream

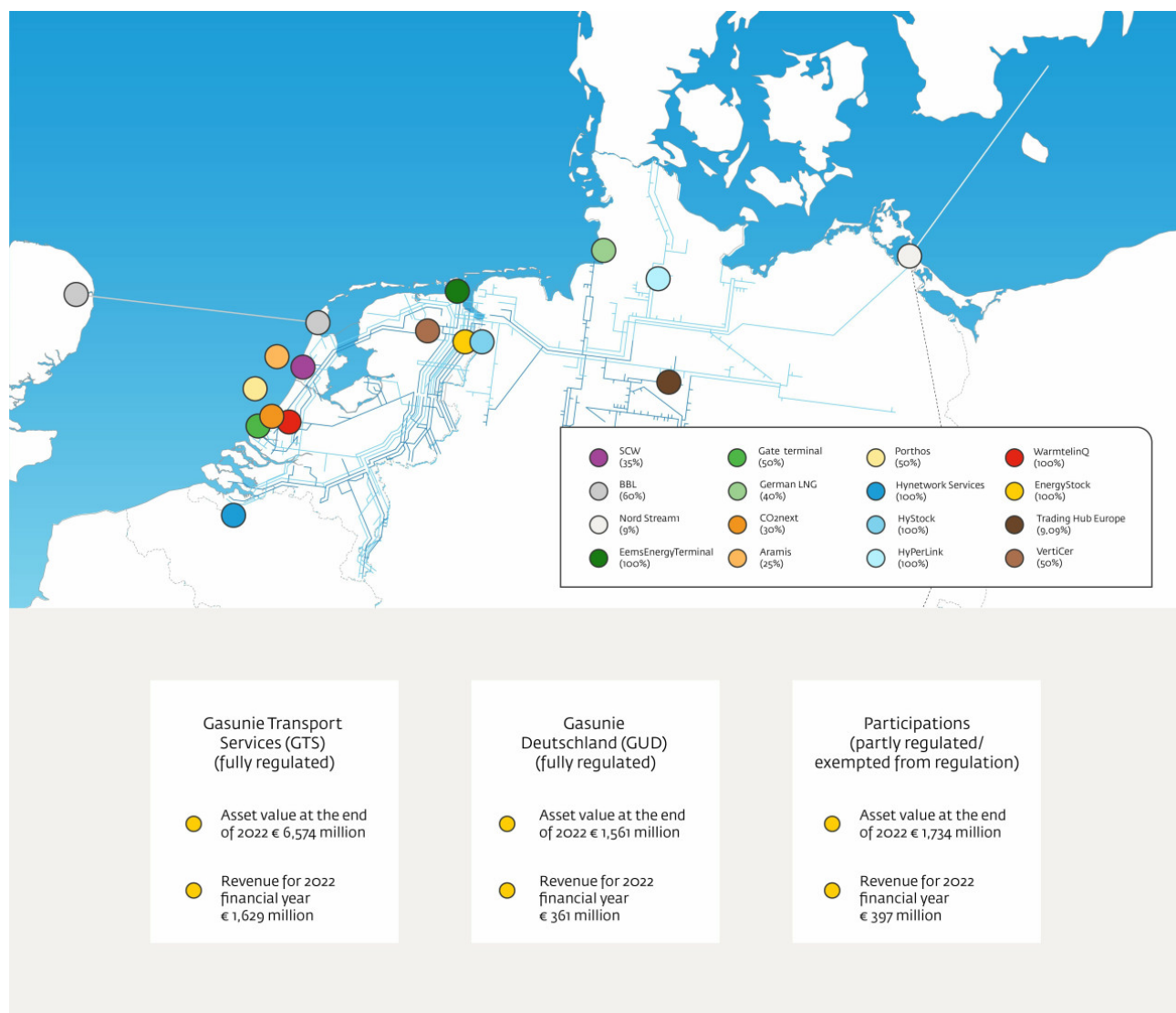
We invest in projects relating to hydrogen, heat, CCS and green gas. We work towards accelerating the achievement of climate neutrality in the energy supply by developing sustainable energy supply chains.

How we are organised

Gasunie has three business units, two of which operate a gas transport network. The latter two business units, Gasunie Transport Services (GTS) in the Netherlands and Gasunie Deutschland (GUD) in Germany, are network operators that offer their services in a transparent manner and sell the available capacity on non-discriminatory terms. Gas can be fed into the network at entry points, and customers can draw gas from the network at exit points. Customers enter into contracts to reserve capacity at specific network entry or exit points over a specific period (year, quarter, month or day).

Our third business unit, Participations, offers energy infrastructure and related services that are not subject to regulation (unregulated or exempt). Customers buy capacity, which entitles them to use the relevant infrastructure during a certain period. The services are open access. The tariffs for these services are non-discriminatory and mainly determined by supply and demand. Our Participations unit's operations support the functioning and liquidity of the energy market in the Netherlands and Germany.

Our gas TSOs and our major participating interests



Our strategy

Gasunie pursues a three-pillar strategy resting on the foundations of our organisation.



1.

Optimising
infrastructure



2.

Connecting
Europe



3.

Accelerating the
energy transition



4.

Organizational foundation
Conditional to achieve the goals of the pillars

1. Optimising infrastructure

We ensure a safe, reliable, affordable and sustainable gas infrastructure in our core area.

3. Accelerating the energy transition

We are accelerating the transition to a carbon-neutral energy supply.

2. Connecting Europe

We contribute to an efficient gas infrastructure and services for a properly functioning European natural gas and LNG market.

4. Foundations of our organisation

We make sure the foundations of our organisation are in order so that we can achieve the goals defined under our three strategic pillars.



Optimising infrastructure

We ensure safe, reliable, affordable and sustainable gas infrastructure in our core area

We ensure high-quality gas infrastructure in our core area. That's our foundation. The energy supply in our core areas has an excellent track record in terms of safety and reliability. By working smarter, we keep the costs of energy transmission as affordable as possible.

These are the corporate goals we strive for:

- Optimise risk-based asset management with the aim of achieving cost reductions within the bounds of our social licence to operate.
- Optimise Gasunie's position and maintain the value of the company by means of an optimum regulatory framework and optimum tariff structure.
- Realise our safety objectives.
- Enable users and suppliers to respond adequately to supply shocks.

Connecting Europe

We contribute to efficient gas infrastructure and services for a well-functioning European natural gas and LNG market

Contributing to a well-functioning European market for natural gas and LNG is our second point of focus. Natural gas will remain important in the coming decades, as a feedstock and as a source of energy. With the closure of the Groningen gas field, it is crucial that well diversified international natural gas flows find their way to our core area.

These are the corporate goals we strive for:

- Facilitate the phase-out of production from the Groningen gas field.
- Enable users and suppliers to respond adequately to supply shocks.
- Strengthen our international position in north-western Europe, particularly in Germany, which we do by participating in, and opening the way for LNG projects.

Accelerating the energy transition

We are accelerating the transition to a carbon-neutral energy supply

We are fully committed to accelerating the transition to carbon-neutral energy, through the use of hydrogen, green gas, heat grids and CCS, for example. This calls for making use of existing and new knowledge and new collaborations. We use our experience to shape the market of tomorrow, together with partners.

These are the corporate goals we strive for:

- Enable the feed-in of green gas into the Dutch transmission system faster and at a lower cost.
- Gain a leading position in the area of green hydrogen transport and storage.
- Take an active role in constructing and managing heat and CO₂ transport infrastructures.

Foundations of our organisation

Foundations of our organisation

We are Gasunie, a leading European energy infrastructure company that has been serving the public interest since the 1960s. Every day, we work on our duties to society with passion and dedication. In doing so, we make sure the foundations of our organisation are in order so that we can achieve the goals defined under our three strategic pillars.

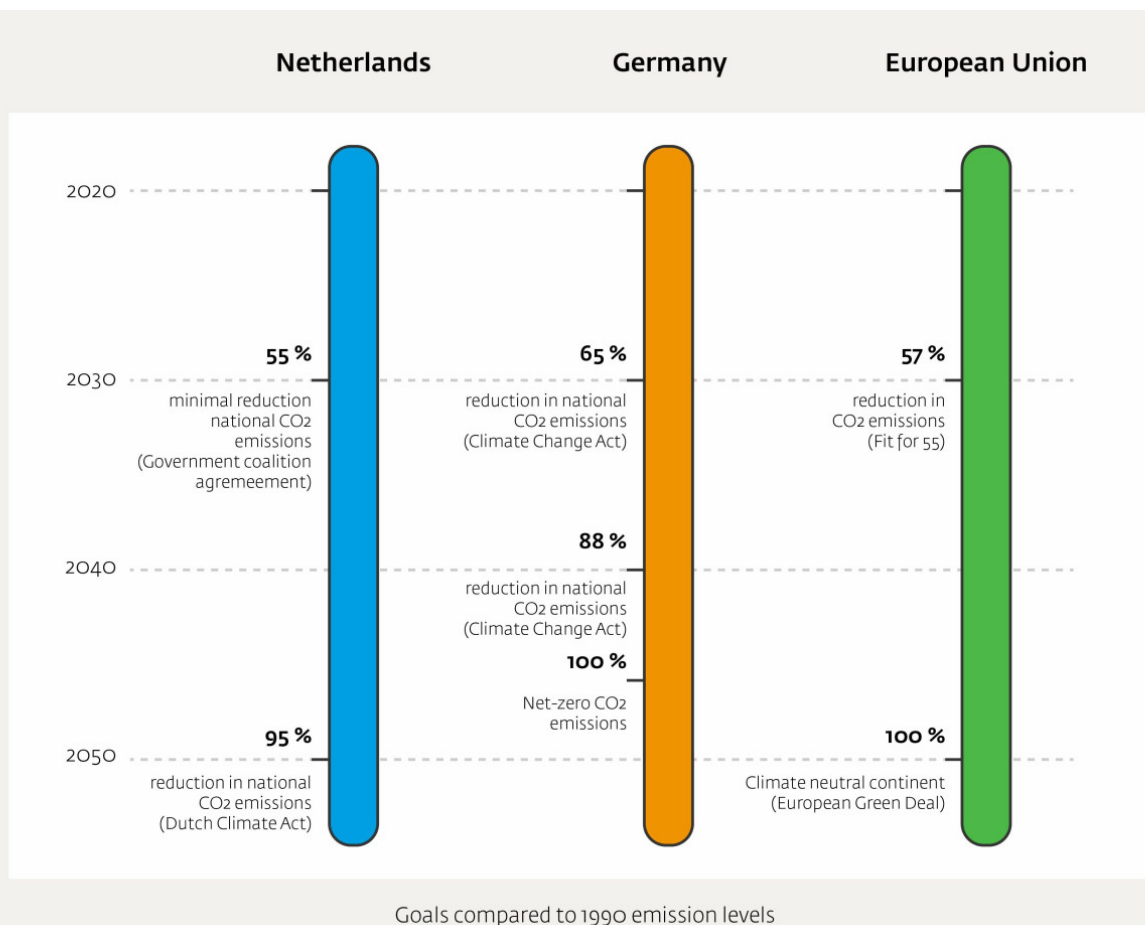
These are the corporate goals we strive for:

- Create a future-proof organisation by improving our flexibility and agility.
- Realise our CSR objectives, which we have set out in our [Gasunie Green Deals](#).
- Realise our digital ambitions.

Our vision for 2030

In 2020, Gasunie captured its strategy in an outlook for the coming ten years: Vision 2030. By 2030, we will have transformed from a gas transmission company into a broad energy infrastructure company that is transporting, storing and treating natural gas, green gas, hydrogen, CO₂ and heat in a safe, reliable, affordable and sustainable way. We will play a key role in achieving the ambitious climate goals set in the Netherlands, Germany and the European Union (see figure below). We update our Vision 2030 programme on a regular basis.

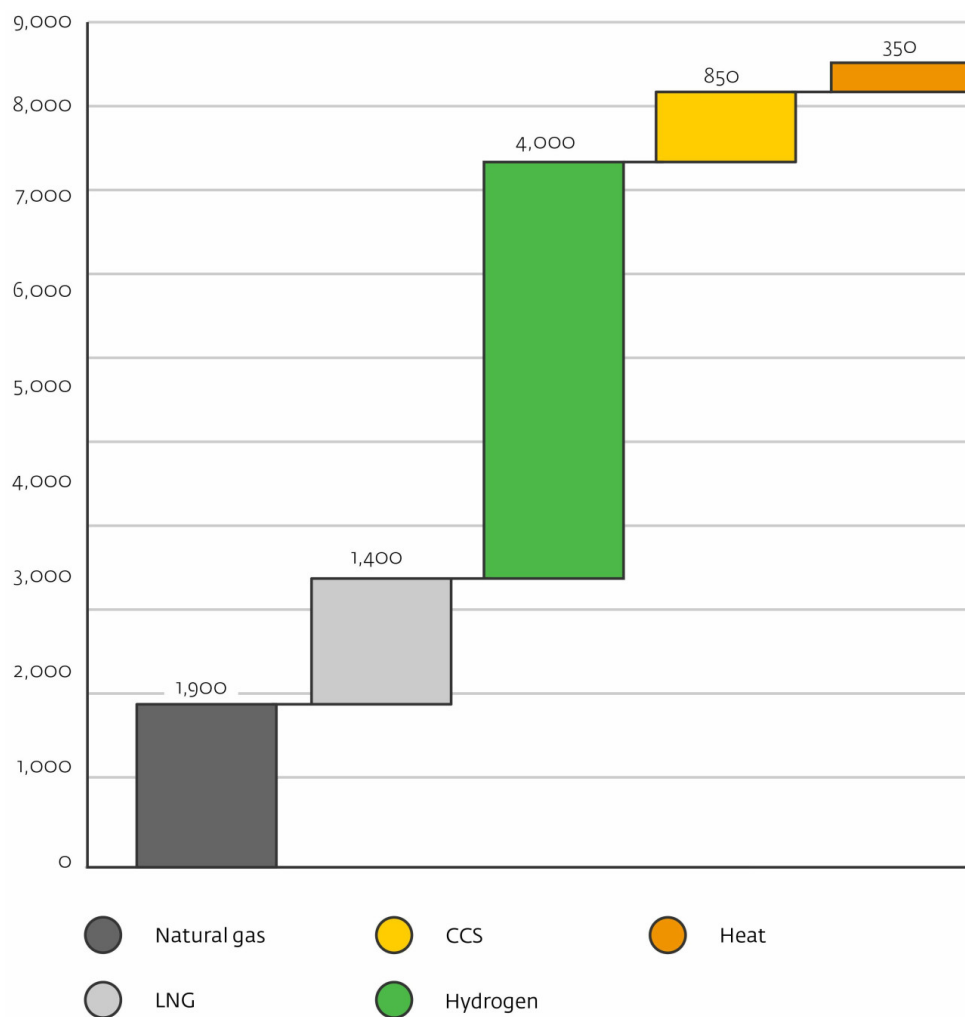
Climate goals of the Netherlands, Germany and the European Union



The climate goals are clear: carbon emissions in Europe have been cut by at least 55% by 2030 (compared with 1990 levels), and the EU has achieved climate neutrality by 2050. Though many countries, companies and citizens are taking measures, we are not there yet – far from it. The reports of scientists and rulings of the courts are as plain as day. To achieve the climate goals, the energy system will also have to change significantly. Renewable gaseous energy carriers like green gas and hydrogen are indispensable for the transition of industry and homes, as is carbon capture, transport and storage (CCS).

Gasunie has been investing in natural gas infrastructure for nearly sixty years and in energy transition projects for more than ten. The knowledge and experience we have gained along the way now put us in an ideal position to scale up and contribute materially to the energy transition, while in the meantime we keep the current energy supply safe, reliable and affordable. Our people can make a difference in the current *and* in the new energy world.

Based on this conviction, our Vision 2030 strategy includes large-scale energy transition projects for which we intend to make an investment decision in the coming years. We expect the vast majority of these projects to be, either immediately or gradually, made subject to regulation, meaning that we will market these assets at regulated tariffs. For each project we look at tailor-made solutions that will keep the development and operating risks under control.

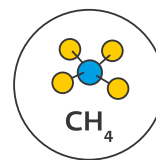
Our Vision 2030 includes plans for major investments in energy transition and security of supply

According to our current estimates, Gasunie's total investments under its Vision 2030 investment agenda will amount to around € 8.5 billion. This chart shows the net capital expenditures (i.e. capital expenditures after deduction of funding) that we currently foresee for the various forms of energy in which we want to play a role around 2030. Some Vision 2030 investments will take place in 2031 and 2032. The investments in natural gas infrastructure concern replacement and expansion investments. The investments in LNG infrastructure concern LNG terminals and their connections to the gas transmission network.

We want to carry out a number of projects with partners. Only Gasunie's share in the investments is shown, and grants, for example, have already been deducted from this amount. There is a separate decision-making process for each project. The financing of the projects comes from various sources, such as capital market funding and operational cash flows. Depending on political and economic developments, the total investment figure and how this amount is distributed over the various forms of energy may change in the coming years.

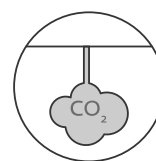
Vision 2030 – Natural gas

It's 2030 and the Groningen gas field has been closed for several years; however, we expect demand for natural gas in the Netherlands in 2030 to still be at 55 to 72% of the 2020 level. In 2030, Gasunie is ensuring that the Netherlands has sufficient physical import points for natural gas. We add nitrogen to part of the imported natural gas so that the Dutch market receives sufficient gas of 'Groningen quality'. In Germany, where the demand for natural gas has remained more or less stable, we are helping industries that wish to do so switch from coal to gas as an energy source.



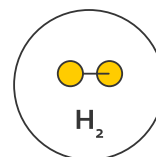
Vision 2030 – CCS

Carbon capture and storage (CCS) is one of the very few options that energy-intensive industries – refineries, chemical plants, steel producers, waste processors, cement producers and such – have to avoid large amounts of carbon emissions in the short term and at a relatively low cost. CCS allows these industries to contribute to meeting the climate targets and keeps them in our economy. In 2030, Gasunie is active as an operator of pipelines used to transmit CO₂ to transfer hubs and to reservoirs deep under the sea.



Vision 2030 – Hydrogen

On the way to becoming a zero-emission society, natural gas is increasingly being replaced by hydrogen, especially in manufacturing and industry. Our relatively shallow North Sea is suitable as a location for the generation of large volumes of wind energy. This wind power can be used to make hydrogen. Tankers bring in liquefied hydrogen and hydrogen carriers to Europe from overseas, which can be easily unloaded at our seaports. Underground salt layers in certain locations in the Netherlands and northern Germany lend themselves well to building caverns to store gases. By 2030, Gasunie has developed large-scale transport and storage infrastructure for hydrogen in the Netherlands and northern Germany that connects hydrogen suppliers with hydrogen buyers. With the help of this infrastructure, our market area has become the gateway to Europe for the global hydrogen market.



Vision 2030 – Green gas

The Dutch Climate Agreement set 2 bcm as the target volume of green gas that was to be flowing through the Dutch networks by 2030, with half of this being fed directly into Gasunie's main transmission network. To achieve this, by 2030 we have enabled third-party initiatives for scaling up green gas



production methods, for example through gasification and fermentation. Being the same quality as Groningen gas and entirely carbon-neutral, green gas is a sustainable alternative to natural gas.

Vision 2030 – Heat

In the Netherlands, in 2020 roughly 90% of the required heat came from fossil fuels (mainly from natural gas), with just under half of that used to heat homes, offices and other buildings. In urban areas, the reuse of waste heat, i.e. heat as a by-product of industrial processes, has proven a cost-effective alternative. In 2030, Gasunie is transporting waste heat from the Port of Rotterdam to The Hague, Delft, Leiden and surrounding areas.

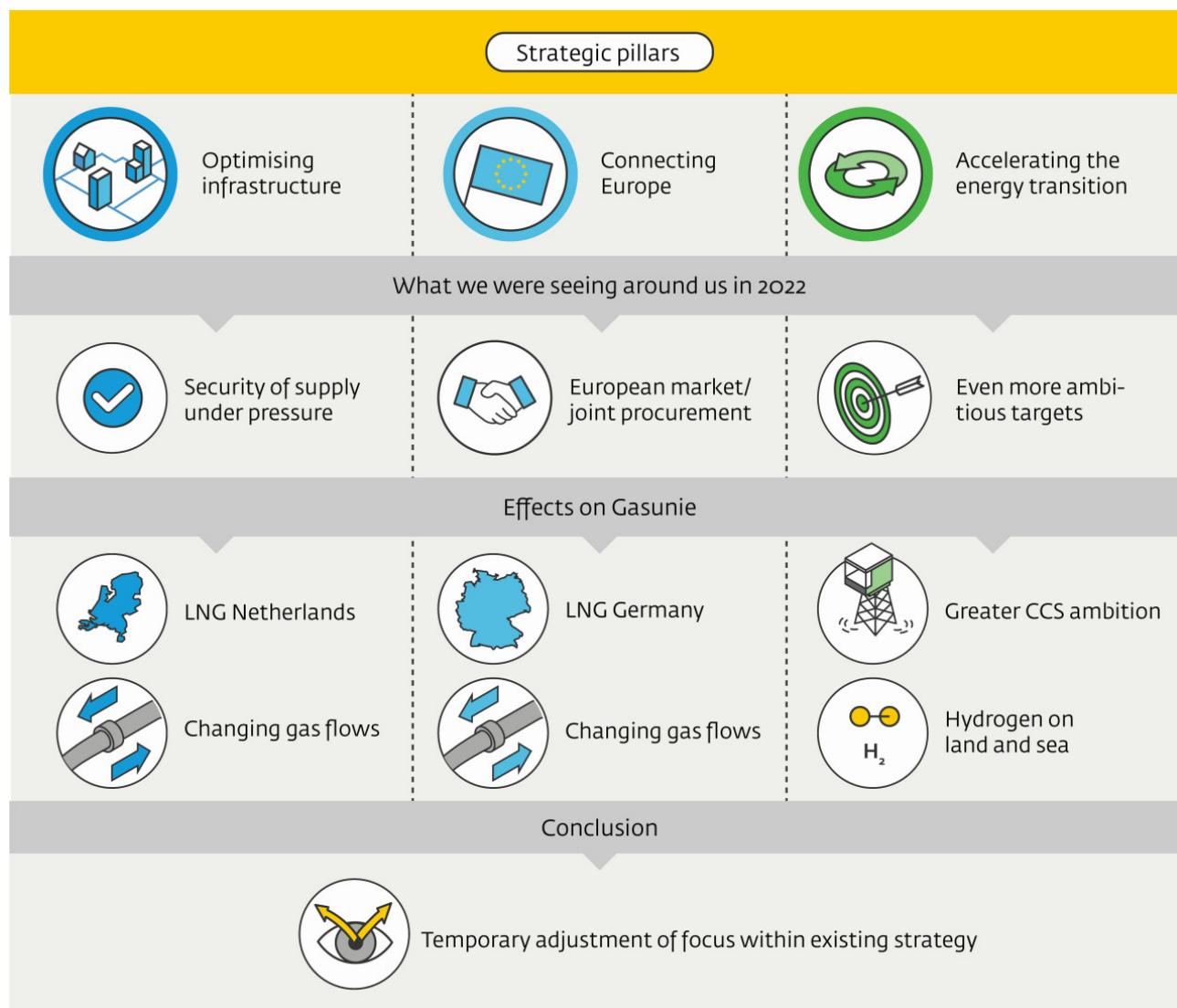


What we learned in 2022

Last year, Gasunie faced challenges relating to all three of its strategic pillars. Most notable was the emergence of a physical shortage of natural gas in Europe as Russia continued to reduce its supplies, a process that had already started in 2021. As a consequence, we saw sharp price increases on the wholesale market as European countries competed with each other to fill their national gas storage facilities. The bright side of this was that these countries saw their fill levels quickly rise. Furthermore, we saw the European Commission fully assume its role by launching [RePowerEU](#) and taking the first step towards collective procurement of the part of the natural gas volumes required for the winter of 2023/2024. With the introduction of RePowerEU, EU Member States also faced a set of new ambitious energy transition goals and, alarmed by Russia's power play, many Member States also set their own new national transition goals.

For Gasunie specifically, the geopolitical unrest did not result in us adjusting our strategy, but it did lead to a temporary adjustment of the focus within the existing three strategic focus areas. In our core markets of the Netherlands and Germany, we responded by focusing our efforts on building new LNG landing and regasification capacity and by adapting our networks where possible to the changed gas flows. At Gasunie, the adjustment to the energy transition goals mainly translated into the further realisation of our ambitions in the area of hydrogen transport and transmission.

Geopolitical unrest: no adjustment to strategy, but a temporary change in focus



Our impact

The issues surrounding security of supply resulted in a very dynamic environment outside the company last year. Despite this situation, in 2022 Gasunie made reasonably good to good progress in the implementation of its strategic management agenda, with the result that Gasunie created additional social and economic value for its stakeholders.

Implementation of our management agenda in 2022: reasonably good to good progress

	Materieel thema *	Strategische pijler Accelerating the energy transition	Strategische pijler Connecting Europe	Strategische pijler Optimum infrastructure
 Developing according to plan  Developing partly according to plan  Not developing according to plan				
Optimise risk-based asset management with the aim of achieving cost reductions within the bounds of the social licence to operate.	internal economic value creation II, III			
Optimise the position of gas and Gasunie and maintain the value of the company by means of an optimum regulatory framework and tariff structure.	internal economic value creation I, IV			
Facilitate the phase-out of gas production from the Groningen field.	external social value creation II			
Enable the feed-in of green gas into the Dutch transmission system faster and at a lower cost.	external social value creation I, II			
Realise our safety objectives.	internal social value creation III			

-  Developing according to plan
-  Developing partly according to plan
-  Not developing according to plan

	Materieel thema *	Strategische pijler Accelerating the energy transition	Strategische pijler Connecting Europe	Strategische pijler Optimum infrastructure
Respond appropriately to disruptions in supply following the Russian invasion of Ukraine.	external economic value creation II, IV			
Strengthen our international position in north-western Europe, particularly in Germany, which we do through partnerships and greenfield projects.	internal economic value creation II, IV			
Gain a leading position in the area of hydrogen transport and storage.	external social value creation I, IV			
Take an active role in the development of heat transport infrastructure and CO ₂ transport and storage.	external social value creation I, IV			
Create a future-proof organisation by improving our flexibility and agility.	internal social value creation I, II, III			
Realise our CSR objectives, which we have set out in our Gasunie Green Deals.	internal social value creation I, II, III			
Realise our digital ambition.	internal social value creation I, II, III			

* Material topics

I. Energy transition

II. Security of supply

III. Safety of the network

IV. Developments in laws and regulations

V. Relationship with stakeholders and our communities: this theme is reflected in all topics

The value we created

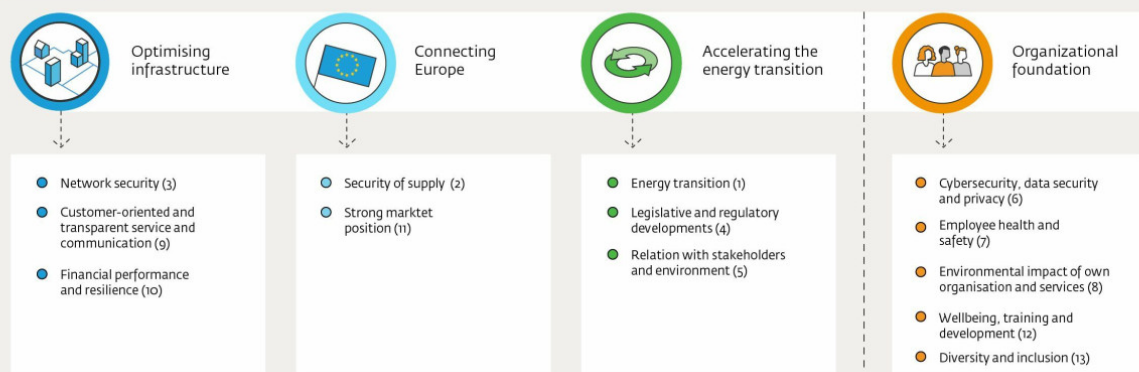
Gasunie's value creation model shows how we use the six capitals of the International Integrated Reporting Council (IIRC) in our company to implement our strategic priorities. We create economic and social value and, in doing so, we have both positive and negative impacts on society. With our positive impacts we contribute to the UN Sustainable Development Goals.

How Gasunie creates value

Our input



Our organizational model: strategic focal points and material topics



Our output and our impact

External economic value creation		External social value creation	
The value we create by performing our natural gas infrastructure core business		The value we create for society by enabling the energy transition	
Results 2022	Impact	Results 2022	Impact
Total transport volume 1,108 TWh	Value creation among business end-users and welfare value creation among households	FID taken for first leg WarmteInQ	Reduction of climate change
Reliable gas transport: 1 uncontrolled event and 4 transport interruptions	End-user loss of value due to interruptions	Production ratio pseudo-Groningen gas/Groningen gas 8:1	Indirect environmental effects (enabling closure of Groningen field)
38,356 TWh gas traded on TTF	Value creation among business end-users and welfare value creation among households	Green CAPEX 12.9% / Green OPEX 4.3% / Green turnover 0.2%	Reduction of climate change

Internal economic value creation		Internal social value creation	
The value we create while performing our natural gas infrastructure core business		The value we create by making our day-to-day operations more sustainable and socially responsible	
Results 2022	Impact	Results 2022	Impact
Net profit € 555 million	Value appreciation of tangible assets	Training expenditures per employee: Netherlands € 2,186, Germany € 2,253	Employee development
Tax charge € 166 million, dividend € 200 million	Reliable payer of taxes and dividends	Gender equality: 27% female share in higher management	Contribution to diversity and inclusion
Salaries € 291 million	Welfare effects of having work	Healthy work environment: 3.8 incidents per million working hours	Work-related downtime and accidents
Credit ratings AA-, A1	Solid financial reputation	Healthy work environment: absenteeism Netherlands 4.05%, Germany 4.77%	Work-related downtime and accidents
ESG ratings 16.8; B	Improved ESG reputation	CO2 emissions scope 1+2+3: 786 kt	Contribution to climate change
Replacement investments € 96 million	Reliable, sustainable, affordable infrastructure		

In the process of value creation, Gasunie supports the following United Nations Sustainable Development Goals (SDGs):



04 External economic value creation

External economic value is the benefit (balance of all positive and negative value) expressed in monetary terms that arises outside Gasunie as a result of Gasunie carrying out its core functions of transporting, storing and treating natural gas, within the financial frameworks set for us by our regulators. The economic value of energy to society is enormous; ongoing availability with no disruptions is of great importance.

Our gas transport and infrastructure activities are at the heart of our strategy. We take care of the development of the gas transport network and ensure that it functions well. We do this by ensuring transmission security and offering relevant services to our customers. Safety, reliability, sustainability and efficiency are central to everything we do.

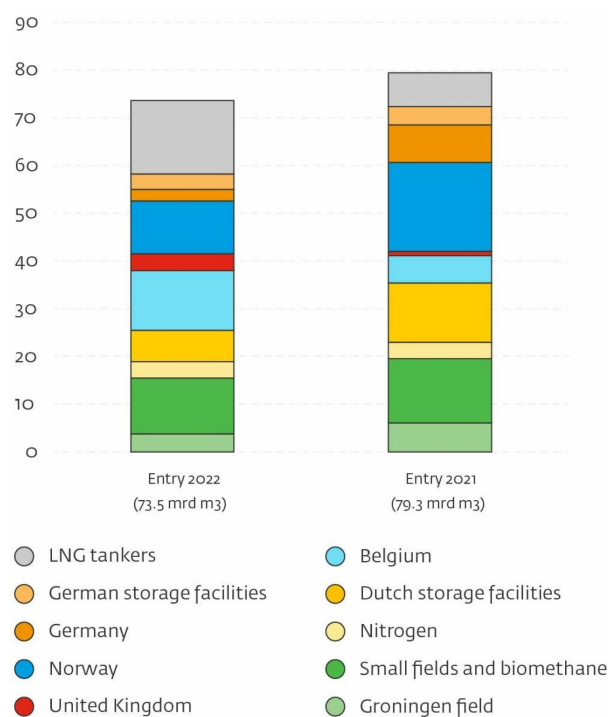
GTS: historically low gas transmission

In 2022, Gasunie Transport Services transmitted 784 TWh (73.5 bcm) of gas, the lowest volume of gas transmitted in the last 30 years and a decrease of approximately 7% compared to the 841 TWh (79.3 bcm) transmitted in 2021. The decrease is largely due to lower domestic consumption and a decrease in G-gas exports abroad.

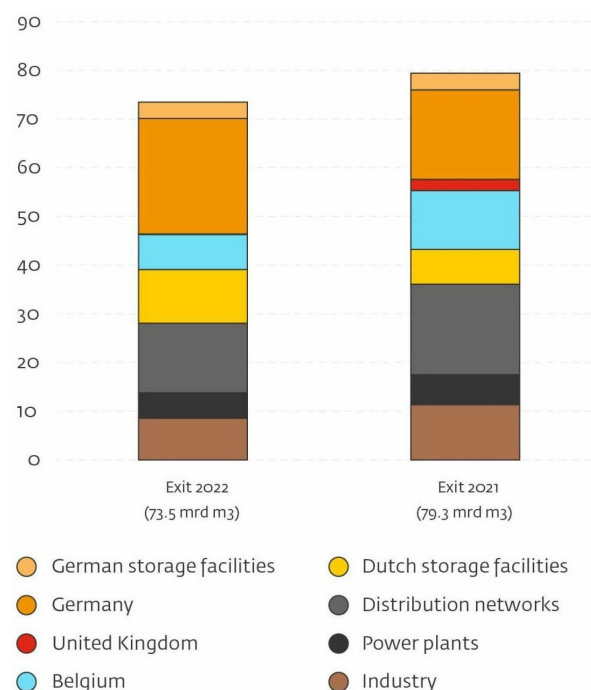
There were two underlying causes for this decline in market demand, the first of these being the considerably higher average annual temperature* in 2022. Particularly striking were the warm periods at the beginning of this year and during the last two weeks of 2022. The second cause was a sharp rise in gas prices as a result of the shortage due to the drastically reduced supply of gas from Russia to Europe. This has led to a reversal of the gas flows, as shown in the chart below.

* In 2022, the average effective temperature in KNMI's reference location of De Bilt was 9.4°C, making this year the second warmest ever: only 2014 was warmer still (9.5°C). The 9.4°C recorded for 2022 made it 1°C warmer than in 2021. At the beginning of the year, the average effective temperature in De Bilt never dipped below -1.9°C on a daily basis. And the coldest day for the first part of 2022 only arrived on 1 April 2022.

Origin of gas in GTS' system (2022 compared to 2021)



Destination of gas in GTS' system (2022 compared to 2021)



Gas transport changed considerably in 2022. Where, in the past, high-calorific gas was transported from East to West, with the gas being imported from Germany via the Netherlands and then exported to the UK and Belgium, in 2022 the flow of high-calorific gas changed from West to East, with the Netherlands importing gas from the UK and Belgium and exporting this to Germany. What is striking is the sharp increase in entry via LNG tankers (+116%) and a sharp increase in exit capacity to fill Dutch storage facilities (+56%).

Peak supply

Peak supply is an important public task carried out by GTS for small users in the Netherlands. Peak supply must be distributed if the mean effective 24-hour temperature falls to below -9.0°C. GTS provides all the necessary facilities to ensure peak supply deliveries to licence holders, including gas purchasing, flexibility services and gas transport over the national grid. There were no peak supply deliveries in 2022.

Transport security in the freezing cold

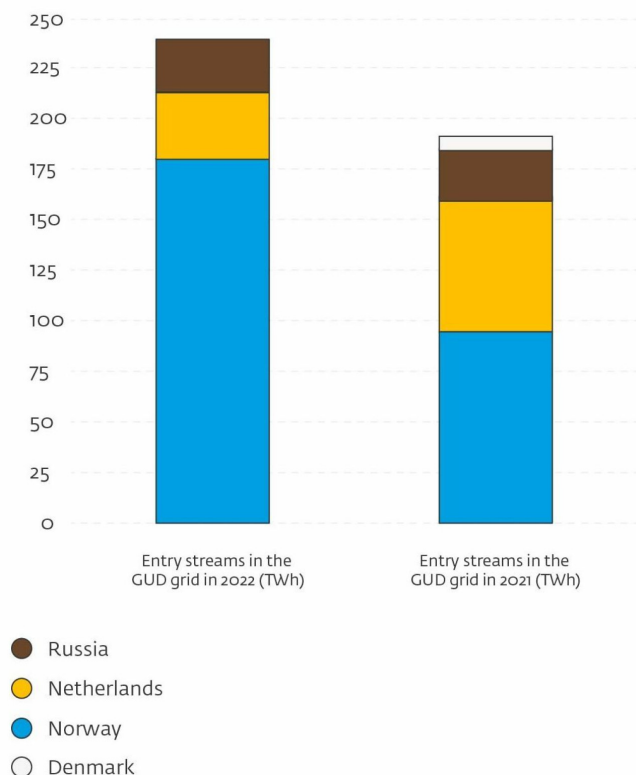
The highest level of gas transport in 2022 occurred on Tuesday 13 December, which saw 311 million cubic metres of gas being transported over the course of one day (mcm/day). Though this volume could be transported without problem, it should be noted that this was considerably lower than the volume reached on the busiest day in 2021: 420 mcm/day. Both figures were far below the record set on 2 January 1997, when we transported 527 mcm of gas in one day.

GUD: key role thanks to reverse in gas flows

In 2022, Gasunie Deutschland transported 324 TWh (33.2 bcm) through its networks, an increase of 21.6% compared to the 267 TWh (27.3 bcm) transported in 2021. Germany has 12 regional gas TSOs. With the decline in gas flows from Russia and given its location in the north-western region of Germany, GUD's network played a crucial role in the transport

of replacement gas flows from Norway and the Netherlands.

Entry flows in GUD's network (2022 compared to 2021)



Gas transport security

In 2022 we provided a high level of transmission security for our customers in the Netherlands and Germany. Four transmission disruptions occurred in 2022, three at industrial customers in the Netherlands and one at the connection point of a regional grid operator in Germany. As a result, the gas supply to these customers was interrupted for a short while. The impact was limited in each case. We have set ourselves a standard of no more than six transmission interruptions in any one year; we stayed below this figure in 2022.

To safeguard the integrity of the pipeline systems, GTS and GUD inspect part of their pipeline system annually. In 2022*, GTS carried out internal inspections ('pig runs') of 237 kilometres of pipeline (2021: 209 kilometres). GTS also inspected 15 kilometres of pipeline above ground in 2022* using External Corrosion Direct Assessments (2021: 4 kilometres). GUD conducted pig runs on a total of 60 kilometres of pipeline (2021: 117 kilometres).

* Estimated figure

Security of gas supply

Over the year under review, the security of gas supply in the EU came under unprecedented pressure due to the reduction in natural gas being supplied by Russia. In the years prior to the Covid-19 pandemic, Russia was supplying around 200 bcm of the approximately 500 bcm of annual market demand for natural gas. In the summer of 2021 it became clear that Russian gas suppliers were not making any effort to replenish their own stock levels in European gas storage facilities. They also gradually stopped offering short-term gas contracts.

This turned out to be the prelude to the Russian invasion of Ukraine in February 2022. The invasion led to a growing number of EU and US sanctions against Russia and the Russian regime and the provision of tangible support to Ukraine. This, in turn, induced Russian gas suppliers to breach their long-term supply contracts with EU countries and energy companies for the first time in history by putting the squeeze on the supply of gas or even turning off the gas taps completely. In September 2022, sabotage of Nord Stream 1 made the supply of gas over this pipeline impossible; the supply had, however, already stopped in the weeks prior to this due to reported 'compressor problems' on the Russian side.

As a result of these developments, and with additional gas imports from non-Russian suppliers starting up, the traditional direction of the international flow of natural gas in Europe from East to West has now changed to West to East. As a result, the Netherlands received significantly larger gas volumes from the UK and Belgium and through the import of LNG. Germany saw its supplies from Norway and the Netherlands increase sharply.

In July 2022, GTS published an analysis showing what the consequences of going an entire year without Russian gas would likely be. This analysis shows that there need not be a gas shortage in the Netherlands in the winter of 2022-2023. It also shows that the Netherlands would still be able to deliver the maximum (physically possible) export volume to Germany. This is all provided that a number of conditions are met, i.e.:

- There is a doubling of the Dutch import capacity for LNG, which must be realised before the start of the new gas year (October 2022).
- The Dutch gas storage facilities are filled to 80%, to be achieved before the start of the new gas year.
- Maximum use is made of the LNG terminals in the Netherlands, Belgium and the UK.
- There is a stable import flow of gas from Norway to the EU.
- There is also a supply from the Groningen gas field (minimum flow) and the small gas fields.
- Use is made of virtually the full capacity of coal-fired power stations in the Netherlands.
- We see a significant reduction in demand. The winter season has average temperatures.

These conditions were met in the first three months of the gas year, with the result that the Netherlands did not have an actual gas shortage in the winter of this gas year. There has been virtually no supply of Russian gas to the EU since the summer and, with the failure of the Nord Stream pipeline, the supply of Russian gas is not expected to resume for the time being. This means the scenario as described by GTS in July has become a reality.

The loss of Russian gas flows is causing continuing scarcity in north-western Europe compared to the pre-Covid consumption level, which is reflected in high wholesale gas prices. This is having major financial consequences for consumers and businesses. Based on data on gas consumption and current prices, GTS expects 20 to 25% less gas to be consumed in 2023. This reduction in demand is partially the result of energy savings on the part of consumers; however, it is, to a large extent, also due to demand destruction in the business community.

If the winter of 2023/2024 turns out to be a cold one, this increases the chance of there being an actual gas shortage, and this given the fact that there will be even less Russian gas available in 2023 than in 2022. This means that measures are needed to ensure a stable, enduring improvement to the supply/demand balance in our market area. This requires both a sustained increase in supply and a continuation of the current significant reduction in demand.

Reserves situation

Netherlands

At the end of March 2022, the European Commission presented a proposal to require EU Member States with gas storage facilities to have these largely filled before winter. The objective is to become less vulnerable to the impact of reduced supply from non-EU countries, especially Russia. To ensure that the Netherlands was as well prepared as possible for the winter and to become less dependent on Russian gas, at the request of the Dutch government the storage facilities were filled higher than usual last year. Dutch storage facilities were at 77% of maximum fill capacity at the end of 2022, compared to 36% at the end of 2021.

Germany

In April 2022, the German economy ministry BMWK asked the nationwide market area manager Trading Hub Europe (THE) to procure and store, in German storage facilities, the equivalent of 10 TWh in LNG. The federal government also passed new legislation to ensure that German gas storage sites are filled before next winter. The law also imposes obligations on THE and on storage facility operators and their customers. Following discussions with the German government, loans from state-lender Kreditanstalt für Wiederaufbau have given THE the financial means to sign agreements with storage facility customers and procure gas itself to ensure that the storage capacity is filled. German storage facilities were at 91% of maximum fill capacity at the end of 2022, compared to 50% at the end of 2021.

Expansion in the Netherlands

EemsEnergyTerminal and Gate terminal

To reduce dependence on gas from Russia, in 2022 Gasunie and its partners doubled the annual LNG import handling capacity in the Netherlands, from 12 bcm to 24 bcm. They managed this by expanding the capacity of the existing Gate terminal in Rotterdam (50% Gasunie, 50% Vopak) to 16 bcm and by constructing the temporary EemsEnergyTerminal (EET) in the port of Eemshaven, adding another 8 bcm in capacity. In 2022, Gate customers fed 14.4 bcm of gas into the GTS grid (2021: 7.1 bcm).

With just six months between design and commissioning, EemsEnergyTerminal was developed in record time. Here, two floating storage and regasification installations (FSRUs) convert liquefied natural gas (LNG) into gaseous natural gas, which is then transmitted to the existing gas grid along a new 4km-long pipeline. The LNG is imported by ship. Each ship supplies about 150,000 to 170,000m³ of LNG, good for approximately 100 million cubic metres of natural gas. The first natural gas flowed from the terminal into Gasunie's national natural gas network in mid-September. In 2022, 11 LNG tankers unloaded their cargo at EemsEnergyTerminal.

Interview: How the Netherlands got a new LNG port in just 175 days

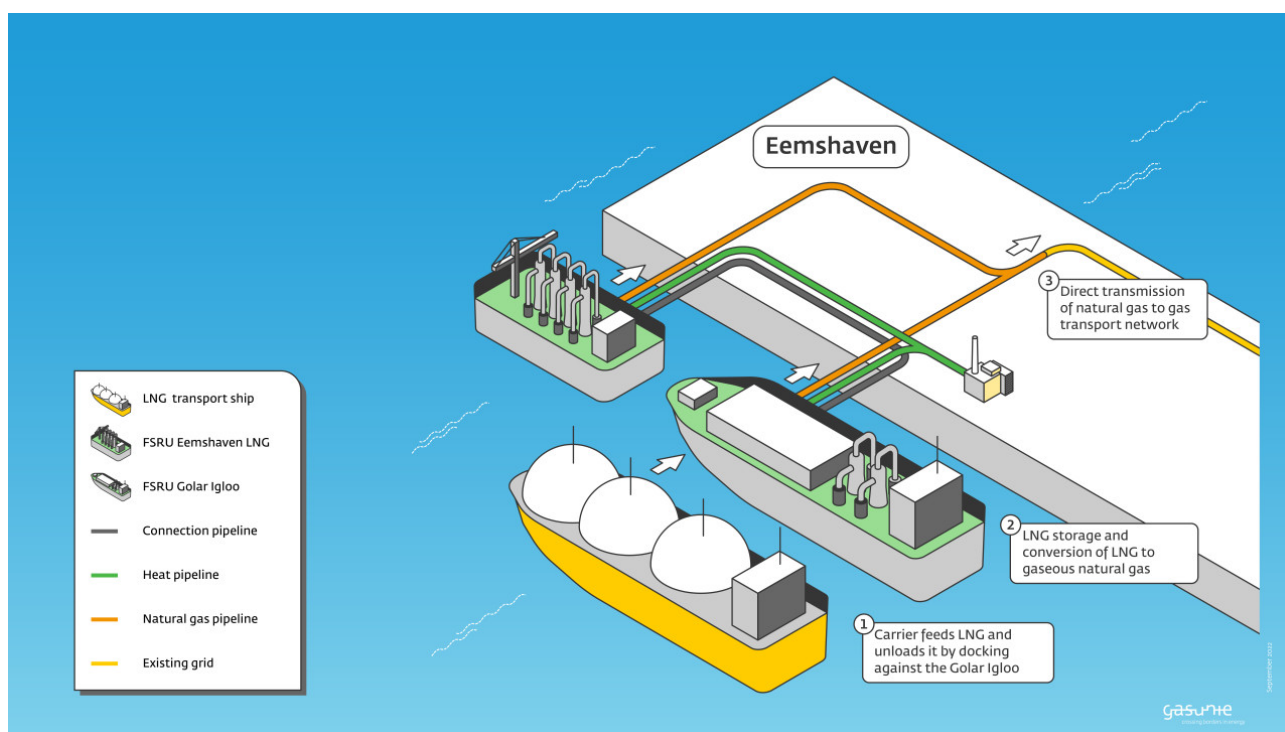
Less than six months after the mobilisation of the project organisation, EemsEnergyTerminal was supplying natural gas to the main transmission grid. This was an immense achievement, given that such a construction project normally takes three years. Erich Jurdik (EemsEnergyTerminal project director) and Rob van Heumen (senior regulatory affairs advisor, Gasunie) talk about the factors that contributed to this success. Erich says, 'The sense of urgency made the entire team feel very determined. There needs to be that same sense of urgency about the energy transition.' [Read more >>](#)

Other LNG initiatives

Gasunie is currently working on expanding LNG import capacity in the Netherlands further. We plan to further expand capacity at the Gate terminal and EemsEnergyTerminal by means of technical optimisations. These measures, which could possibly be in place before the start of next winter (2023/2024), can expand the import capacity up to the end of the 2025/2026 winter.

The additional supply of LNG arriving via the Netherlands will alleviate the supply shortage, which in turn could contribute to lowering gas prices. Given the importance of transitioning to a green energy supply, Gasunie wants to realise this expansion on a temporary basis. The intention is to eventually (after a few years) use as many components of the temporary installations as possible for the transmission of hydrogen.

EemsEnergyTerminal: powerful response to scarcity of supply



Expansion in Germany

German LNG

As a result of the war between Russia and Ukraine, the German Ministry for Economic Affairs and Climate Action has launched several initiatives to directly increase LNG supplies to Germany in the short, medium and long term. This includes the construction of two permanent onshore LNG terminals – one in Brunsbüttel and one in Stade, to be commissioned in 2026, and temporary floating LNG terminals in Wilhelmshaven, Stade, Brunsbüttel and Lubmin, to be commissioned in 2023.

On 4 March 2022, Gasunie, Kreditanstalt für Wiederaufbau (KfW, on behalf of the German government) and RWE signed a letter of intent for the joint construction of the onshore LNG import terminal in Brunsbüttel. The terminal will have an annual throughput of at least 8 bcm with a possible expansion to 10 bcm.

Gasunie subsidiary German LNG will manage the terminal on completion. The licensing procedure is already underway. ConocoPhillips, INEOS and RWE Supply & Trading are the first customers in line to formally sign up for capacity at the terminal. The intention is to design the LNG terminal in Brunsbüttel in such a way that, eventually, green hydrogen or hydrogen carriers such as ammonia can be imported. No final investment decision has yet been taken for the German LNG terminal.

Other LNG initiatives

In addition, the German Ministry for Economic Affairs and Climate Action has commissioned Uniper and RWE to charter FSRUs for Germany, to be berthed at Wilhelmshaven, Stade and Brunsbüttel. As a network operator, GUD must quickly build pipelines to connect the FSRUs in Brunsbüttel and Lubmin and the onshore terminal in Brunsbüttel to the gas transmission network. The investments have been approved by German regulator BNetzA and, accordingly, will become part of GUD's regulated asset base.

Security of supply dashboard

To keep the market and society up to date on the security of gas supply, GTS has developed a [dashboard](#), updated daily, that presents information from public sources in a clear, orderly manner. This dashboard shows the individual and total stock levels at the Dutch seasonal gas storage facilities, the gas consumption in the Dutch market, the supply of gas for Europe, gas transport to and from Germany and Belgium, and the volume of LNG imported to the Netherlands. All this information is also published weekly on the Dutch government website.

TTF: less trade, rising market share

In 2022, less gas was traded on the Title Transfer Facility (TTF) than in the record year 2021. The number of parties trading on TTF also declined compared to the previous year.

	2022	2021	change
Amount of gas traded on TTF	38,356	47,705	-20%
Maximum number of active parties in one day	170	175	-3%
Amount of gas traded through the GTS network via TTF	486	513	-5%

On a gas trading platform, there are two main forms of transactions: over the counter (OTC) transactions, where the gas is purchased directly from the other party, and transactions through a gas exchange, which acts as the intermediary for all traders. OTC trading decreased by more than 40% in 2022, from 19,610 TWh (in 2021) to 11,511 TWh. The decline in the TTF share traded through gas exchanges was less steep, from 28,094 TWh (in 2021) to 26,845 TWh in 2022.

Over the past year, TTF's lead over other European gas trading platforms remained strong. In 2021, nearly 80% of European gas trading took place on TTF, compared with 75% in 2022, which again confirms that the Dutch gas market is working well and that TTF has acquired a leading position in Europe.

THE

In October 2021, as mandated by German law, all German TSOs consolidated the two existing German market areas into one large virtual trading hub for all of Germany, with a single market area operator, Trading Hub Europe (THE). Gasunie expects THE to lead to greater liquidity on the German gas market. An integrated German market area makes further north-western European market integration easier to achieve. In the course of 2022, the German government approached THE several times asking the hub to take on new tasks in the area of security of supply.

Nord Stream write-off

On Monday 26 September, Nord Stream informed Gasunie about a drop in pressure registered in the gas pipelines. Gasunie has a 9% share in Nord Stream. (Gasunie is not a shareholder in Nord Stream 2). It soon became clear that the pipelines had been sabotaged in several places, allowing the gas that was still in the pipeline to escape. This sabotage of pipelines is unprecedented, and very serious, too, because of the major environmental damage this has caused. As a shareholder, we are consulting on the situation that has arisen. We are in close contact with our European co-shareholders, partners and the relevant government bodies. In March 2022, Gasunie reduced its shareholder role to the minimum required to guarantee security of supply for Europe.

The two Nord Stream pipelines were not in use at the time they were sabotaged. Gazprom had already reduced gas supplies through Nord Stream and, after maintenance work on their own installations in September, did not resume its gas supplies to Europe through this pipeline. At the time of the publication of its half-year report for 2022, Gasunie announced that it would reduce the book value of its stake in Nord Stream by € 267.8 million to € 240.3 million. Based on our updated risk assessment, including expectations regarding future dividends, we have decided to set the value of our interest in Nord Stream at year-end 2022 at zero.

Nord Stream transported a total of 30 bcm of natural gas in 2022, compared to 59.2 bcm in 2021. Up to and including May 2022, supply was at maximum capacity, in line with previous years; from June to August, the volume gradually dropped to zero.

Gate terminal: essential contribution to security of supply

In 2022, Gate terminal made an essential contribution to security of supply in the Netherlands, with a total of 14.4 bcm fed into the grid, more than double the volume seen in 2021 (7.1 bcm). We expect capacity to increase to 16 bcm from 2024 through various optimisations and adjustments. Gate is exploring the possibility of further expanding capacity from 2026 to a total of 20 bcm.

	2022	2021
Feed-in of LNG to GTS network in billion m3	14.4	7.1
Number of large tankers	176	102
Number of smaller tankers	91	142
Number of trucks and containers loaded	8,598	8,468

VertiCer: strong partner for Guarantees of Origin

On 1 January 2023, CertiQ and Vertogas merged under the name VertiCer. CertiQ and Vertogas are subsidiaries of, respectively, TenneT and Gasunie. CertiQ issues Guarantees of Origin (GOs) and Certificates of Origin (COs) for electricity and renewable thermal energy. Vertogas does this for green gas and hydrogen.

With this merger, the companies are preparing for the anticipated integration of gases, heat and electricity in the future energy system. The collaboration also puts VertiCer on the stage as a strong partner for harmonising GO systems in Europe. TenneT and Gasunie foresee substantial growth in the number of GOs required for all renewable and circular energy carriers. New roles and tasks may eventually be added, such as issuing GOs for carbon storage, for example.

Vertogas saw volume relating to the number of GOs issued level off somewhat (as predicted), going from 2.2 million megawatts in 2021 to 2.1 million megawatts in 2022. We expect gradual growth over the coming years as a result of the increase in the number (and size) of production installations for both biomethane and hydrogen.

The number of traded GOs increased from 3.2 million MWh in 2021 to 3.6 million MWh in 2022 (including transfers to the Dutch Emissions Authority), a trend that we expect to see continue, albeit depending on how the energy market develops. We also expect an increase in international trade activities in the form of import and export of GOs. In 2022, GOs were issued to 58 green gas producers, 62 traders and 85 end users (2021: 59, 75 and 81 respectively).

In October 2022, Vertogas registered the first hydrogen certification participant and issued the first-ever GOs for hydrogen in Europe.

Verdict in Solstar case

At the end of 2018 GTS fell victim to balancing fraud by a small connected shipper, Solstar, as a result of which it incurred over € 16 million in losses. To call the offenders to account and recover the losses suffered, GTS reported the fraud to the authorities. An investigation by the Fiscal Intelligence and Investigation Service ('FIOD') eventually led to an arrest and conviction. In December 2022, a former director of Solstar was sentenced to one year's unconditional imprisonment. It was proven that the man (together with others) was able to build up a licence under false pretences and that he falsified statements and other documents with the aim of forming an image of a creditworthy enterprise, based on which Solstar gave an inaccurate picture that the company could pay its bills.

05 External social value creation

External social value is the value that Gasunie creates by investing in matters of major social importance, but which cannot yet be accurately expressed in monetary terms. In concrete terms, this concerns our contributions to the planned closure of the Groningen gas field and our investments in the energy transition. Gasunie believes that it must be possible to achieve the European and national emission reduction targets on time and that, as an energy infrastructure company, we can play an important role in this in our core area.

Contribute to closure of the Groningen gas field

Advice to the Dutch Ministry

In January each year, GTS advises the Dutch State Secretary for the Extractive Industries in the area of security of supply for the upcoming gas year. This advice includes an analysis of the expected supply and demand. In its analysis, GTS calculates the amount of production from the Groningen gas field necessary to ensure security of supply based on the amount of gas expected from the different sources (for example from foreign import, offshore production, small fields, etc.). In 2022, GTS reported that in gas year 2022/2023 the Groningen gas field would only need to operate on 'pilot light' mode, with a minimal level of production.

In February, Russia invaded Ukraine, dramatically changing the geopolitical landscape. This has had major consequences for the energy markets. The flow of Russian gas coming into Europe has dropped, causing an historic increase in gas prices and a significant reduction in demand due to demand destruction. Meanwhile, European countries have pursued policies to top up their stores of gas. In response, GTS carried out additional research in September to determine the consequences of all of this for security of supply and the level of production now required from the Groningen gas field. Based on the findings of this new analysis, it was determined that the conclusions from January still applied: the capacity of 4.4 million Nm³/hour and the resulting volume of 3.2 billion Nm³ for gas year 2022/2023 is enough to ensure security of supply.

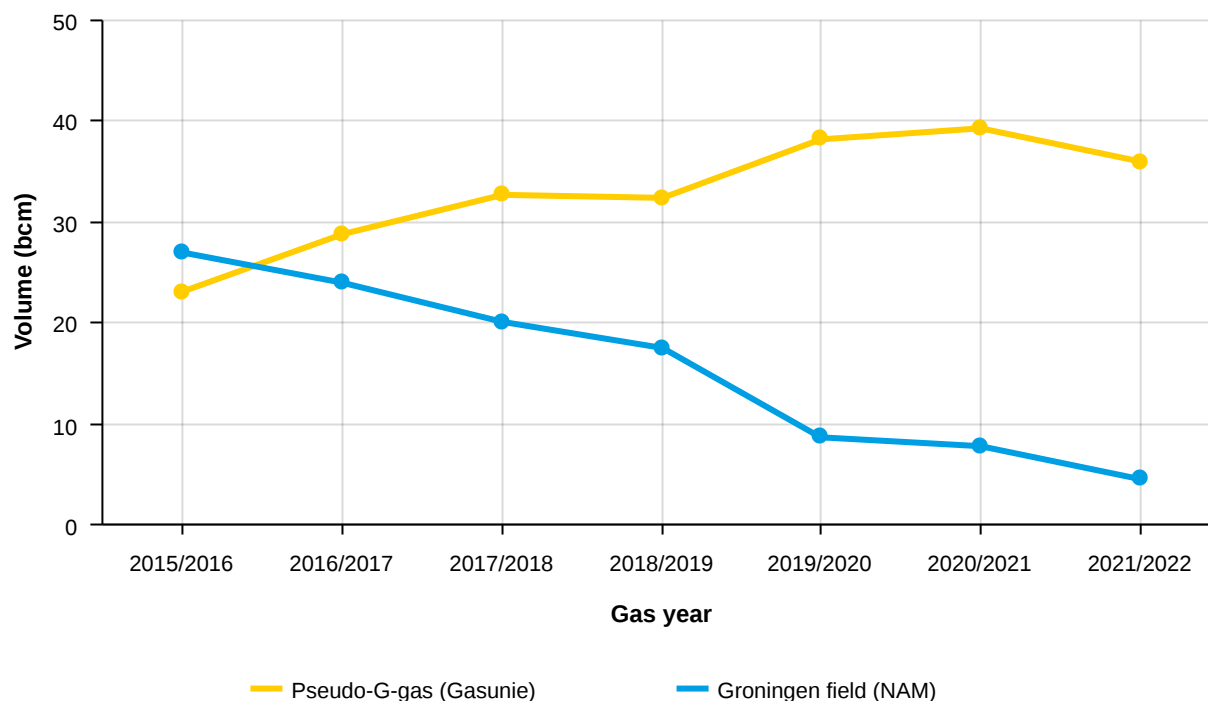
In its advice of January 2023, GTS requested that the State Secretary not close the Groningen field definitively in the 2023-2024 gas year either. GTS recommends that the Groningen field be kept on 'pilot light' so that, in the event of setbacks, the Ministry of Economic Affairs and Climate Policy has the option of allowing additional production, alongside any other measures such as (possibly mandatory) demand reduction.

Zuidbroek delay

Thanks to the deployment of additional workers, the construction of the Zuidbroek II nitrogen plant was nearing completion at the start of 2023. Various deadlines for the delivery of the plant were not met in 2022 due to friction between the main contractor Air Products and subcontractor Ballast Nedam Industriebouw. The construction work that still needed to be completed at the end of 2022 was relatively limited in scope. Construction is expected to be completed in October 2023. Given the considerable decline in market demand for natural gas and the now well-stocked storage facilities, this situation will have no consequences for gas production from the Groningen gas field for the coming gas year (October 2022 to October 2023). GTS's nitrogen installations already in operation can supply sufficient volumes.

With the commissioning of the nitrogen installation in Zuidbroek, a maximum of 10 bcm of 'pseudo Groningen gas' can be produced annually by blending nitrogen into imported gas. The new installation will provide additional capacity in the winter, ensuring that the Groningen gas field no longer needs to be used, even when temperatures are low. In the summer, the plant will eventually be used to fill the seasonal gas storage facilities with pseudo Groningen gas.

Relationship between the production of Groningen gas and pseudo G-gas



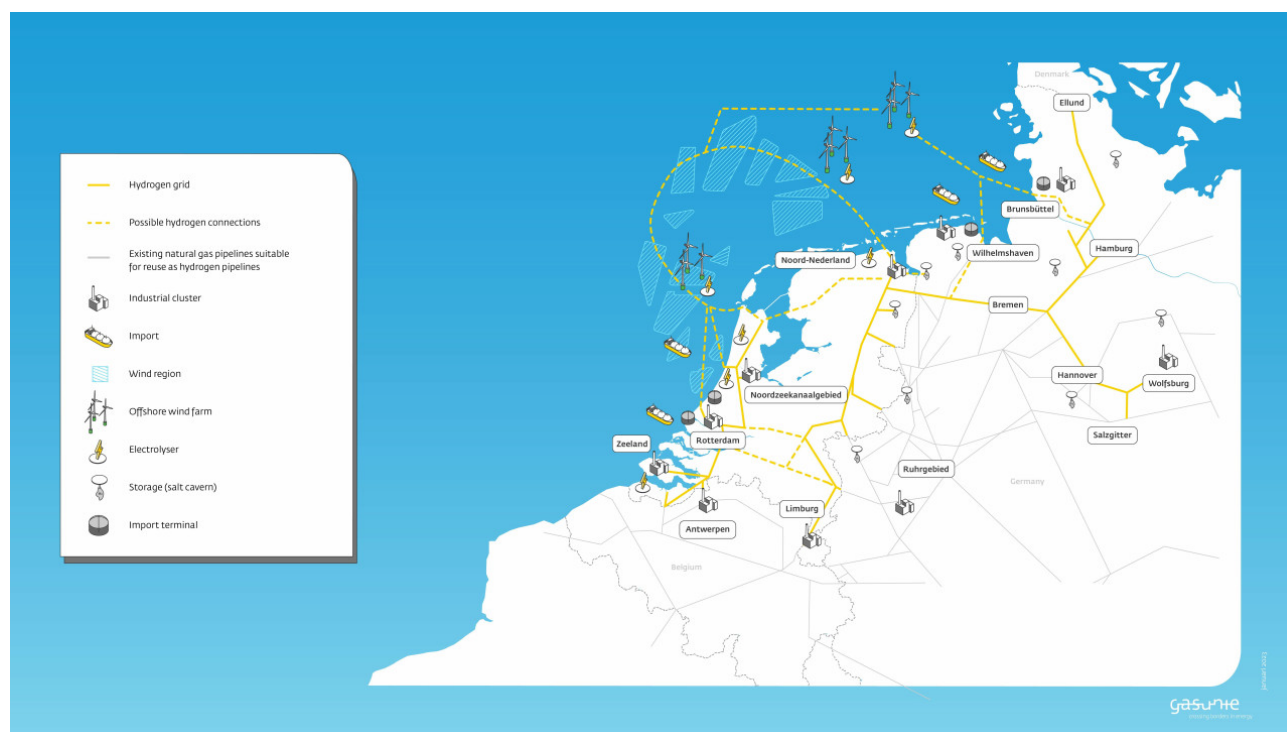
In the 2021-2022 gas year (1 October to 30 September), NAM's gas production from the Groningen field amounted to 4.5 bcm. That would have been eight times as much if Gasunie subsidiary Gasunie Transport Services had not been producing pseudo-Groningen gas by mixing nitrogen with natural gas imported from abroad. In total, we avoided the production of 36 bcm of Groningen gas during the 2021-2022 gas year.

Investments in sustainable energy infrastructure

Hydrogen

The supply of and demand for green hydrogen will need to be built from the ground up, as will the transport connections between suppliers and consumers and storage facilities. A large number of parties are working on this together. Gasunie's strategy to help develop the hydrogen supply chain is based on four pillars: Transport, Import, Storage and Offshore.

The hydrogen network in 2030



This map shows the hydrogen network as Gasunie envisions it in 2030. The map is part of Gasunie's publication *InfraVision* (currently being drafted), which will provide insight into the 2030-2050 development pathway for the infrastructure required for hydrogen, natural and green gas and CO₂ – individually and as these concern each other.

Transmission

Netherlands

In 2021, the Dutch government commissioned Gasunie subsidiary Hynetwork Services to build, in three phases, a national hydrogen transmission network connecting the key industrial clusters.

- Phase 1 (2026): connecting the industrial clusters on the coast (Zeeland, Rotterdam-Moerdijk, the North Sea Canal area, and the northern region of the Netherlands). In the first phase, a connection with the Zuidwending storage facility and an initial connection with Belgium and Germany are also planned.
- Phase 2 (2028): connecting infrastructure completed in phase 1 with the Limburg industrial cluster. The connections with Belgium and Germany are to be expanded, partly because Germany is expected to need increasingly more imported hydrogen.
- Phase 3 (2030): connecting the western and eastern routes with a southern route that also links up with the Belgian hydrogen infrastructure at Sas van Gent and Dilsen. Connecting Den Helder to the existing routes.

With the help of this national infrastructure, the Netherlands will become the gateway to Europe for the global hydrogen market. We aim to make a final investment decision on phase 1 in 2024. The Dutch hydrogen network will stretch out over 1,183 kilometres and will consist for 85 to 90% of repurposed pipelines from GTS' national natural gas grid. The national hydrogen network has now been included in the national coordination scheme, under which the Dutch government coordinates spatial planning and permitting procedures. Hynetwork Services has been transmitting hydrogen between Dow Chemical's plant and the plant of fertiliser producer Yara, both located in the Zeelandic Flanders region, since 2017.

Gasunie also anticipates that Hynetwork Services will be designated as the hydrogen TSO in the Netherlands around 2025. From 2025 to 2030 there will be a transitional regime for access to the transmission network, during which time it will be up to Hynetwork Services and interested companies to mutually agree arrangements concerning access. After this period, regulator ACM will set the transmission tariffs that Hynetwork Services can charge and ensure that access be given to any party requesting such.

Germany

Gasunie is working on the HyPerLink project in the north of Germany, where GUD's natural gas network is located. This hydrogen transmission network will stretch out over 663 kilometres and approximately 75% of it will comprise repurposed natural gas pipelines. HyPerLink may be eligible for an IPCEI grant of € 160 million. Gasunie hopes to take the investment decision for HyPerLink at the end of 2023. With a 'go' decision, the first part, including the connection to the Netherlands, can be ready in 2026. Our new entity Gasunie Energy Development GmbH is involved in the realisation.

In its final form, HyPerLink will connect ports in the northern part of Germany with the Ruhr, link up with the Dutch and Danish hydrogen networks, and become part of a German national hydrogen grid. The German government is considering forming a nationwide hydrogen TSO, but it is currently unclear how this relates to the gas TSOs that want to convert parts of their natural gas networks for the transmission of hydrogen.

Import

To achieve the climate goals, a substantial part of the total demand for hydrogen in north-western Europe will have to be met through imports from other countries. Gasunie is investigating the possibilities of developing terminals in the Netherlands and Germany for hydrogen and hydrogen carriers.

Various international supply chains and technologies are being developed for the transport of hydrogen, including ammonia, liquid hydrogen and liquid organic hydrogen carriers (LOHCs). Gasunie expects ammonia to play an important role as a hydrogen carrier. After being combined with nitrogen to form ammonia, hydrogen can be transported more efficiently in larger volumes, stored and then converted back into hydrogen. Moreover, existing technologies and markets can be used, and sustainably produced ammonia can also be used directly, for example as a zero-carbon fuel in shipping or as a raw material in the production of fertiliser, for example.

In 2022, Gasunie, HES International (HES) and Vopak signed a collaboration agreement for the development of an import terminal for green ammonia at the Maasvlakte industrial area near Rotterdam. The parties aspire to have this ACE Terminal in operation from 2026.

Ships from all over the world can berth at the envisioned location to unload ammonia, which can then be converted here and transported onwards through the hydrogen network in the Netherlands and Germany to the end customers. Development can be accelerated by using existing infrastructure. Furthermore, the intended site is a prime location thanks to the space it affords for further expansion and growth.

Gasunie is also investigating possibilities for building terminals for hydrogen/hydrogen carriers in Eemshaven in the Netherlands and Brunsbüttel in Germany.

Storage

To give the future Dutch hydrogen grid the desired stability, a large-scale central storage facility is needed. Gasunie subsidiary HyStock is studying the possibility of developing four salt caverns in Zuidwending for use in storing vast volumes of hydrogen. This would make it possible to store large amounts of energy in a safe, efficient and reliable manner. Demonstration tests carried out in 2022 showed promising results.

HyStock will now take further steps towards the development of the first salt cavern, which can come into operation in 2026, provided the permits are ready in time. An application has been made to have the planned storage facility come under the national coordination scheme.

In Germany, Gasunie is participating in the hydrogen storage pilot H2Cast; with this project we are already jostling for a position in the future German hydrogen storage market.

Offshore

In 2022, four North Sea countries signed the Esbjerg declaration, in which they stated that they would develop the North Sea as a 'Green Power Plant of Europe'. In the declaration, they set the ambition to produce 65GW of offshore wind by 2030. Of this, 20GW is earmarked for the production of green hydrogen, a portion of which may also be produced offshore.

Various studies have been started at Gasunie to open the way for this offshore green hydrogen. Research into the offshore hydrogen network will provide a better understanding of the system requirements, the costs and the route(s) from the offshore hydrogen production sites to the landfall points where the hydrogen will be transferred to the national (onshore) hydrogen network.

To enable large-scale rollout and integration of wind energy further offshore at the lowest social cost, Gasunie is also investigating the development of energy hubs. In this arrangement, wind farms are connected to centrally located offshore hubs, which are connected to each other and to North Sea countries via cables and/or pipelines.

The Dutch Minister for Climate and Energy Policy intends to appoint Gasunie to develop and operate the offshore hydrogen network in the North Sea. As for electrolysis, whether onshore or offshore, the government has recently decided that this is a commercial activity that is reserved for private market parties, unless it emerges that no commercial parties are willing to make the requisite investments. In that case, the Dutch government may consider offering this extra scope to network operators, this from a system perspective. In view of the government's standpoint, Gasunie is phasing out its electrolysis-related processes.

Interview: One hydrogen network developed by Gasunie, on land and offshore

The hydrogen knot has been cut. Last summer, Dutch Minister for Climate and Energy Policy Rob Jetten appointed Gasunie as the party to construct and manage the hydrogen network in the Netherlands. The Minister now intends to give us the same role for the hydrogen network in the North Sea. Gasunie's offshore hydrogen development manager Werna Udding and Guido Custers, project director at Gasunie for the Netherlands hydrogen network, discuss the plans. 'We have to start now to ensure that the first generators and the first users are connected with each other in good time,' says Guido. [Read more >>](#)

CCS

Gasunie is committed to facilitating the development of CCS by developing CO₂ transport and storage infrastructure together with partners from across the supply chain. The projects we are working on are Porthos, Aramis and CO2next.

Porthos

In September, the permits issued to Porthos for storing CO₂ in depleted gas fields under the North Sea became irrevocable. The fields P18-2 and P18-4 are the first fields in the Netherlands in which CO₂ may be stored permanently.

In March, the Dutch Council of State heard the appeal lodged by the environmental organisation Mobilisation for the Environment against the integration plan and two permits for Porthos. The session specifically considered the matter of the partial exemption issued for the construction – whether this was in line with European legislation and whether it had been correctly applied in the case of Porthos. The Council of State issued an interim ruling in November, and a final decision is expected in the course of 2023.

In December, the Dutch Council of Ministers published a guarantee scheme for Porthos, enabling Porthos to order materials in anticipation of obtaining the final permits and a positive FID, thus preventing further delays in the project. The guarantee scheme is still subject to parliamentary approval.

Aramis

In 2022, the Dutch government added Aramis to the list of projects that come under its multi-year programme for energy and climate infrastructure ('MIEK'). Moreover, the European Commission has granted project PCI status, in part based on the possibility of processing CO₂ from neighbouring countries – such as Belgium, Germany and France – as soon as this has become legally possible. A launch event was held with CO₂ emitters and other stakeholders in November.

CO2next

In 2022, CO2next took the technical, organisational and commercial aspects of the project forward. The technical basic design has been completed, and the collaboration with Aramis was intensified. Now CO2next and Aramis will, together, turn their attention to the permit processes and the environmental impact report, to be drafted in accordance with the Ministry of Economic Affairs' memorandum on the scope and level of detail. The EIA is underway. Multiple market parties were invited to express their interest in an open season procedure.

Heat

WarmtelinQ

With the WarmtelinQ project Gasunie is building an underground main transmission pipeline that will bring waste heat, i.e. heat as a by-product of industrial processes, from the Port of Rotterdam, through Vlaardingen and to The Hague and Leiden to warm homes and businesses in the Province of Zuid-Holland. The go-ahead for the construction of the pipeline from the port to The Hague was given in 2021. Construction is in full swing and it is expected that this section will be ready to supply heat in the second half of 2025.

In July 2022, the Province of Zuid-Holland, the Ministry of Economic Affairs and Climate Policy, and Gasunie signed the Zuid-Holland heat grid covenant, giving the official go-ahead for the construction of the section of pipeline to run between Rijswijk and Leiden. Construction of this section is expected to be able to start in mid-2025, with the first heating expected to be supplied to Leiden and neighbouring municipalities in mid-2027.

After months of preparation, construction of the section of the WarmtelinQ heat transmission pipeline to The Hague got underway in Delft in October 2022. In November, a number of drilling operations were carried out near Rijswijk-Buiten using the horizontal directional drilling (HDD) method, with impressive results.



The horizontal directional drilling for WarmtelinQ in Delft under the Laan der Verenigde Naties road was a spectacular technical achievement. On 7 December 2022 local residents were given the opportunity to see the procedure for themselves and ask questions.

WarmtelinQ faced a number of challenges in 2022. For example, an appeal was lodged with the Council of State concerning the issuance of permits for the section of pipeline between Vlaardingen and The Hague. The Council of State has determined that additional research must be carried out and has stated that it will make its decision based on the findings. Their decision is expected in the second quarter of 2023.

Given the ruling of the Council of State on the construction exemption with regard to the nitrogen issue at Porthos, WarmtelinQ has applied for a Dutch Nature Conservation Act permit for limited nitrogen emissions during construction. We do not expect that either of these matters will have an effect on the completion date or the first 'delivery' of heat.

To minimise dependence on Russian gas, Gasunie completed the EemsEnergyTerminal in 2022. Given that heat transport pipelines are a prerequisite for the proper functioning of this installation, Gasunie has made available some of the insulated pipes originally earmarked for the WarmtelinQ project. This involves a total of three kilometres of pipeline. WarmtelinQ's scheduled completion date will not have to be pushed back as a result.

Warmtenet Groningen

In September, provincial administrators from the Province of Groningen and municipal authorities in Eemsdelta, Het Hogeland and Groningen signed a [letter of intent](#) along with Gasunie, Enpuls, WarmteStad and Groningen Seaports for a heat transport pipeline from the port of Eemshaven and the Oosterhorn industrial area to the City of Groningen, passing a number of villages along the way. The pipeline is intended to provide homes with waste heat from businesses in the port and industrial area. Heat from local sources will also be accommodated in the grid. If the project proves to be feasible, the heat transport pipeline can be contributing to sustainable, reliable and affordable heating from around 2030.

Decision of the Dutch government on heating

The Dutch government has decided that from July 2024 – with a transitional period of seven years after that – all new heat grids will be in public hands. Private heat network companies can still participate in both the infrastructure and production and supply, provided that the majority of the infrastructure is in the hands of a public party. This decree will be part of the new Dutch Collective Heat Supply Act.

As a wholly owned subsidiary of state-owned Gasunie, WarmtelinQ is already in public hands. However, this decision does affect its distribution networks, i.e. the heat grids that deliver the heat from WarmtelinQ to homes and businesses over an intricate, local-level network. These distribution networks are now mostly in the hands of private parties like Eneco and Vattenfall. This will change in the future. Eneco and Vattenfall are WarmtelinQ's founding customers.

Green gas

Scale-up opportunities

The Netherlands has set itself the goal of producing 2 bcm of green gas annually by 2030. This is currently 0.2 bcm. A tenfold increase in just eight years is a very ambitious target. To achieve this ambition, in April 2022 five green gas sector associations united under Platform Groen Gas. Gasunie plays an important role in the platform. This platform, in close consultation with the Dutch Ministry of Economic Affairs and Climate Policy, has started implementing a multi-year plan.

Gasunie sees many opportunities for market parties to scale up green gas production. In the [REPowerEU](#) plan, the European Commission has set a European green gas target of 35 bcm by 2030. The Dutch coalition agreement includes the ambition of introducing a blend with green gas. The government would then require suppliers to supply green gas to be used in the natural gas grid. The Ministry of Economic Affairs and Climate Policy aims for a blending obligation of 1.6 bcm by 2030.

The Dutch government has announced that, under the new Dutch Energy Act, Gasunie will be given the scope to bring new green gas technologies such as SCW and Eemsgas to the market. The SCW and Eemsgas plants have been set up to demonstrate that it is possible to produce green gas on a large scale using gasification. In terms of upscaling, we expect that, on successful demonstration of the technologies, several plants will be constructed to produce large volumes of green gas.

SCW

At the Demonstratiefaciliteit SKW Alkmaar demo gasification plant, syngas has been produced using SCW Systems' supercritical water gasification technology from the end of 2021. In 2022, the plant ran without problem for many hundreds of hours. In 2022, work was carried out on the installations that enable the conversion of syngas to green gas. The first green gas was fed into the GTS network early in 2023.

Gasunie is a 35% shareholder in Demonstratiefaciliteit SKW Alkmaar. By taking this stake, Gasunie aims to facilitate the further development of the technology so that large-scale production of renewable gas becomes feasible in the Netherlands and beyond. In 2022, SCW and Gasunie developed an acceleration plan for this. This plan also pays attention to SCW Systems' other promising technology, CO₂CLEANUP. With this technology, CO₂ is extracted from the atmosphere or processes and is permanently captured in usable powders. Gasunie does not, however, participate in or invest in CO₂CLEANUP.

EemsGas

At the beginning of 2022, Gasunie and torrefaction specialist Perpetual Next set up a 50/50 joint venture to complete the Torrgas Delfzijl project. The plan is to build a new plant that will eventually be able to sustainably produce green gas from syngas.

In June, the partners decided to continue the project under the new name EemsGas, a name chosen in recognition of the plant's location in the municipality of Eemsdelta. Moreover, this name change avoids confusion concerning the nature of Torrgas' involvement: after Perpetual Next and Gasunie took over the project at the beginning of 2022, Torrgas ceased being a shareholder, but the company is still involved as a supplier of the technology.

With the EemsGas project, the two partners are investigating the possibilities of building a commercial gasification plant in Delfzijl that would use woody biomass originating from recycled wood waste. This plant would use the technology developed by Torrgas, with which green gas can be produced from syngas. The emphasis is now on finalising the technical design of the plant and updating the business case based on the latest market information, after which a decision on the next step will be taken in 2023.

Our contribution to decarbonisation

By 2030, Gasunie wants to have completed its transformation from a gas transmission company to an energy infrastructure company, and for some time now we have been expanding our activities to include heat, CO₂, hydrogen and green gas. These plans are described in our Vision 2030.

Vision 2030 investments can ensure many megatonnes of avoided carbon emissions

Project	2022	2023	2024	2025	2026	2027	2028	2029	2030
 Hydrogen	0.0	0.0	 0.0	 0.9	2.5	3.0	3.5	5.2	6.7
 CCS	0.0	0.0	0.0	 1.3	2.5	 5.6	8.8	12.5	12.5
 Green gas	 0.1	0.1	0.2	0.2	0.6	0.9	1.2	1.5	1.8
 Heat	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Subtotal:	0.1	0.1	0.2	2.4	5.7	9.6	13.6	19.3	21.2
 Demand reduction	15.3	10.3	10.4	13.9	16.0	17.4	19.0	20.8	21.3
Total:	16.3	10.4	10.6	16.3	21.7	27	32.6	40.1	42.2

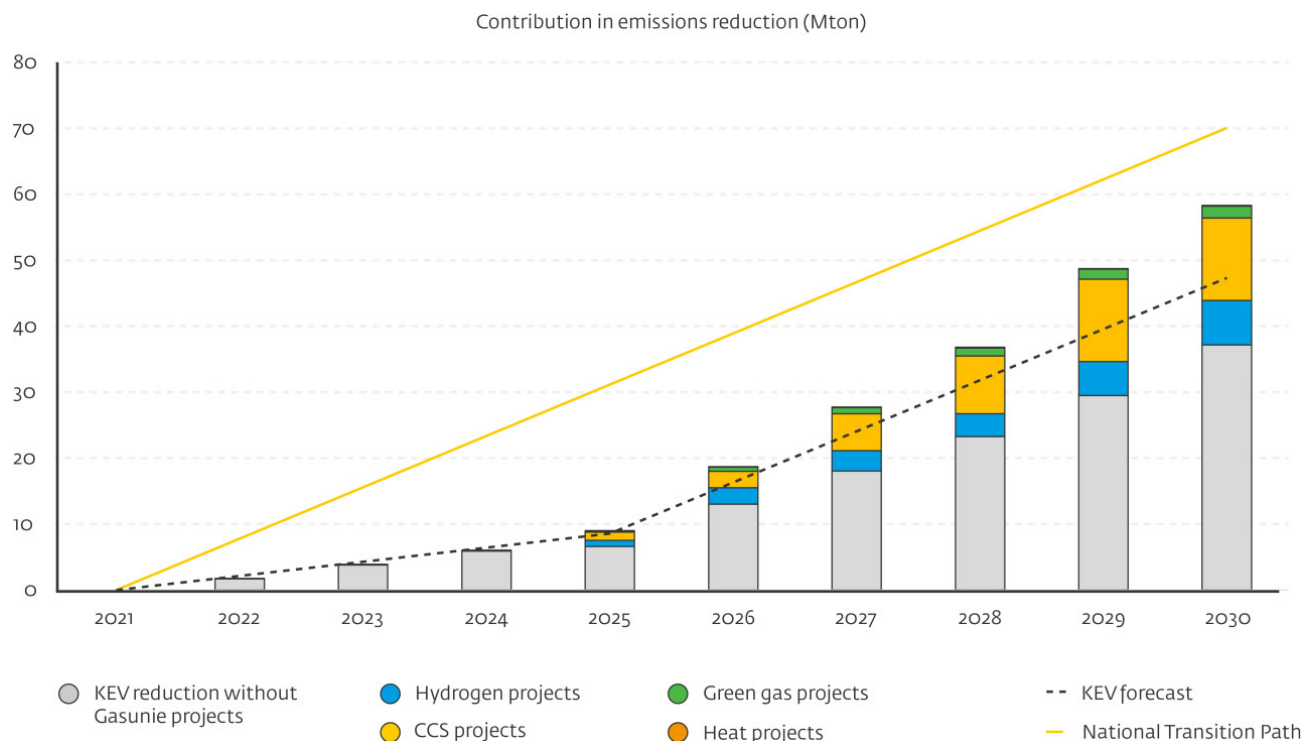
Note: Hynetwork Services concerns the completion of the initiatives in Rotterdam (2025), North (2025), North Sea Canal Area (2026) and Zeeland (2027).

The visual above shows the annual tonnes of emission reduction that our Vision 2030 projects will achieve, provided we are able to implement them on time and in full (and provided we are facilitated in doing so). Gasunie's infrastructure users will then have considerably lower carbon emissions. At the same time, with the increase in the generation of electricity from solar and wind, for example, the Netherlands will be consuming less natural gas (demand reduction), which will then further reduce the total carbon emissions of our infrastructure users.*

* Furthermore, our Vision 2030 projects will be able to contribute to cutting emissions in other countries too.

The question is, are we, with our Vision 2030 investments, doing enough to make a meaningful contribution to achieving the carbon emissions targets society would like to see met? As can be seen in the visual below, the answer is yes. The Netherlands aims to be climate-neutral by 2050. To get there, as a country the Netherlands must cut its carbon emissions every year over the coming decades: it needs to follow what's called the National Transition Pathway (see the yellow line). However, as can be seen in the Climate and Energy Outlook published by PBL Netherlands Environmental Assessment Agency, we are lagging behind on this pathway (see the dotted line). If Gasunie were to be facilitated in implementing its Vision 2030 programme completely and without delay, we in turn would be able to facilitate the Netherlands in closing most of the gap between the Climate and Energy Outlook and the Transition Pathway. This means that, alongside Gasunie, many other parties must also make an extra effort to achieve the 2030 targets and stay on track to achieve carbon neutrality by 2050.

Investments ensure that the Netherlands does not lose sight of the Transition Pathway

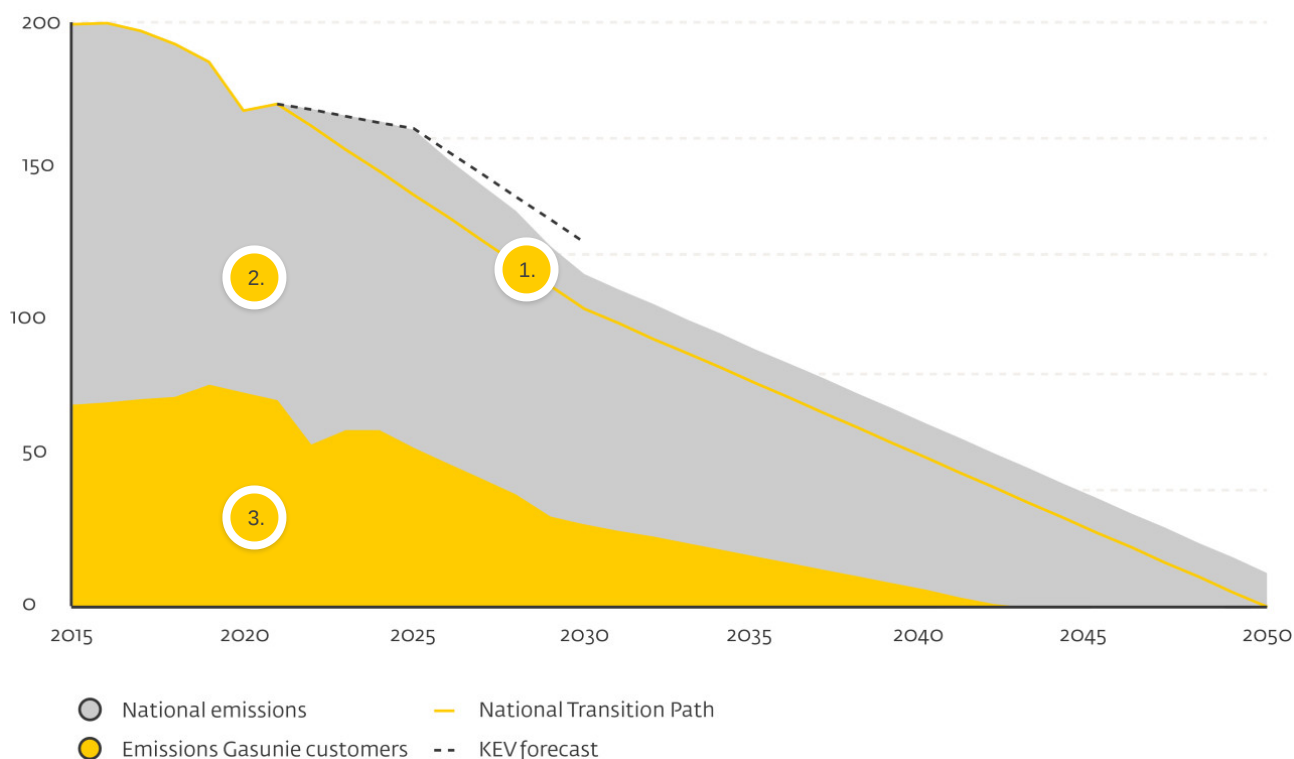


This effect is also visible if we extend the horizon to 2050, as shown in the visual below. To achieve climate neutrality in 2050, the country's national carbon emissions must be steadily reduced (see the dashed line). If Gasunie were to be facilitated in implementing its Vision 2030 programme completely and without delay, a significant part of the task still to be completed between now and 2030 could be completed (the grey area would then be between the C&EO reference scenario and the Dutch national climate target). Users of the Gasunie infrastructure will then emit considerably less CO₂ (see the yellow area and can even achieve climate neutrality ten years earlier than the national target date* by, for example, using additional solar and wind power, which will reduce the total carbon emissions by users of our infrastructure even further.** Gasunie will still have a big job ahead of it after 2030. The hydrogen system in particular will need to be expanded, and we also foresee further growth in green gas and follow-up investments in CO₂ storage.

* We only take into account the energy/gases transmitted through the Gasunie network. For example, we have not taken into account the contribution of green gas in the networks of the regional network operators. Any negative emissions from green gas production are not included either. Only green hydrogen and imports are included in the hydrogen scenarios.

To determine the contribution that will be made by green gas and hydrogen, we assumed that these will fully replace natural gas. This assumption is somewhat conservative given that, if these replace oil or coal, the emission reduction contribution will be greater still. To avoid any double counting with CCS projects we have disregarded blue hydrogen. For CCS projects, the expected transport volumes of captured CO₂ from the Netherlands have been used; calculations do not include any storage of CO₂ from neighbouring countries.

** As a baseline for this, we calculated the carbon emission footprint of natural gas consumption in the Netherlands, as reported in the Climate and Energy Outlook 2022 published by the Netherlands Environmental Assessment Agency. A natural gas emission factor of 56.4kg CO₂/ GJ was used, as determined by the Ministry of Economic Affairs and Climate Policy.

Gasunie infrastructure users could already be climate-neutral before the target date**1. Emission reduction pathway**

This is the emission reduction pathway the Netherlands must take to become climate-neutral by 2050. These are net emissions. With net zero emissions there may still be natural gas consumption, because CO₂ emissions from fossil fuels are being captured (through CCS), for example.

3. Carbon footprint

This is the carbon footprint of the energy/gases that Gasunie transports to and from parties in the Netherlands. Reducing the Scope 3 footprint is made possible in part by importers, connected parties and project partners of Gasunie. Upstream emissions in the supply chain are not included. In terms of reducing the size of the yellow area after 2030, we assume the trend set out in the II3050 study.

2. National emissions

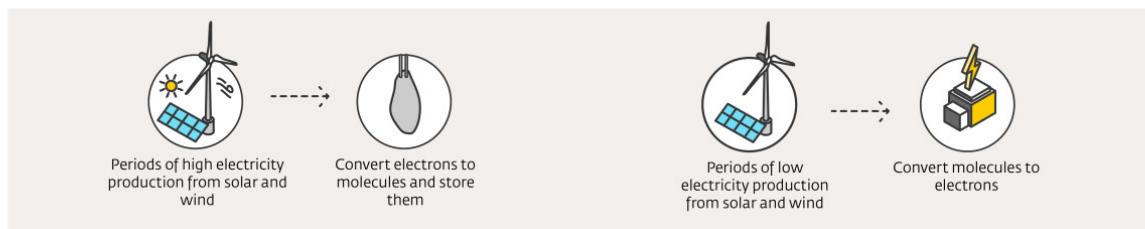
The grey area represents the national emissions in the Netherlands if Gasunie can complete its Vision 2030 projects.

System integration

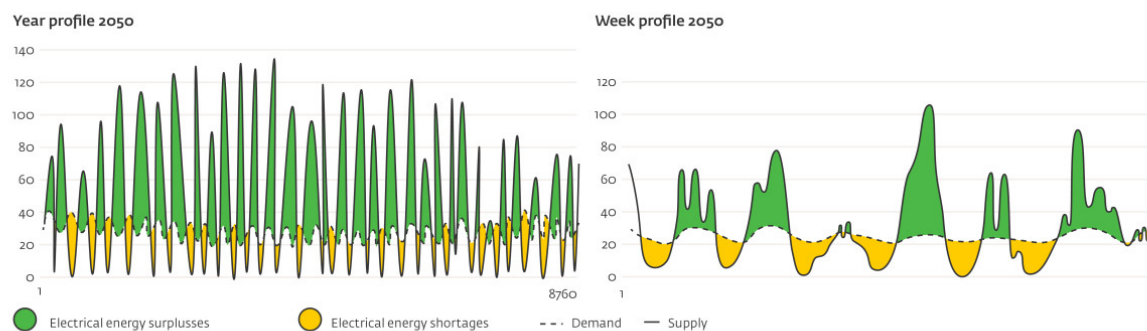
On the way to a climate-neutral energy system, operators of transmission, distribution and storage systems for electricity, gas and heat must work together as effectively as possible to ensure that, at all times, energy consumption is accompanied by the lowest carbon emissions possible. Gas continues to play an important role. Given that natural gas can carry a lot of energy, making it cheap to store and transport, it can be used for electricity generation during periods when the wind is not blowing and the sun is not shining. Natural gas will slowly but surely make way for green gas and hydrogen.

System integration: working together to minimise carbon emissions

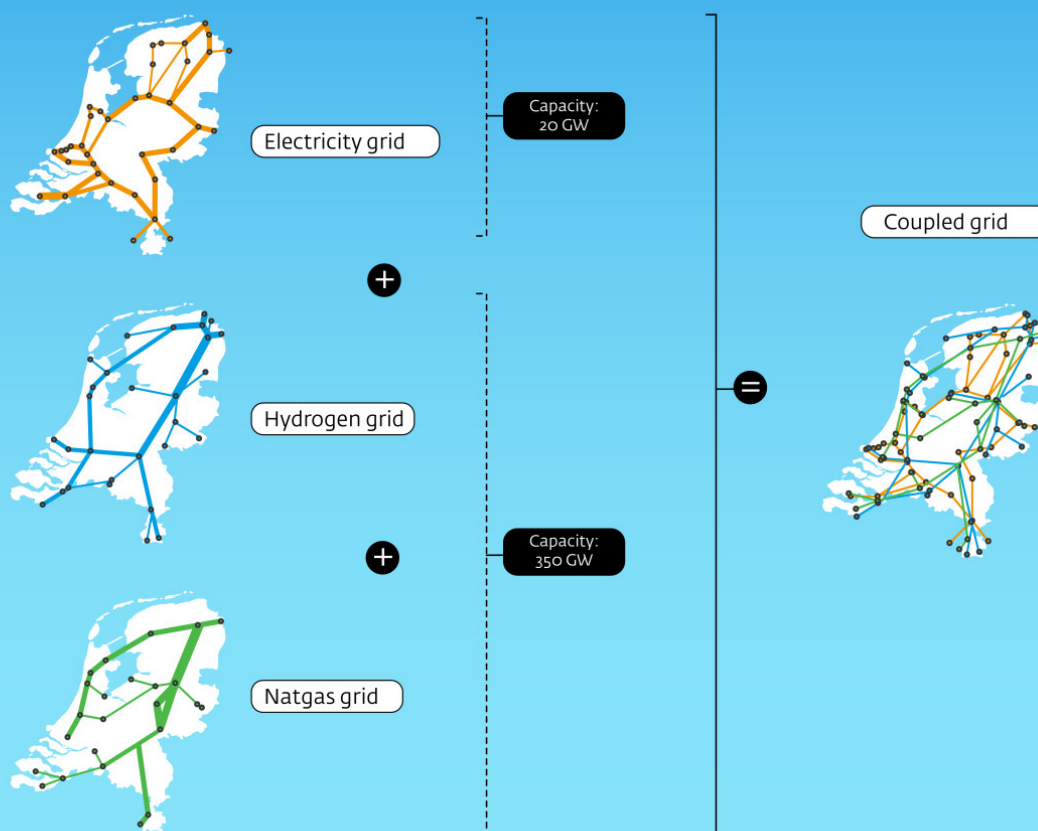
System integration is essential to have sustainably generated electricity at all times



Through system integration, electricity shortages and surpluses cancel each other out



System integration is connecting and making different energy networks work together



II3050

Gasunie, TenneT and the regional network operators have been working together for several years on the Integrated Infrastructure Outlook 2030-2050 (II3050), which shows what the carbon-neutral energy supply of 2050 could look like. For each of the scenarios described in II3050, we determine the impact on flexibility and infrastructure (development paths for the period 2030-2050) and the consequences in terms of costs, space and feasibility (human resources and raw materials/feedstocks). An intensive process involving the 14 industries with the highest volume of emissions and the six industry clusters has provided insight into the sustainability strategies of the industry from 2030 to 2050. The final report of the second edition of II3050 will be published at the end of 2023.

Gasunie's InfraVision

The II3050 scenarios and development paths form the basis for InfraVision, Gasunie's vision of the probable and the desired gas infrastructure in north-western Europe between 2030 and 2050. Renewable gaseous energy is indispensable for the transition of industry and power plants. In the InfraVision report, we provide a coherent picture of the development of transmission, storage, import and conversion of hydrogen, natural and green gas and CO₂, and we describe Gasunie's role in this. InfraVision can be developed further and given more depth by assessing its content against the scenarios in the next editions of II3050. We expect to publish our InfraVision report at the end of 2023, concurrent with the publication of the second edition of Integrated Infrastructure Outlook 2030-2050 (II3050).

National programmes

The Dutch government takes the insights from II3050 into account when making choices in its various programmes, such as the energy system programme ('PES'), main energy structure programme ('PEH'), national programme for making industry sustainable ('NPVI'), exploration of offshore wind landing ('VAWOZ'), and its multi-year energy and climate infrastructure programme ('MIEK'). Gasunie provides input for these state programmes so that knowledge and learnings from II3050 and Gasunie's InfraVision can contribute to the validation of system choices and considerations when making policy choices.

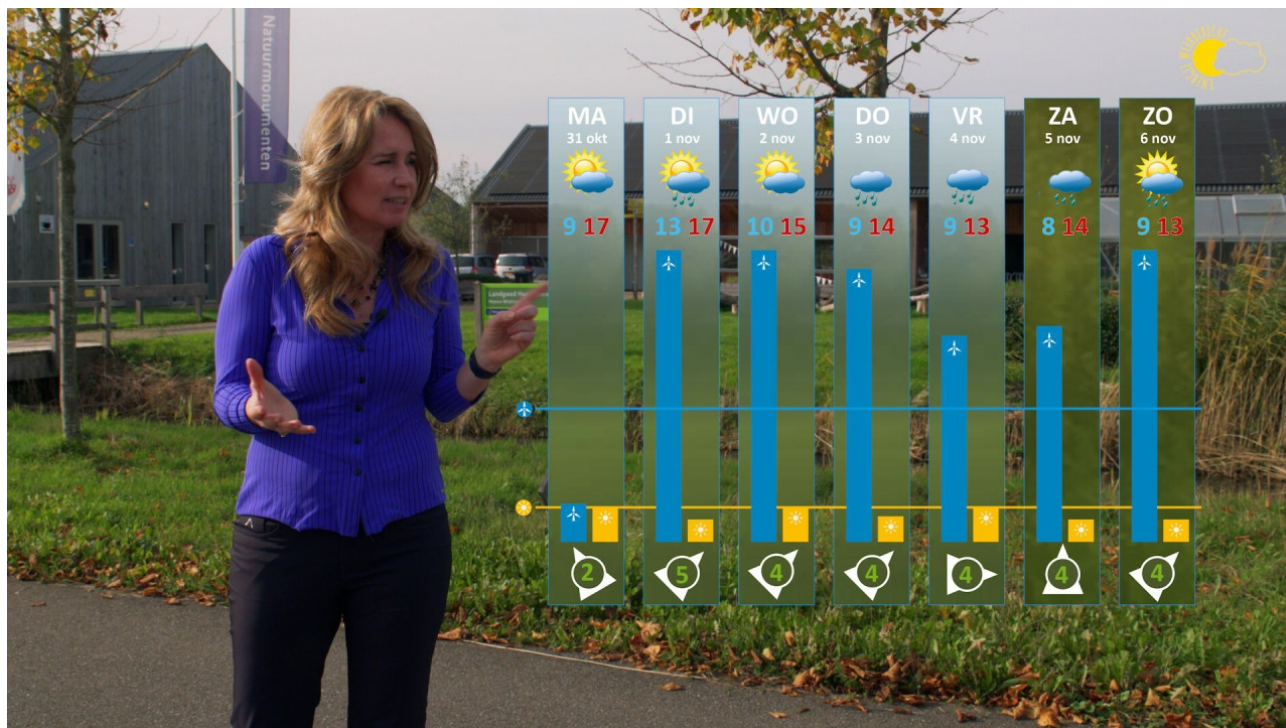
Offshore NSWPH

As part of the North Sea Wind Power Hub (NSWPH) programme, Gasunie worked together with TenneT and Energinet on Pathway, a first-ever global system design for offshore energy infrastructure. Published in 2022, this study once again demonstrates the need for system integration between hydrogen and electricity in north-western Europe. Pathway 2.0 will be published in 2023.

Energy weather report

On 31 October 2022, Dutch meteorologist Helga van Leur presented the first in a series of weekly energy weather reports in which, in a short video, she details the weather forecast for the coming week and the expected amount of solar and wind energy. She also gives the viewer tips on which days it pays to save extra on heating. The energy weather reports can be viewed at www.energieweerbericht.nu. This site shows the forecast for solar and wind energy and heat and provides advice on how to 'move with the weather'. This site and programme are made possible by the Dutch Association of Sustainable Energy (NVDE), TenneT and Gasunie.

Meteorologist Helga van Leur presents the energy weather report



Data services

Gasunie develops strategic data services in the interest of the energy transition and system integration. Gasunie does not do this alone: we work on this together with partners such as TenneT, Nationaal Klimaat Platform, the Dutch Association of Sustainable Energy (NVDE), and Netbeheer Nederland. We have developed initiatives like [EnergieOpwek](#), which provides insight into how much renewable energy is being generated, the [CO₂ monitor](#), which shows the CO₂ emissions of our energy system, and [Energieweerbericht](#), an 'energy weather report' telling when to expect a renewable supply of energy. These platforms go beyond us providing insight to enabling people to act according to these insights. For example, we, as a society, can reduce carbon emissions by using energy carriers when they are the greenest. In response to the increasing demand for our data we will be expanding our forecasts and further intensifying our collaboration with TenneT.

06 Internal economic value creation

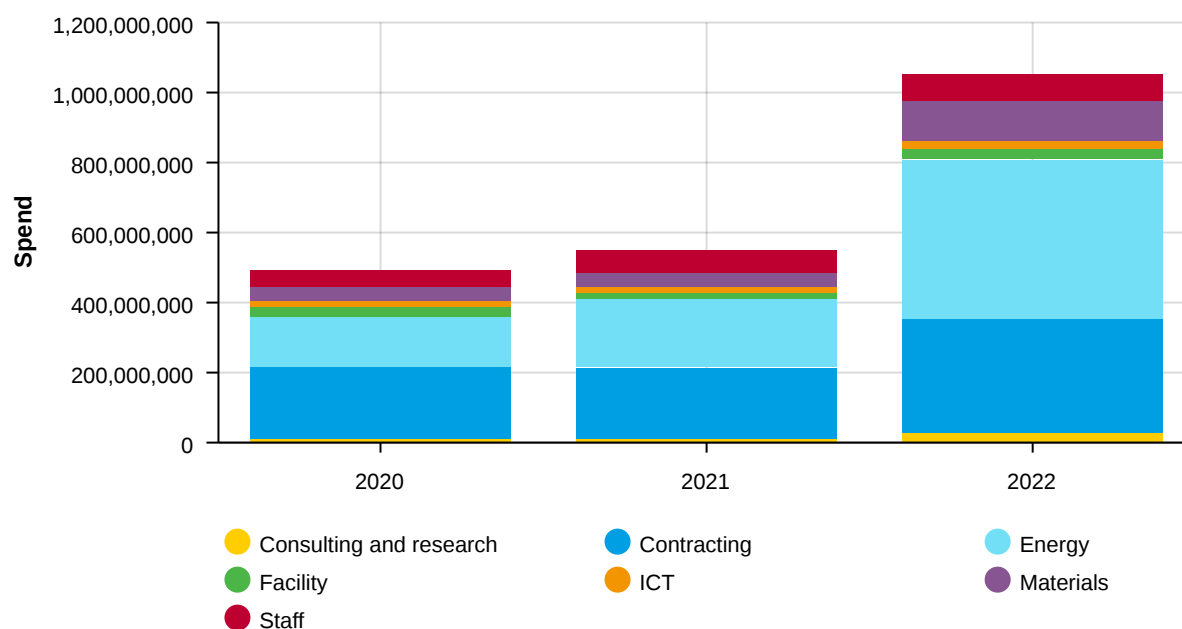
Internal economic value is the financial value (balance of all positive and negative value) that arises within Gasunie as a result of Gasunie carrying out its core functions of transporting, storing and treating natural gas. We 'extract value' in terms of getting energy and materials from suppliers, working time from our employees and money from our capital providers. With this we generate positive economic value in terms of payments, salaries, interest, dividends, ratings, asset value and cybersecurity.

Procurement

Gasunie procured significantly more from its suppliers in 2022, with Gasunie Netherlands procuring more than one billion euros worth of goods and services. This strong increase is the result of spending on the New Energy projects and the LNG expansions, such as at the port of Eemshaven.

* Gasunie Netherlands also procured some, but not all, goods and services for Gasunie Germany.

Gasunie procured significantly more from its supplier in 2022



The extreme inflation of 2022 put pressure on indexation agreements with suppliers. In 2023 we hope to conclude new contracts with our engineering firms and contractors, contracts that should make us more attractive to those parties. We are trying to shift the relationships we have with these parties from a per-transaction model to the 'construction-team model', a collaborative, project-specific design, engineering and construction partnership between the customer and one or several other parties. We intend to make more permanent combined-party arrangements with partners so that we can all benefit from the learning effect. We will issue these major tenders – with a combined value of € 1.3 billion up to 2031 – in 2023.

In the Dutch and European tenders we have issued, we see a clear focus on New Energy. We actually already saw this increase in spending in 2021, given that tenders always come in advance of the actual investments (after taking the FID). For the new infrastructure projects, we use existing framework agreements as much as possible, which can significantly reduce the sourcing effort and lead time for each project.

Gasunie is increasingly making use of Europe-wide and/or selective tender procedures

Unique tenders handled at Gasunie Tender Board	2022	2021	2020
Tenders regular	107	109	101
Tenders for energy transition projects	47	33	18
Tenders total	154	142	119

Energy procurement

Both our natural gas consumption and our electricity consumption increased in 2022 compared to 2021, as a result of the phasing out of Russian gas imports to Europe. This phase-out has changed the usual direction in the international flow of gas, which is now increasingly a west-to-east flow through north-western Europe. Russian gas entered our system at a higher pressure than the gas that has been replacing it. This only affected us in Germany, where, with a transmission volume that was only 20% higher, our natural gas consumption almost doubled due to additional compression efforts. The compressors in Rysum and Embsen in particular were used extensively in 2022.

In the Netherlands, we saw our own natural gas consumption decrease, largely as a result of a lower need for compression at the compressor stations due to the phasing out of the G-gas market abroad, warmer weather and a drop in demand owing to higher market prices. Our lower natural gas consumption can also be attributed to energy-saving measures we have taken. The decrease has been offset somewhat by the consumption of boil-off gas in the generators of, and as a result of flaring by EemsEnergyTerminal since mid-September 2022. The plan is to connect the FSRUs to the onshore grid early in 2023. Our natural gas consumption in the Netherlands would have been even lower were it not for the increase in transport from the Netherlands to Germany as an effect of the change in gas flows.

Natural gas consumption

Our natural gas consumption over the past five years was as follows:

(in millions of kWh; conversion factor 9.77 kWh= 1m ³)	2022	2021	2020	2019	2018
Netherlands	445	487	485	459	486
Germany	886	451	484	285	210
Total	1,331	938	969	743	696

Electricity consumption

Our electricity consumption over the past five years was as follows:

(in millions of kWh)	2022	2021	2020	2019	2018
Netherlands	749	741	705	656	764
Germany	10	8	9	8	9
Total	759	750	713	665	772

Heat consumption

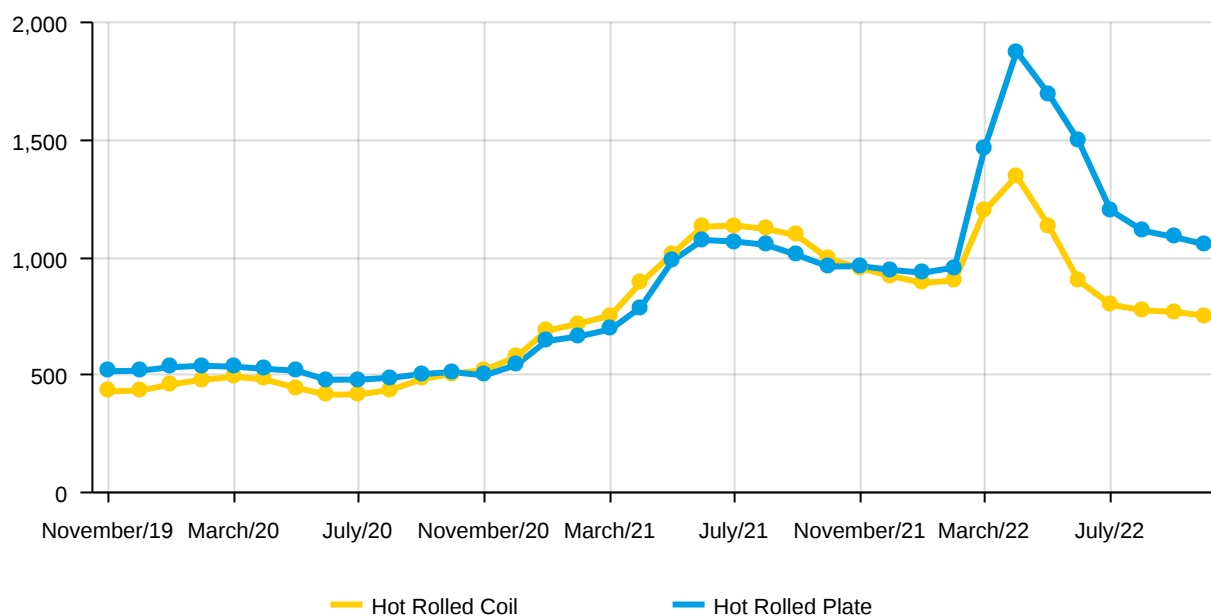
Our heat consumption over the past five years was as follows:

(in millions of kWh)	2022	2021	2020	2019	2018
Netherlands *	51	40	-	-	-
Germany	-	-	-	-	-
Total	51	40	-	-	-

* We have been using the Energy Monitor since 2021 to determine boiler gas consumption in our gas receiving stations. With the help of the Energy Monitor, we were able to distinguish between different energy carriers based on the type of heating system (natural gas fired, electric, or heat supplied by third parties). For 2021 we classified all boilers in the gas receiving stations as natural gas fired. In 2022 we added the heat consumption of the EemsEnergyTerminal. The LNG is pumped into one of the two ships at a temperature of -162°C and is later heated onboard to convert it back to a gas (regasification), which is then immediately fed into Gasunie's gas grid.

Implementation of the sanctions policy

Following Russia's invasion of Ukraine, and in line with EU and Dutch sanctions, Gasunie has screened its key suppliers, customers and fellow infrastructure companies for Russian shareholders. During a routine check during a tender procedure, we found that two of our smaller suppliers had a major shareholder on a US sanctions list. Business ties with these companies have since been severed. We also checked whether our main material suppliers supply products that include raw materials or components from Russia. Some of our suppliers have switched to other sources (mainly on their own initiative). The screening has led to higher prices and longer delivery times, which has put pressure on our project organisation and our company in general. The situation now seems to have stabilised to some extent; however, the higher prices and longer delivery times have remained. This is in part because gas TSOs and DSOs throughout Europe are investing in their infrastructure all at once.

Effect of the Russian invasion of Ukraine on European steel prices

Source: MEPS International

IT security

A prerequisite for being able to create value and achieve our Vision 2030 plans is that our digital systems, data and information be adequately secured. This awareness is shared by our stakeholders, who place IT security high on their list of material topics.

Our IT security and business continuity measures in 2022 were aligned with internal and external digital threats. It is our ambition to be best-in-class in the area of IT security. There were no IT disruptions with an impact on the essential business processes. Potential crisis situations and business disruptions, as a result of vulnerabilities in suppliers' software for example, have been adequately resolved.

The geopolitical developments as a result of the Ukraine war have led to an increased focus on and strengthening of our current security measures in all IT domains and an increased focus on business continuity and resilience. There is a general awareness that these aspects need ongoing attention. We have stepped up efforts in the area of external training and exercises in incident and crisis management.

What Gasunie is doing about cybersecurity

- Cybersecurity, business continuity and crisis management are all part of our governance structure.
- We continuously monitor systems, networks, applications and services for incidents, events and threats, relating to data breaches and cyberattacks, for example.
- We conduct regular internal and external security audits and penetration tests of our systems, products and practices that affect user data and access to the systems.
- Annual audits are conducted as part of our ISO 27001 certification; for the last eight years these have been carried out for the Netherlands and for the last six years for Germany, with a positive outcome.
- Various government bodies also conduct cybersecurity audits based on European and national laws and regulations, and we also carry out assessments on our own as required by government bodies in the Netherlands, Germany and the UK.
- We participate in various cybersecurity and crisis management exercises organised by the energy transmission sector and the government, both periodic and one-off.
- We run corporate security awareness programmes in the Netherlands and Germany that encompass all aspects of information security. These are aimed at raising awareness of information security risks among our staff and improving their behaviour by paying ongoing attention to this topic.

Interest

Our financing activities in 2022

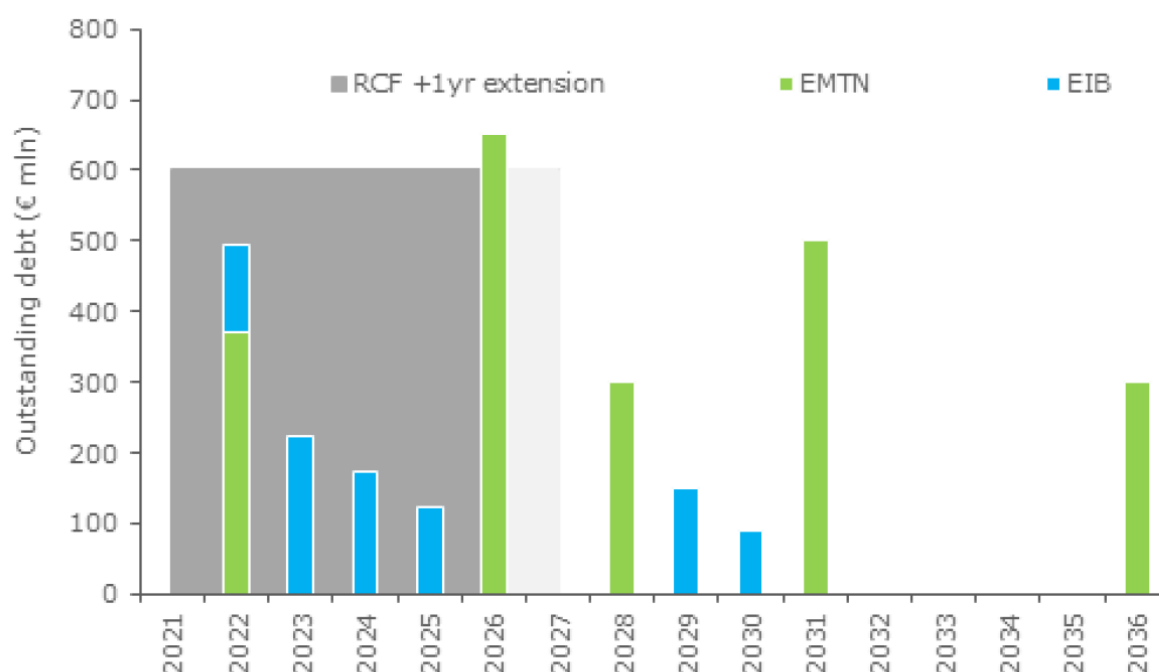
In June, we issued a second sustainability-linked bond loan, this time for € 500 million and with a tenor of 12 years at an effective interest rate of 3.497%. The revenue from this new bond was used to repay a bond loan of € 369 million maturing in July. Funds were also used to repay an EIB loan of € 125 million in November.

In March 2022, the committed credit facility was extended by one year for the second and last time and now has a term until April 2027. The RCF amounts to € 600 million and the facility includes KPIs for sustainability. When these KPIs are met, we are granted a discount on the annual credit provision costs.

Our net debt position (nominal interest-bearing debt less cash) decreased in 2022 by € 641 million to € 2,579 million. Gasunie's solvency at year-end 2022 was 57% (2021: 61%).

Our outstanding long-term loans as at 31 December 2022 (in millions €)

Private loans (EIB)	765 (of which 225 will be repaid in 2023)
Bond loans (EMTN)	2,250
Total	3,015

Our maturity profile as at 31 December 2022**Our financing activities in 2023**

Gasunie will need to repay a € 125 million EIB loan and € 100 million in TLTRO (targeted longer-term refinancing operations) borrowings in 2023. Two further repayments of EIB loans will follow in 2024, one of € 125 million and one of € 50 million.

As more of our Vision 2030 projects are, as planned, approved in the coming years, the need for additional financing will increase, though some of this need will be absorbed by grants. In 2023, we expect to raise up to € 300 million to meet our long-term financing needs through new bank financing or by issuing a bond. If we do not raise additional financing in the coming years, the interest costs will remain virtually the same due to a decreasing amount of debt.

Ratings

Our credit ratings remained at the same high level in 2022. The most important reasons behind these good ratings were our solid financial profile, having the Dutch state as a shareholder, clarity with regard to the Dutch and German regulatory frameworks in the coming years, and the important role played by Gasunie in achieving European and Dutch energy transition objectives.

We were able to further improve our ESG ratings in 2022. The responsible rating agencies give as reasons our efforts in the area of governance, employee safety, cybersecurity, human rights, and business development in the area of the energy transition.

We have high ratings in the area of creditworthiness and ESG risks

Rating agency	S&P Global Ratings	Moody's Investors Service	Sustainalytics	ISS-ESG
Latest update (month, year)	Oct-22	Jan-23	Nov-22	Nov-22
Current rating	AA-	A1	16.8	B
Long term outlook	stable	stable	n/a	n/a
Short term rating	A-1+	P-1	n/a	n/a
Previous rating	unchanged	unchanged	19.3 (lower=better)	C+
Key strengths	Focus on low-risk, regulated gas transmission operations in the Netherlands and northern Germany.	Low business risk, underpinned by the company's regulated monopoly gas transmission network operations.	Strong product governance.	Employee safety.
	Monopolistic position in the Dutch natural gas transmission market and one of the twelve gas transmission system operators in Germany.	Good cash flow visibility for the Dutch and German regulated businesses.	Strong human capital management.	Protecting human rights.
	High likelihood of extraordinary support if needed from the Dutch government.	Strong implicit support from its owner, the Dutch government.	Strong cybersecurity programmes.	New (green) business development (hydrogen transport, district heating networks, Carbon Capture and Storage).
Key risks	Long-term business reshaping need with a focus on hydrogen and biogas transport. Uncertain medium-to-long-term growth prospects for regulated gas infrastructures.	Lower allowed returns for regulated operations in Germany and the Netherlands in the current regulatory periods.	Energy use and GHG emissions out of own operations.	Energy intensity.
	Large investment program driven by means to facilitate the countries' energy transition.	Material share of operating profit from its unregulated businesses, which have reduced cash flow predictability.	Community relations (community involvement).	Governance of sustainability issues (Gasunie has no assigned independent committee in charge of sustainability issues).
		Likely requirement of higher investment level, in the short term (Groningen field closure) and in the long term (Vision 2030)	Business ethics.	Ensuring compliance with code of conduct.
Transparency level	n/a	n/a	n/a	Very high
Ranking	n/a	n/a	4th out of 97 gas utility companies.	Top 20% of 60 gas- and electricity infrastructure companies.

Tax payments

In October, Gasunie concluded a new 'horizontal monitoring' covenant with the Dutch tax authorities. With horizontal monitoring, if the tax authorities assess that they can rely on the quality assurance system of a taxable enterprise, they will carry out fewer or less-intensive audits. Gasunie finds it important to have a good working relationship with the tax authorities; the covenant helps us achieve this.

Gasunie sees paying taxes as an important contribution it is making to society. We pay all taxes due in a timely manner and in accordance with tax laws and regulations in the countries where we operate. We endorse the tax governance code published by employer's organisation VNO-NCW. We pay tax on profits where value is created in the normal course of commercial activities.

We endeavour to work together with tax authorities on the basis of mutual respect, transparency and trust. We want to participate constructively in the national and international dialogue with government bodies, stakeholder groups and other parties to support the development of effective taxation, legislation and administration.

The table below shows how much we paid in taxes or received as a rebate for the main types of taxes. The corporate income tax paid in 2022 is higher than that in 2021 due to the higher profit we achieved in 2022. We received more VAT in 2022 than in 2021 as a result of our higher investments and because a reduced rate of 9% applied to a significant part of our services during the second half of 2022.

Tax payments	2022	2021
In millions of euros		
Netherlands		
Corporate income tax	-99	-52
VAT	116	50
Wage tax	-70	-62
Dividend tax	-33	-39
Total	-87	-103
Germany		
Corporate income tax	-23	-50
VAT	10	-7
Wage tax	-12	-12
Total	-25	-69

Bedragen met een minteken zijn afdrachten, bedragen met een plusteken zijn ontvangsten.

Dividend

The shareholder supports our energy-transition activities. In order to be able to keep financing the required investments, we are in talks with the shareholder about a change to the dividend policy. Considering the exceptional gas market conditions in 2022, we are proposing to pay out a lower amount for 2022. Subject to the resolution on the payment of dividend adopted at the shareholders' meeting, the Executive Board proposes that a dividend of € 200 million be paid for the year 2022.

Interview: Public interest is paramount

Gasunie is wholly owned by the Dutch Ministry of Finance. How do each of these organisations experience their relationship, especially after a turbulent year like 2022? Helmer Vossers (director of the Financing Directorate, Ministry of Finance) and Ulco Vermeulen (business development director, Gasunie) look back and ahead. Helmer says, 'Gasunie has gone through an incredible transition in the area of new forms of energy while, at the same time, they have responded vigorously to the current issues. That's a combination that's extremely hard to pull off.' [Read more >>](#)

Salaries

Gasunie paid € 291 million in salaries in 2022. Collective agreements apply to all our staff in the Netherlands and Germany. In Germany, GUD concluded a collective agreement with the trade unions for both 2023 and 2024. Employees will get an inflation compensation payment of € 1,500 in January of both years. Salaries will increase by 6% in April 2023 and by an additional 2.5% in April 2024. The collective agreement is in effect until December 2024.

In the Netherlands salaries increased in line with inflation in 2022 and 2023, with a 1% pay rise given on top of that in 2022. In 2022, a net amount of € 500 was paid to all employees in April to spend, at their own discretion, on courses, health and wellbeing; this will be repeated in 2023. Under the collective agreement, employees are now given the option of exchanging the official Dutch national holidays of Ascension Day and Good Friday for a public holiday of their choice.

Pay rises in 2023

At Gasunie we want our employees to retain their purchasing power. This is an important starting point for Gasunie, which is why, in our collective agreement that applies in the Netherlands, for pay rises we have agreed with the unions that Gasunie will apply the consumer price index (CPI) of Statistics Netherlands (CBS). We have been doing this for years, based on the year-on-year CPI inflation rate (August to August). For 2023, with the application of this principle of purchasing power retention Gasunie employees will get a pay rise of 11.96% on 1 January 2023.

The CPI is the most important measure of inflation and shows the price trend of a 'basket' of goods and services purchased by the average Dutch household. In years with low inflation, following the CPI means that pay rises at Gasunie have been moderate. Over the past decade, inflation was usually between 1% and 2% and wages at Gasunie were also increased by similar percentages. Now that inflation is high, this means that wages will also be increased more. Gasunie considers it important that we live up to the agreements we have made with the unions. With this our employees can be sure of retaining their purchasing power, which is especially important in these times of high inflation.

Pension

In 2021, Gasunie and GasTerra reached agreement with the trade unions on a new pension plan, effective as of 2022 and valid until the transition to the new pension plan and in any case no later than 31 December 2026. The main changes in short are:

- The employer contribution has been temporarily increased by 1%, in effect until the transition to the new pension plan.
- The accrual becomes variable, depending on the pension contribution in combination with the financial health of the pension fund (based on the policy funding ratio).

Grants

Gasunie makes use of various national and EU grant schemes. Our grant policy is aimed at making use of these schemes in a timely and efficient manner, for example to facilitate energy transition projects and sustainability activities Gasunie can use to contribute to achieving the Dutch, German and EU climate goals.

Gasunie makes use of a varied range of grant schemes and similar, including:

- Energy Investment Allowance ('EIA'), for sustainable and energy-saving investments
- Energy and Climate Innovation Demonstration grant ('DEI+'), for carbon reduction and energy-saving technologies, demonstrations and pilots
- Connecting Europe Facility (CEF) for Energy, for investments in the construction of new cross-border energy infrastructure in the EU or the rehabilitation and improvement of existing infrastructure.

Gasunie uses this funding for projects such as WarmtelinQ, the upgrade of the nitrogen plant in Ommen, and making the uninterruptible power supply (UPS) at the Beekse Bergen metering station more sustainable. The funding available under these schemes varies, and depends on aspects like the project size, duration, eligible costs and, if applicable, the consortium in which Gasunie participates.

Net amounts of the major funding decisions	Received in 2022
EIA	€ 5,945,476
Other	€ 3,100,000
Total	€ 9,045,476

The amounts shown is the funding allocated and are subject to final determination after completion of a project or submission of a tax declaration. EIA amounts have been determined based on the sustainable investments Gasunie intends to make.

Grant example: WarmtelinQ

WarmtelinQ is an underground transport pipeline that will enable waste heat from the Port of Rotterdam to be used to heat homes and businesses in the Province of Zuid-Holland. The pipeline starts at the Port of Rotterdam and continues through Vlaardingen to The Hague and Leiden. Construction started early in 2022 and the first heat is expected to be supplied by mid-2025. Gasunie is receiving a grant for the development and construction. Though the funding is for Gasunie, because the grant cuts project costs this also results in a lower tariff for the consumer. This is a direct effect of being awarded this grant.

Internal carbon pricing

To be able to make the right investment decisions in the design, construction, use and replacement of installations, Gasunie uses internal carbon pricing. In line with market trends, this price has risen sharply:

- 2020: € 25 per metric tonne CO₂
- 2021: € 50 per metric tonne CO₂
- 2022: € 100 per metric tonne CO₂
- as per 2024: € 200 per metric tonne CO₂

Regulation

Netherlands

The regulatory authority ACM sets the permitted revenue for GTS and thus the maximum tariffs, based on the methodology decision. The methodology decision describes the method by which GTS can recoup its efficient costs during a regulatory period, and the rules and parameters that apply. The current regulatory period runs from 2022 to 2026.

Methodology decision 2022-2026 appeal proceedings

GTS and market parties have lodged an appeal against the 2022-2026 methodology decision. On 10 December 2021, GTS filed an appeal against this decision with the Dutch Trade and Industry Appeals Tribunal (CBb), GTS' grounds for appeal concern (I) the benchmark and (II) the energy costs.

(I) Benchmark

With regard to the benchmark study – the study on the basis of which a static efficiency of GTS of 93.7% has been determined – GTS believes that this study is insufficiently robust to serve as a basis for determining an efficiency discount for GTS. In our view, a static efficiency score of 100% should be applied. In addition to the intrinsic shortcomings of the benchmark model used, in our view the study is also insufficiently transparent and insufficiently verifiable.

(II) Energy costs

With regard to the price risk of the costs of energy and power (energy costs), this methodology decision has not applied a post-calculation mechanism as it should do. ACM's approach, in which the entire price risk is transferred to GTS, is based on an incorrect picture of our energy costs. By not applying post calculations to GTS's energy costs, GTS' financial risk on these costs becomes disproportionately high.

GTS wants to see full post calculation of the total costs of energy and power, possibly with a limited bonus/penalty arrangement.

Most of the court sessions took place between September and December 2022; the final sessions covering the remaining items on the agenda will be held in March 2023. The Tribunal is expected to issue its ruling in the autumn of 2023 at the earliest.

Increase in revenue in 2022

GTS' revenue in 2022 rose significantly above that in 2021. The situation on the European gas market and the loss of Russian gas flows to north-western Europe resulted in a large gap between gas prices on the Dutch market area TTF on the one hand and the UK and Belgian market areas on the other. This situation created a large demand for transport capacity from Belgium to the Netherlands, causing congestion in GTS' gas transport network. As a result, shippers paid more than € 222 million in auction premiums to GTS in 2022. Revenue from interruptible capacity (capacity that is not guaranteed at all times but which can only be restricted under certain circumstances) also rose sharply, to € 300 million.

GTS returns the revenue from interruptible capacity to the network users through an offset in future transmission tariffs ('post calculation'). This applies also to revenue from auction premiums, unless GTS uses these for congestion-mitigating measures. Application of this post-calculation mechanism will have a dampening effect on the transmission tariffs from 2024.

ACM will publish the 2024 tariff decision in May 2023.

Germany

In 2022, German regulator Bundesnetzagentur (BNetzA) set the applicable revenue cap for GUD for the new regulatory period 2023-2027. In June 2021, GUD filed its cost application with BNetzA based on the costs incurred in the 2020 'photo year'. (The photo year [base year] is the year three years prior to the first year of the new regulatory period.) The consultation on the cost application was completed in 2022; at the end of April 2022 we received the final (positive) results of the cost application.

In October 2021, BNetzA published its determinations on the equity interest rates for electricity and gas networks for the new regulatory period. The permissible rate of return on equity is 5.07% pre-tax for new assets and 3.51% pre-tax for old assets. Like many other network operators, GUD filed a lawsuit with the Higher Regional Court in Germany with regard to BNetzA's determination of equity. The case was ongoing in 2022 and the court has set the oral hearing for June 2023.

Early in 2022, BNetzA started on the evaluation of a new general efficiency factor that will apply to all TSOs and DSOs in the regulatory period 2023-2027. In a first phase, the regulator requested all the necessary information from the TSOs to determine the parameters for the efficiency model.

The regulator has also started determining the individual efficiency factor for the new regulatory period. BNetzA started the consultation phase in September and proposed six different models, under which the expected result would be partly good and partly bad for GUD. We were notified of the final model selection in February 2023. The efficiency factor for GUD for the fourth regulatory period has been set at 100%. BNetzA will make the details of the decision-making process available to GUD during the revenue cap hearing for the fourth regulatory period.

EU Taxonomy

The EU Taxonomy clarifies which activities of companies may or may not be called sustainable based on their contribution to preventing climate change or mitigating its consequences. In 2022, 12.9% of our capital expenditures (CAPEX) and 4.3% of our operating expenses (OPEX) qualified as being sustainable (taxonomy-eligible activities). In 2021, these percentages were 10.5% and 6.3% respectively. At € 5.1 million (2021: € 4.5 million), the revenue that can be regarded as sustainable under the EU Taxonomy is still quite limited. A detailed disclosure of our EU Taxonomy activities is included as an Annex to this annual report.

07 Internal social value creation

Our internal social value is the sum of positive and negative non-financial value that we create through our day-to-day business operations. Though we do generate emissions we also take action to reduce these. And while we do have accidents and sickness absence, we are dedicated to creating a working environment that is geared to increasing focus, performance, meaningful work, job satisfaction and safety.

Corporate Social Responsibility

By making major investments in new energy infrastructures over this decade, we are laying the foundations for the creation of significant external social value in the future. We are already creating internal social value right now by continuing to future-proof our day-to-day operations.

Difference between Gasunie's Vision 2030 and the Gasunie Green Deals

Plan	Description	Connects with	Term	Creation of
Gasunie Vision 2030	Construction of new renewable energy infrastructures	Paris climate agreement, emission targets EU, NL, DE	2020-2030	External social value
Gasunie Green Deals	Making own operations sustainable and socially responsible	UN Sustainable Development Goals	2020-2030	Internal social value

Gasunie Green Deals

In 2020, we identified nine different areas in which we can make our day-to-day operations greener and more social, in line with the United Nations' Sustainable Development Goals (SDGs). In 2021, we set concrete targets (KPIs) for these nine 'Gasunie Green Deals'. We recorded our initial results in 2022. We report on the progress we are making in achieving the targets on our dedicated CSR pages at gasunie.nl/csr. In the coming years, we will regularly evaluate whether the Gasunie Green Deals and the KPIs are feasible and sufficiently ambitious.

Below we provide a summary of our Green Deals results; later in this section we provide more details on the various Green Deals. We were able to make progress with most of the Green Deals in 2022. One exception was the Green Deals on Energy Efficiency and Emission Reduction. Last year we had to use considerably more energy to perform our core tasks. This was partly due to the loss of Russia as a gas supplier. Russian gas that entered the GUD and GTS networks at relatively high pressure from the east and north has been replaced by gas flows that are fed into our networks from the west and south at a lower pressure. As a result, the compressors in our networks had to work harder to keep the gas at the right pressure.

<i>Gasunie Green Deal</i>	<i>Ambition 2030</i>	<i>Milestones in 2022</i>	<i>Expectations for 2023</i>	<i>Connects to SDG</i>	<i>Responsible manager</i>
1. Zero-emission construction site	Award 50% of our construction project procurement to contractors with verifiable emission reduction measures	Pilot deployment of H2 generator for generating construction site electricity during reconstruction of N270 in Venray. Next year we will start using hydrogen-fired generators for our own maintenance projects.	New framework agreements for engineering firms and contractors, with sustainability heavily considered as one of five strategic pillars starting in 2023.	7, 9, 13	NL: Manager Operations Engineering
		Replacement of dynamic no-breaks (running on diesel) with static, emission-free no-breaks. Last year the facilities at CS Beverwijk were addressed.	Emission-free no-breaks at CS Grijpskerk and CS Wieringermeer.		DE: Manager Operations
2. Circular purchasing	50% of purchased kilograms of material is demonstrably circular	In 2022 have procured 5.36% of our materials circularly and followed up on the introduction of material passports in (European) tenders.	Further roll out material passports and further explore their validation.	8, 12, 13	DE: Manager Procurement
		Organization is ready to receive digital material passports from suppliers. We currently have more than 100 material passports defined by component type.			DE: Manager Procurement
3. Reusing assets	Dutch national hydrogen network 100% ready, with 85-90% reuse of existing pipelines	Made decision in principle with government to further develop Waterstofnetwerk Nederland.	First investment decisions for Waterstofnetwerk Nederland.	7, 9, 13	Manager Corporate Strategy
4. Social chains	80% of our suppliers are OECD/UNGP compliant	We have aligned the Gasunie Supplier Code of Conduct (GSCoC) with the most recent Responsible Business Alliance (RBA) Code of Conduct, the OECD Guidelines for Multinational Enterprises and the UN Principles on Business and Human Rights (UNGP).	Establishment and implementation of Due Diligence in accordance with OECD Guidelines. Due Diligence is an ongoing process that helps companies identify and then stop, prevent or mitigate human, labor and environmental risks.	8, 12, 17	NL: Chief Information Officer
		Gasunie Netherlands has declared the updated GSCoC in Q3 2022 applicable to all its procurement contracts. Gasunie Germany included the GSCoC in its General Terms and Conditions in Q3 2023.	GSCoC systematically maximally secured in procurement process. Attention shifts to supply chain responsibility through Due Diligence.		DE: Manager Procurement
		Supplier sustainability commitment (CO2 reduction, circularity, social impact) counted 5-25% in almost every tender.			
5. Inclusiveness and diversity	Senior management includes at least 30% women	Today, 27% of our managers are women.		5, 8	NL: Directeur Human Resources
		Onderzoek uitgevoerd naar beloningsverschillen vrouwen en mannen (Equal Pay).	Periodic follow-up surveys.		DE: Manager Human Resources
		Internship compensation equalized for all interns regardless of level of training.			
		All members of senior management reside in the Netherlands or Germany.			
6. Biodiversity	100% of our sites contribute to biodiversity	At the end of 2022, Gasunie employed 31 people with a distance to the labor market.	By the end of 2023, we hope to have 40 people with a distance to the labor market working for Gasunie.	15	NL: member BoD
		32% of our larger Dutch sites and 44% of our larger German sites were contributing to increased biodiversity by the end of 2022. Combined, this gives a percentage of 36% (the Netherlands has more sites than Germany).	Prepare for new maintenance contract (Netherlands) from 2024 with maximum attention to ecological mowing and disposal of grass clippings, including on the smaller sites.		DE: Manager Business
		In the Netherlands, we started mowing more to prevent adjacent plots from having to deal with extra weeds.			

Gasunie Green Deal	Ambition 2030	Milestones in 2022	Expectations for 2023	Connects to SDG	Responsible manager
		In Germany, we continued the program to convert land and sites not in immediate use into natural areas.			
7. Energy efficiency	12.5% reduction in energy use compared to base year 2020 (increase from 8% to 12.5% in line with the new European Energy Efficiency Directive)	Energy consumption increased by 24.1% in 2022 compared to 2021, mainly due to changing gas flows. In particular, GUD needed more energy for compression.	Ambition 2023: 2.4% energy reduction from base year 2020	7, 9, 13	NL: Manager HSE
		By lowering the natural gas temperature at the gas receiving stations, we needed less energy to heat the natural gas.	Due to EmsEnergyTerminal and Zuidbroek II, we expect further increasing energy demand.		DE: Manager HSE
			Implementation ISO50001 energy management system. Certification in 2024.		
			By lowering the pre-pressure at metering and regulating stations, less energy will be required at gas receiving stations to heat natural gas starting in 2023.		
8. Energy purchasing	75% of our electricity purchases come directly from green sources in our market area	Started tendering Corporate Power Purchase Agreements from renewable local sources. With this we encourage the development of renewable generation capacity.		7, 13	NL: Manager Participations
					DE: Manager Business
		Germany: uses green electricity.			
		Germany: share of green gas in consumption drops from 5% (2021) to 1% (2022) due to sharply increased use of gas compression and tighter market supply of green gas.			
9. Emissions reduction	CH4: methane emissions below 70 kton CO2eq/year	Methane emissions in 2022 of 135 kton CO2eq (2020: 155, 2021: 144).	We remain on track to meet the 2030 reduction target.		NL: Manager Assets
		The use of recompression and nitrogen displacement has further reduced methane venting.			DE: Manager HSE
	CO2: CO2eq emissions (scope 1+2 market-based) below 219 kton based on constant transport volume (2020=1085 TWh)	Our CO2eq emissions of 390 kton in 2022 are 61 kton (19%) higher than the 329 kton in 2020, due to greater need for compression due to changed gas flows and EmsEnergyTerminal.	Additional measures needed to meet 2030 target.		
			EmsEnergyTerminal generated its own electricity in 2022 but will be connected to the grid in early 2023.		

* Excluding our scope 3 emissions. We exclude these because Gasunie does not own the natural gas that flows through our infrastructure.

Gasunie Green Teams

Gasunie employees in the Netherlands started the Gasunie Green Teams project on their own initiative in 2022. Employees were challenged to form project teams and submit sustainability ideas that could be voted on. The three most popular entries – shorter parking routes at headquarters, wider selection and better quality of vegetarian/vegan food in the company restaurants, and better waste separation – received an implementation budget. The Gasunie Green Teams will continue to search for new sustainability initiatives in 2023.

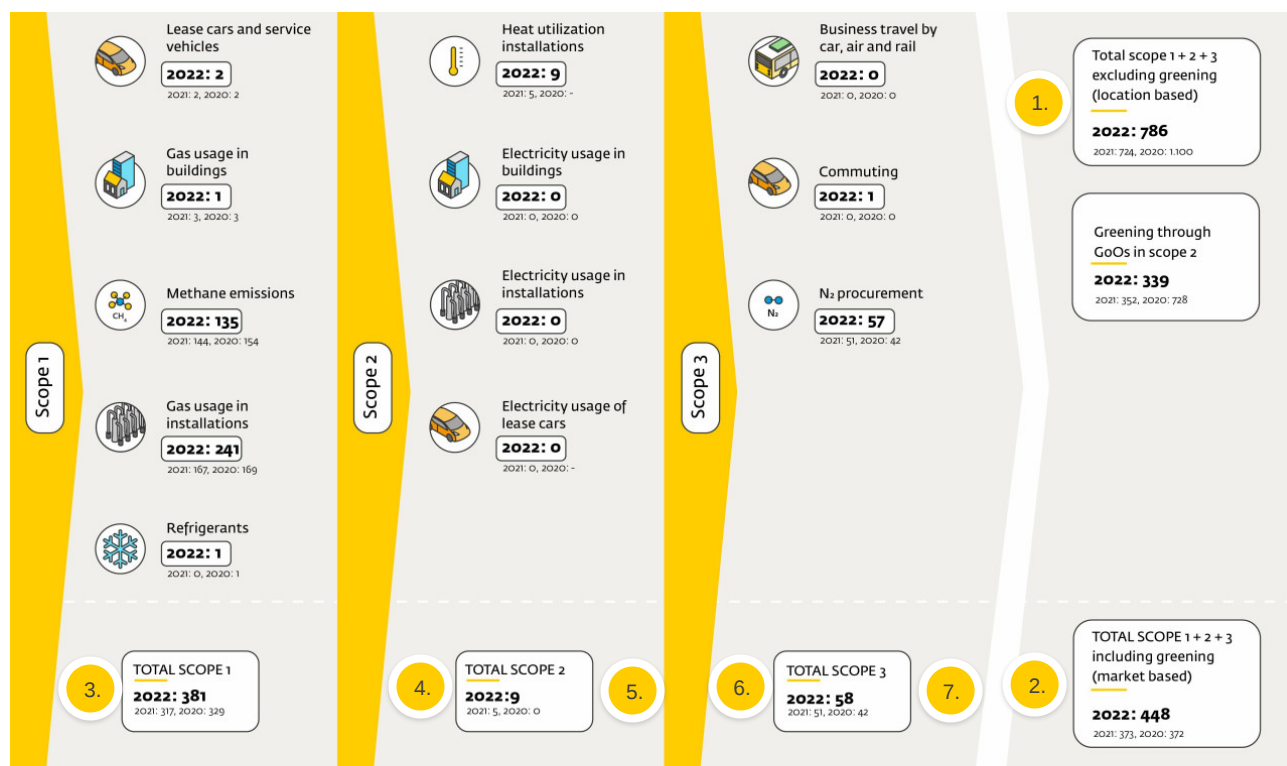
Green Deal 9: Emission reduction

In our emissions reporting we split our carbon emissions into three groups (called 'Scopes'). The footprint is expressed in carbon dioxide equivalents (CO₂e).

Presently, our emission data is collected at fixed moments in the year to determine the amount and source of these.

Having a good system and methods for recording emissions is important, and that importance is only growing.

Accordingly, in 2022 Gasunie worked on an IT tool for emission registration and reporting that will enable us to achieve a higher degree of transparency, traceability and availability of our emission data from 2023 onwards.

CO₂ emissions according to the GHG Protocol (in metric tonnes of CO₂e)

For all methane emissions, the GWP value has been increased from 25 to 28. This was first done in 2022 and implemented from the year 2020

Scope 1: Direct result of own business activities

Scope 2: Indirect consequence of purchased energy

Scope 3: Other indirect consequence, e.g. purchased nitrogen

1. Location based

This figure is based on the greenhouse gas emissions caused by the generation of electricity in the region where the electricity is used. The location-based figure is then calculated by multiplying the electricity consumption (expressed in kilowatt-hours, kWh) by the CO₂ emission factor given for electricity in the list of CO₂ emission factors.

3. Scope 1

This comprises all emissions that are a direct result of our own activities, like the emissions from our compressors, our own gas consumption for heating buildings, the gas used by the boilers at the gas receiving stations, etc. This category also includes our CO₂ equivalents in methane emissions and hydrofluorocarbons (HFC, for cooling processes).

2. Market based

This figure is calculated based on the greenhouse gas emissions of the energy installations where the purchased electricity originates. We prove the origin of the electricity (from renewable sources) through Guarantees of Origin (GOs). In the Netherlands in 2022 Gasunie purchased Guarantees of Origin from European wind farms. In Germany, Gasunie procured green electricity directly from its electricity supplier.

4. Scope 2

This includes the indirect emissions of energy we have procured. We procure electricity for our electric compressors and for the production of nitrogen we use to convert imported high-calorific gas into Groningen quality low-calorific gas ('pseudo G-gas'). Scope 2 also includes the electricity consumed in our offices and our installation buildings. We are decarbonising our electricity consumption by purchasing Guarantees of Origin.

5. Scope 2

Scope 2 emissions are shown on the basis of a market-based method. The location-based figures for Scope 2 emissions are: 398 kt CO₂e in 2020 and 352 kt CO₂e in 2021. We had completely decarbonised our electricity consumption by 2022.

6. Scope 3

These are other indirect emissions in Gasunie's value chain that fall outside our direct control. Currently, we only report on a portion of our Scope 3 emissions, for example on the emissions resulting from our road, air and rail travel and energy required by third parties to produce the nitrogen we procure. We are in the process of making a comprehensive assessment of all Scope 3 emissions data in accordance with the GHG protocol.

7. Scope 3

The quality conversion from imported high-calorific gas to pseudo G-gas takes place using self-produced nitrogen (Scope 2) and nitrogen procured from third parties (Scope 3).

What we are doing to reduce emissions

The transmission of natural gas requires energy, energy we use to keep the gas grid at pressure, to blend natural gas with nitrogen, and to compensate for frictional losses during transmission. Gasunie uses natural gas and electricity for this. Burning this natural gas and generating this electricity produces CO₂ and NO_x emissions. Furthermore, methane (CH₄) is emitted to the air during management and maintenance work on our infrastructure. This happens:

- when starting and stopping compressors
- when operating equipment using natural gas pressure (pneumatic components)
- through slow leaks (at couplings, etc.)
- during work on the transmission network.

Our methane emissions over the past five years were as follows.

Methane emissions	Netherlands	Germany
2022	3,331	1,491
2021	4,071	1,085
2020	4,000	1,510
2019	4,176	405
2018	4,712	470

NB: For Germany, the reporting model of the Oil and Gas Methane Partnership (OGMP) we started using in 2020 has provided more accurate information, which is why the methane emission figures for Germany are higher starting from 2020. The increase in Germany in 2022 compared to 2021 can be attributed to the increase in the number of compressor operating hours; due to incomplete combustion, for example, this results in higher 'running time emissions'.

Adjustment in calculation of GWP of methane emissions

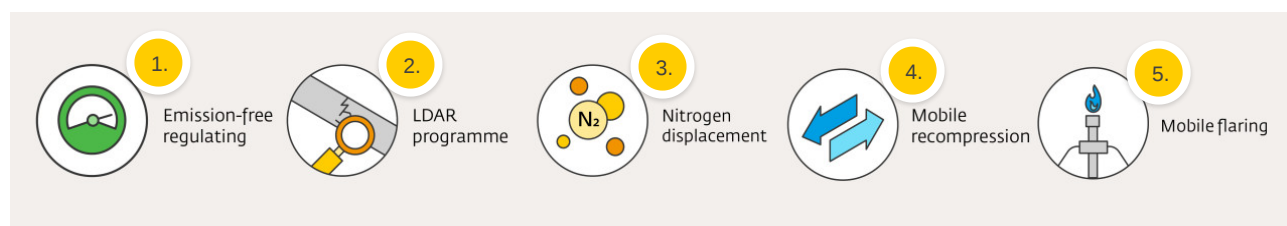
Natural gas consists primarily of methane. Just like carbon dioxide, methane is a greenhouse gas. We calculate the contribution to the greenhouse gas effect in carbon dioxide equivalents (CO₂e). We apply a conversion factor recognised throughout the Netherlands that shows the relative contribution to climate change caused by one kilogramme of methane compared to one kilogramme of CO₂. This factor is known as the Global Warming Potential value (GWP value).

In its reporting for 2022, based on the information published by the Dutch National Institute of Public Health and Environmental Protection ('RIVM') on its emissions reporting site [Broeikasgassen | Emissieregistratie](#) (in Dutch), Gasunie increased its GWP value for methane (i.e. factor for conversion to CO₂e) from 25 to 28. This GWP value is taken from the IPCC Fifth Assessment Report 'Climate Change 2014'. For the years 2020 to 2022, we have adjusted the CO₂e calculation using the GWP of 28 for methane.

Our measures to reduce methane emissions

Reducing our carbon footprint is hugely important to us. We are reducing our methane emissions by making use of:

1. Emission-free regulating equipment
2. Leak Detection and Repair programme
3. Nitrogen displacement
4. Mobile recompression
5. Mobile flaring



1. Emission-free regulating equipment

Gas-emitting regulators are no longer used in newly built or refurbished installations. By the end of 2029 we will have replaced all regulating equipment with emissions with zero-emission variants.

2. Leak detection and repair (LDAR)

With our leak detection and repair (LDAR) programme, we detect leaks in connections and appendages (valves, flanges, etc.) at compressor stations, gas receiving stations, metering and regulating stations and high-pressure valve locations. For this we apply the NEN-EN 15446 standard, which is based on the measuring methodology developed by the US Environmental Protection Agency (EPA).

3. Nitrogen displacement

One way to avoid having to vent natural gas from a pipeline is to use nitrogen to displace the gas and by this means transfer it to a different section of the pipeline. Where possible, this technique is applied.

4. Recompression

We use a mobile recompression unit to recompress as much of the gas as possible that would otherwise have had to be vented. This gas is then transferred to another pipeline. In 2022, recompression returned around 0.9 million m³ of gas to the network (2021: 1.7 million m³).

5. Flaring

If recompression is not an option, flaring offers a way to reduce the environmental impact of the methane in the natural gas by burning it off. In 2022, 340,522 m³ of gas was flared (2021: 636,973 m³). Flaring instead of venting yielded environmental savings of 5 kilotonnes CO₂e in 2022 (2021: 8.2 kilotonnes CO₂e).

International joint efforts to reduce methane emissions

Gasunie is an active participant in the study groups of the [Oil and Gas Methane Partnership](#) (OGMP). Energy companies participating in the OGMP make voluntary agreements on methane emission recording, calculating and reporting. Gasunie Netherlands and Gasunie Germany have committed to reporting the methane emissions for their operational assets for the reporting year 2023 in accordance with the 'Gold Standard', the highest OGMP reporting standard.

Gasunie anticipates that the European Commission will adopt a [regulation](#) aimed at reducing methane emissions at the end of 2023. This regulation includes restricting the use of venting and flaring to strictly necessary situations and tightening up the LDAR (leak detection and repair) programme. It is expected that the changes in the LDAR programme will result in a higher inspection frequency and require short repair times.

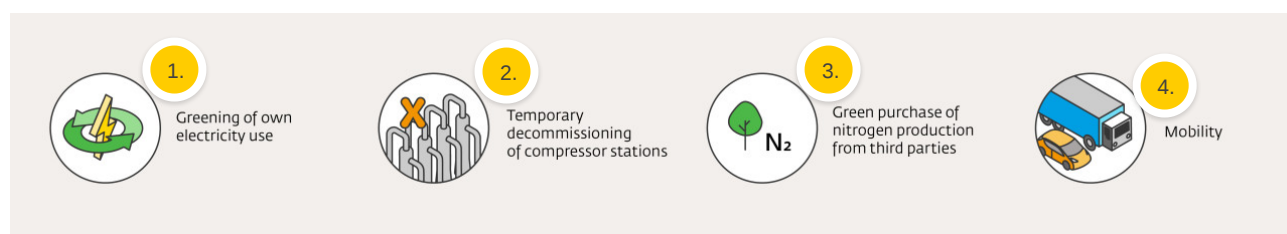
Methane emissions in perspective

Reducing methane emissions has long been a strategic priority for Gasunie. Looking at recent performance we see a 21% reduction in the period 2016-2020. Our target of emitting less than 70 kilotonnes of CO₂e **by 2030** compared to 2020 levels is more ambitious than that of the [Global Methane Pledge](#) (launched by the United States, European Union and partners), which aims to reduce methane emissions by 30% by 2030 compared to 2020 levels.

We expect to reduce our methane emissions further in the coming years, and in 2022 we already saw them go down on the whole. This decrease for the Netherlands relates, among other things, to reduced emissions as a result of starting and stopping turbines and a reduction in operating hours for the compressors.

Modifications made in October 2021 to the control system of a number of Gasunie gas turbines reduced the level of unburned methane emissions from these turbines. We also vented less as a result of a decline in project work in 2022 compared to 2021. In 2021, we started converting gas-actuated control valves to zero-emission valves. The control valves have also been temporarily taken out of operation at a number of stations that are rarely used. During the term of the projects, a total of 760 tonnes of methane emissions will be avoided in the period 2021-2026. For 2022, this comes out at an emission reduction of 44.7 tonnes of methane.

Our measures regarding other CO₂ emissions



1. Decarbonising our electricity consumption

In 2022, we purchased Guarantees of Origin (GOs) from European wind farms for our Dutch activities. In Germany, 100% of our electricity needs are covered by electricity from European hydroelectric power stations.

3. Green procurement of nitrogen at third parties

In 2021, GTS struck a deal with our largest nitrogen producer under which GTS will only procure green nitrogen from them. This nitrogen producer has agreed to decarbonise their emissions by procuring GOs. In 2022, this portion concerned around 81% of the total amount of electricity that was required for the production of all nitrogen procured.

2. Temporary decommissioning of compressor stations

As production from the Groningen gas field is phased out, we are decommissioning a number of our compressor stations on a temporary basis so that these can be used later for the energy transition.

4. Transport & mobility

In 2022, we continued with our policy set in 2021 to replace our fossil fuel company cars with fully electric vehicles.

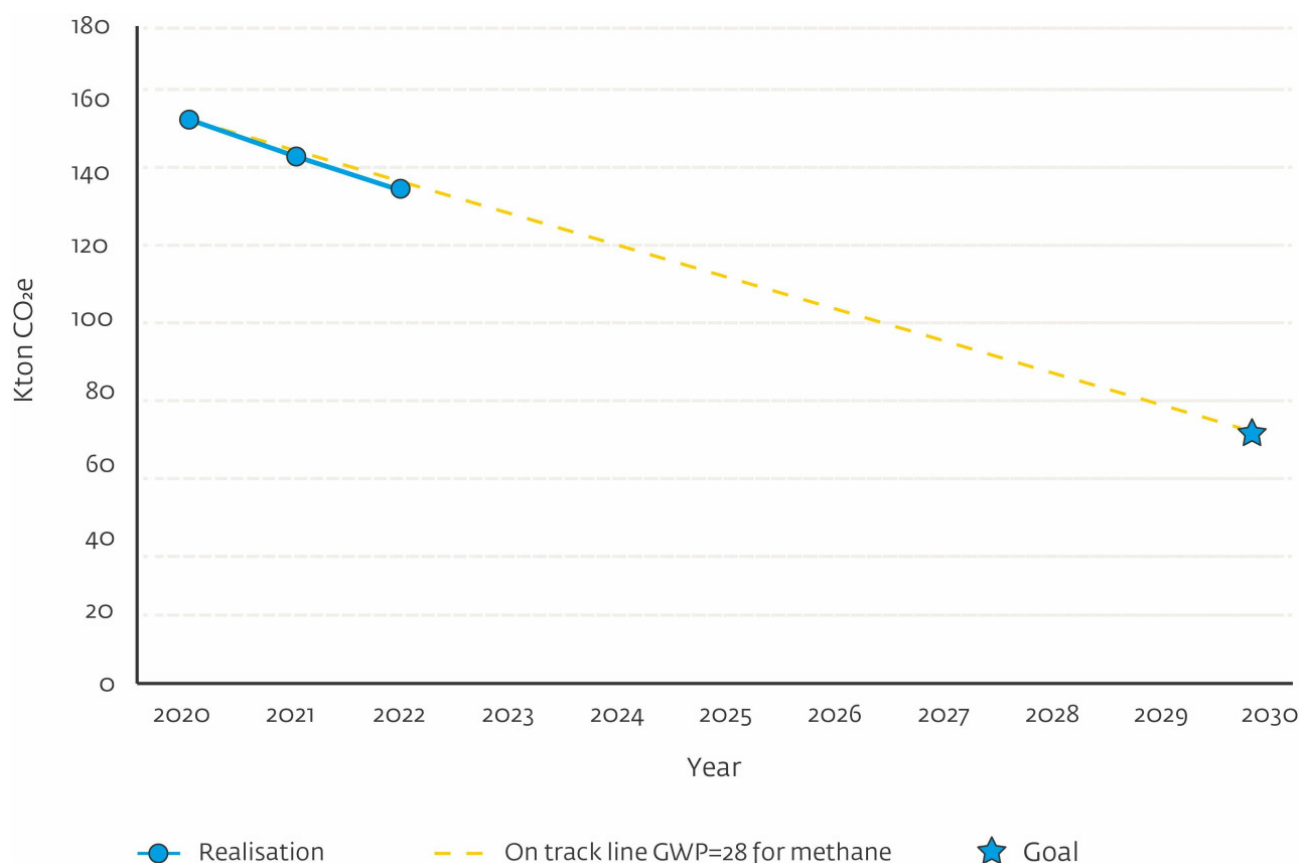
Our carbon footprint reduction ambitions

In 2021 we set a corporate-wide target for both our CO₂ and methane emissions. Our target for 2030 uses 2020 as the base year, given that 2020 is a sufficiently recent year with reliable, up-to-date data. This group-wide target enables third parties to better compare our total results with the total results of other network operators.

2030 target: Our methane emissions must be below 70 kilotonnes CO₂e by 2030. In line with the increase in the methane conversion factor (GWP; see the box 'Adjustment in calculation of GWP of methane emissions'), in 2022 we also recalculated the CO₂ equivalent figures for methane for the years 2020 and 2021. If we are to stick to the target figure for 2030, at a GWP of 28 we will have to reduce more methane in the coming years than would have been the case with a GWP of 25.

Results to date: The reported value for 2022 is 135 kilotonnes of CO₂e (at a GWP of 28). This is a decrease, and it leaves us with the challenge of achieving another 65 kilotonnes of CO₂e. At this time, we believe we are well on track to meeting the company's 2030 methane emissions target, despite the increase in the GWP for methane in 2022 (from 25 to 28).

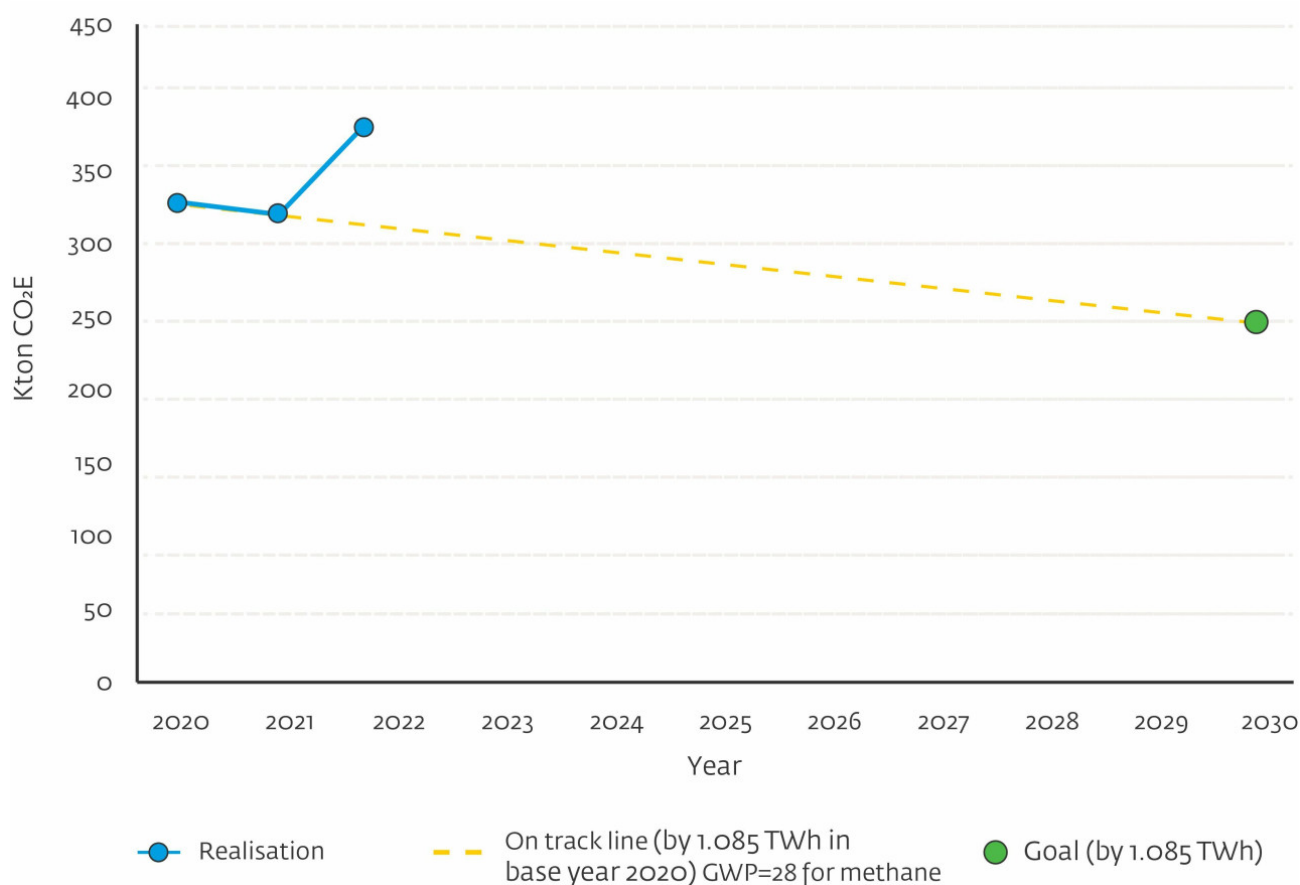
Our methane emissions in 2022: on track to meet our reduction target in 2030



2030 target: we want to reduce our total CO₂e emissions (i.e. including methane emissions) relating to our natural gas transmission (Scope 1 and 2, market-based) by 34% by 2030 compared to 2020, assuming constant transmission volumes. Written as a formula this is: total CO₂e (in kt) = 70 (kt CO₂e) + (0.137 × transmission volume). Because the GWP of methane also affects the CO₂e target for 2030 and we want to keep the original target for 2030, this also means that we have to reduce more.

Results to date: The reported value for 2022 is 390 kilotonnes of CO₂e, a significant increase compared to 2021. This means we are not on track to meet our 2030 target. This regrettable situation is due to the additional compression demand in Germany and only partly due to transmission volumes being 2.1% higher than the baseline of 1,085 TWh. Although it is currently difficult to predict how future gas flows will develop, we remain true to our commitments and will take the necessary steps to meet these. EemsEnergyTerminal generated its own electricity in 2022 but will be connected to the electricity grid early in 2023.

Our CO₂ emissions in 2022: not on track to meet our reduction target in 2030



Green Deal 7: Energy efficiency

Temperature reduction programme for gas receiving stations

Due to the increasingly drier gas in the Netherlands, it is possible to lower the temperature of outlet gas at the gas receiving stations from 5°C to 3°C. In the period 2019-2022, we were able to implement this measure at around 585 gas receiving stations, with savings of approximately 8.3 GWh per year based on the transmission volumes in 2022.

Heating curve control for heating systems at gas receiving stations

Further energy savings can be achieved by making more efficient use of the existing 300 heating systems with high-efficiency boilers at the gas receiving stations. Implementation of this measure started in 2021, but the bulk of the conversion operations will follow in the years 2023 and 2024.

Static pressure relief at M&R stations

In 2020, the outlet pressure of a large number of metering and regulating (M&R) stations was reduced from 40 to 38 bar(e). The result is a lower pressure at the gas receiving station, meaning less of a temperature drop in the gas and, with this, lower heating costs to correct the temperature drop. A study is currently underway to further lower the outlet gas pressure. This reduction will be implemented at the beginning of 2023. Because the pressure reductions at each metering and regulating station are not yet known, the initial estimate is a savings of 3.9 GWh per year, based on the transmission volumes in 2022. All these measures have contributed to a further 5% drop in energy consumption at gas receiving stations per TWh supplied in 2022 compared to 2021.

Other energy-saving initiatives

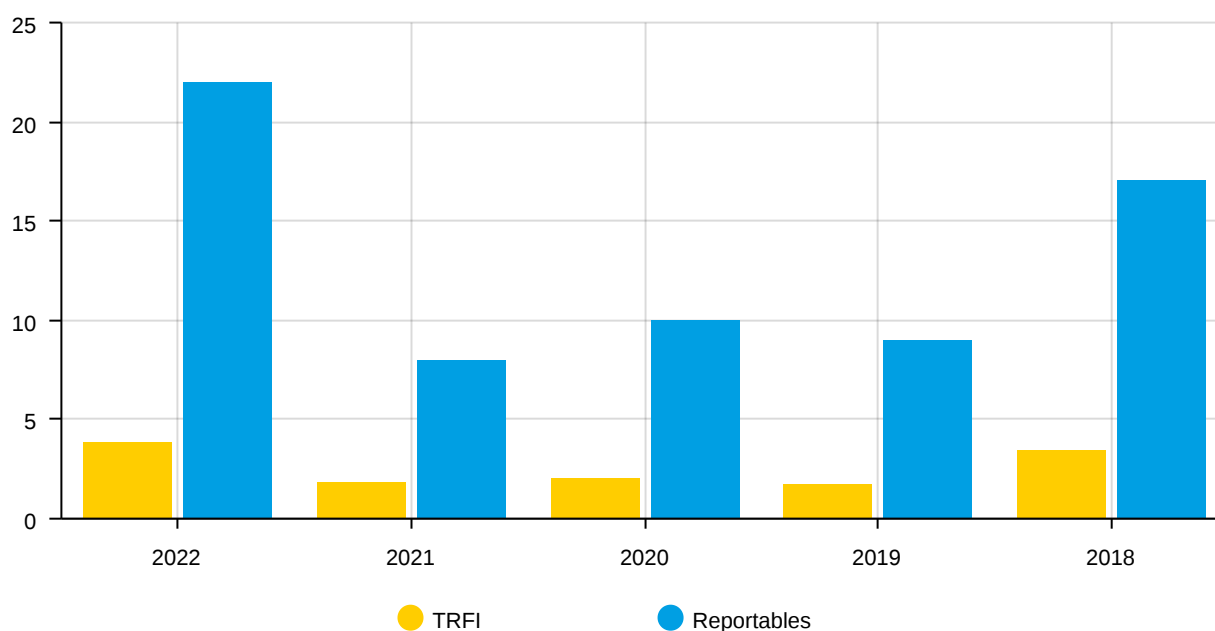
In addition to these major projects, Gasunie also saved energy on a smaller scale, by using LED lighting and replacing the lift motors at headquarters, for example. Furthermore, a project has been started at BBL to install more efficient ventilation.

Operational safety

TRFI

We monitor the number of incidents at Gasunie based on our Total Reportable Frequency Index (TRFI), the total number of incidents resulting in lost-time injuries, medical treatment, alternative work, or fatalities per 1 million hours worked. In 2022, 57 injuries occurred (2021: 33), of which 22* were reportable injuries (2021: 8). This results in a TRFI score of 3.8 (2021: 1.8). There were 12 lost-time injuries (2021: 5). Our target in 2022 was a TRFI below (and in any case no higher than) 2.5. The TRFI score target for 2021 was 2.7 or lower.

* In determining the number of accidents, with effect from 2022 a category of local residents/passers-by has been added. However, this category had no material effect on the calculation of the final TRFI for 2022.



The total number of hours worked by Gasunie employees and third-party employees increased from 4.53 million to 5.74 million hours. Accordingly, the TRFI score of 3.8 is attributable to 22 reportable injuries in 2022 in combination with 5.74 million hours worked. The number of reportable injuries at both Gasunie in the Netherlands (19) and Gasunie in Germany (3) has increased, with what can be called a significant, and very regrettable, increase.

In 2022, there were no work-related fatalities among Gasunie employees or external employees. Further analysis of the accidents, including the reportable cases, shows that about 64% of these result in cuts, crush injuries or even amputations involving the fingers and hands. The underlying causes are diverse and require further investigation. Preliminary analyses indicate that more accidents occur in projects that are characterised by greater complexity, for example due to the large number of activities being carried out simultaneously in a relatively small area as a result of necessary, but also ambitious time frames.

The accidents themselves occur during relatively simple, routine activities, which would suggest that the high-risk activities are receiving sufficient attention. Given the current and expected expansion of the project portfolio, it is important to learn from these accidents and do our utmost to prevent any more of these. Close contact with contractors, increased supervision, safety workshops and 'Learn from this Incident' bulletins are being used to turn the tide. We will use the coming year to develop more tools we can use to increase safety and safety awareness.

Uncontrolled events

Uncontrolled events are incidents involving gas leaks ((natural) gas, hydrogen, nitrogen, air) of over 14,000m³ from a Gasunie-operated pressure holder with a rated pressure of 8 bar or higher. From 2022, we tightened the requirement for the maximum number of uncontrolled events, from 3 annually to no more than 2 per year. One uncontrolled event occurred in 2022 (2021: 0). On 29 August, a gas leak occurred at the Vinkeveen gas receiving station, as a result of which 35,649m³ of gas under a pressure of 38 bar escaped into the atmosphere. Several homes were evacuated as a precaution, but all residents were able to return home within a few hours.

Year	Uncontrolled events
2018	2
2019	1
2020	0
2021	0
2022	1

Reportable injuries

The table below shows the number of injuries that occurred involving Gasunie employees and injuries involving contractors' employees while carrying out work for Gasunie.

	2022	2021	2020
Number of reportable injuries	Total	Total	Total
<i>Reportable lost-time injuries</i>			
- Gasunie employees	4	2	1
- Third parties	8	3	4
<i>Reportable non-lost-time injuries</i>			
- Gasunie employees	2	1	2
- Third parties	8	2	3
Total reportable injuries	22	8	10
Frequency rate for reportable injuries (number of injuries per 1 million hours worked)	3.8	1.8	2

Third parties are: contract workers and their supervisors/coordinators; staff of contractors and subcontractors who carry out work for Gasunie at a Gasunie location or project site; visitors to a Gasunie location or project site; and local residents, passers-by and road users who have become unintentionally involved in an undesirable event caused by a Gasunie asset or activity.

Reportable injuries are categorised as follows:

- **Fatal accident**
An accident resulting in the death of a Gasunie employee or a third party.
- **Lost-time injury (LTI)**
An injury whereby the injured person does not resume work within one working day (24 hours) and there is no option for the injured person to do restricted (alternative) work.
- **Injury leading to restricted work**
An injury following which the injured person is unable to resume normal work within one working day (24 hours) but can do restricted (alternative) work within 24 hours.
- **Injury requiring medical treatment**
An injury where medical treatment was required (i.e. treatment by a GP or medical specialist).

Safety culture

Gasunie strives for a safety culture characterised by a high degree of social safety, with a focus on taking personal responsibility, on personal resilience and on risk awareness. These principles cover so much more than just following the rules. We strive for a proactive culture in which employees identify potential risks on their own and raise and discuss these situations openly. This is the only way to prevent incidents. Such a culture also means that people feel safe in sharing information about dangerous situations and incidents; this allows us to learn together and prevent similar situations from reoccurring.

Moreover, when accidents, incidents and dangerous situations are reported, we determine which measures need to be taken to prevent such incidents from happening in the future. We foster learning by distributing and discussing Learning Incident bulletins and events at peer companies. This helps to enhance awareness and support for implementing improvement measures.

Safe@Gasunie

All people working at Gasunie (permanent, temporary and contract staff) participate in the annual Safe@Gasunie Safety Day. Social safety was the key topic in 2022. It is only when employees feel socially safe that they can perform their duties properly and will be willing to raise the issue of unsafe working conditions, the very things that can prevent incidents. Even with staff who are not working 'in the field', their influence on company safety is significant. Safety starts at a much earlier stage; for example the design and processes surrounding the purchase of materials have a major impact on the safety level of the assets. Many new employees experience a high degree of social safety at Gasunie, thanks to the openness and helpfulness they encounter, for example. Seasoned staff often see that improvements could be made in terms of lowering barriers between departments, between office and field staff, and between the employee and their manager/supervisor.

Attractive employer

Gasunie employs more than 2,350 people (FTEs). They are the driving force behind the economic and social value we create. We recognise the importance of being a good employer and make every effort to be an attractive employer.

1. Total number of employees						
Employment contract, Gender	FTE			Head count		
	GU	GU-NL	GU-D	GU	GU-NL	GU-D
Permanent, Female	266	212	54	300	240	60
Permanent, Male	1375	1181	194	1409	1214	195
Temporary, Female	34	32	2	39	37	2
Temporary, Male	130	127	3	135	132	3
Total	1805	1552	253	1883	1623	260
Employment type, Gender	FTE			Head count		
	GU	GU-NL	GU-D	GU	GU-NL	GU-D
Full-time, Female	213	176	37	237	200	37
Full-time, Male	1166	974	192	1194	1002	192
Part-time, Female	87	68	19	102	77	25
Part-time, Male	339	334	5	350	344	6
Total	1805	1552	253	1883	1623	260
2. Total number of contingent workers						
Gender	FTE			Head count		
	GU	GU-NL	GU-D	GU	GU-NL	GU-D
Female	72	72	0	95	95	0
Male	454	450	4	504	500	4
Total	526	522	4	599	595	4

Besides permanent staff, there are also contract employees at Gasunie. Engaging temporary (external) employees helps us absorb peak workloads, cover employee absences, and bring in specialist expertise as needed.

Equal Pay

Gasunie is an advocate of equal pay for equal work. By paying attention to this we make ourselves an attractive employer, which in turn helps ensure we can achieve our Vision 2030 objectives. On average, women in the Dutch labour market earn 13.2% less per hour than men for the same work. At Gasunie the gender pay gap at the start of 2022 was 4.8%. According to the findings of research that we commissioned employers' association AWWN to carry out in 2022, some of the gender pay gap (1.8 percentage points) cannot be explained.

Interview: Gasunie on track to pay equity

Gasunie considers diversity, inclusion and equality to be key values. That is why the Human Resources department commissioned employers' association AWWN to conduct an independent remuneration survey. Project manager Elina Hamstra of Gasunie and AWWN remuneration expert Karin Panman discuss the study and the findings. Elina says, 'We want to share our experiences with equal pay with other companies.' [Read more >>](#)

Employee survey

In 2022, we 'took the pulse' of our staff in the Netherlands with a major employee survey. The response to the Corporate Pulse survey was nearly 70%. On average, employees (permanent and contracted) are positive about working at Gasunie, and we also score well compared to our benchmark of companies in the energy and utilities sector. At some departments we see that employees are taking a critical look at the work experience. We are pleased with the clear signal and will be paying special attention to this in the coming period.

Compared to the previous survey (2020), employees are better informed about our company goals. Our vision of the future inspires, which is good news for a company in transition. Employees understand well what the effects of the changes will be on their daily work. There is, however, a clear need to be informed and supported earlier or more extensively with regard to the changes.

Employees at Gasunie experience the working environment as social and inclusive, according to the findings of the Corporate Pulse. The extent to which we are accepted at work, dare to be ourselves and receive equal treatment score high in particular. Collaboration between departments could be better. It is also felt in many departments that management does not know enough about what is happening on the work floor. This is an important point for improvement for management. Employees can also contribute to this by reaching out to their manager with information.

Labour market

We are still facing shortages on the labour market in both the Netherlands and Germany. Last year our workforce grew by 189 people. Attracting technical personnel in the central and western parts of the Netherlands is particularly challenging. Recruitment and selection processes for these groups take a long time.

In 2022, we ran specific recruitment drives for engineers and other technical staff, as well as for area managers, lawyers and business developers. We have extended the € 1000 recruitment bonus we offer for staff in technical roles such that this now covers all vacancies. From now on, work placement trainees from intermediate and higher vocational institutions will receive the same remuneration as those studying at university. As part of our equal pay policy, we no longer request pay slips from applicants.

Gasunie received the 'Diversity and Inclusion award' from the employment agency Randstad Participatie. The award was presented to Gasunie for the north-east and central regions of the Netherlands in recognition of the safe and stimulating working environment we offer employees who are new to the Netherlands or who have a physical or mental disability.

Analysis of hybrid working

The Covid-19 pandemic brought about a new way of working at Gasunie. In addition to the face-to-face contact at the office, it has become the norm for a lot of the contact to be remote. The ideal mix between remote and personal contact is different for everyone; what is certain, however, is that we have all started working in a new hybrid way and that this situation is permanent. As an employer, Gasunie wants the working environment to be arranged in line with this trend as much as possible. The Gasunie offices in Utrecht, Ravenstein and Ommen are set up for hybrid work, and headquarters in Groningen is now also being modified in stages. The specific wishes of each department are being taken into account in this regard.

Many departments make arrangements about days/times at which, or situations where staff must be at the office. To ensure that everyone remains connected and engaged, week-start meetings or check-ins are held in many departments. At these meetings – or specifically at the face-to-face meetings – often more attention is also given to the employees' state of mind, and activities aimed at building and maintaining a sense of community (team outings, drinks) are planned more often now.

Sickness absence

Gasunie's progressive sickness absence rate is currently 4.05 in the Netherlands and 4.77 in Germany. In the Netherlands, during the first two years of an employee's illness we are responsible for continuing to pay their wages and for providing them with occupational rehabilitation support. In Germany, this period is six weeks. Our Gasunie target is a sick leave rate that does not exceed 4.1%.

Indicator	Eenheid	2022		2021		2020		2019	
		GUN	GUD	GUN	GUD	GUN	GUD	GUN	GUD
Absence due to sickness (total)		4.05	4.77	3.96	4.46	3.58	3.66	3.85	3.82
- short-term absence	Percentage	0.92	1.81	0.48	0.92	0.49	0.96	0.68	1.57
- medium-term absence	Percentage	0.83	1.8	0.56	1.25	0.69	1.01	0.56	1.22
- long-term absence	Percentage	2.30	1.16	2.92	2.29	2.4	1.69	2.61	1.03
Sickness absence frequency	Frequency	1.14	2.61	0.7	1.83	0.72	1.67	0.96	2.38
Work-related absence (reported by employee)	Absence cases	29	-	37	-	33	-	23	-
Reported to the Netherlands Centre for Occupational Diseases (NCB)	Reports	-	-	-	-	-	-	-	-

* Sickness absence frequency is the number of cases of sickness absence divided by the average number of employees. A lower sickness absence frequency therefore means that, on average, employees are sick less often. Sickness absence frequency says nothing about the duration of the sick leave.

With the increased workload at Gasunie as a result of the extra efforts in the area of transmission security and the energy transition, preventing sickness absence has received a great deal of attention. Since 2022, one of the programmes we have been offering is Master Your Energy, during which employees learn how to make smarter use of their energy and ensure a good energy balance and a good night's sleep. Sickness absence reports are shared with all managers, who also have the opportunity to discuss specific topics with the occupational health physician, like about how to reduce mental health sickness absence, for example.

New governance model

At Gasunie, our world no longer consists solely of gas transmission and storage. The energy transition requires Gasunie to come up with solutions relating to alternative transmission flows, like CO₂ and hydrogen. And a lot of the projects we are working on are very closely interrelated. Gasunie possesses a great deal of knowledge, which is currently spread over various departments. The more we can share that knowledge, the more efficiently we can work together – with an even higher focus on results – and this way realise all our Vision 2030 plans and projects.

In 2022, a study group took the first steps towards designing a new Gasunie governance model. With this we want to bundle our expertise for various activities, like for engineering for natural gas, heat and hydrogen, for example, without the need for a major restructuring. We can also learn from each other in terms of regulatory knowledge and commercial expertise, of course with the understanding that we take measures to adequately protect commercially sensitive knowledge and data. We approached our regulator to consult on the design of the governance model. The new governance model is expected to be introduced in 2023.

SamenSterk

Under the name 'SamenSterk' (which loosely translates as 'a formidable team'), the GTS OI (Installations) and OL (Pipelines and Stations) departments have been merged into one new maintenance and management organisation from 2023: Operation Assets (OA). This bundles all knowledge and expertise needed to carry out the maintenance and management of existing and new assets, for the transmission and storage of natural gas, but also for new energy carriers.

The organisational change has an impact on our employees and the way we work and collaborate. For example, a number of functions have disappeared in the new organisation, but new ones have also been created. Topics that are important for future success have also been worked out, such as having well-organised standby services, sufficient relevant knowledge and expertise, workable capacity planning, and clear processes and procedures. The Works Council has issued a positive opinion on SamenSterk.

08 Dilemmas

Dealing with Russian partners

Gasunie has maintained close ties with Russian companies and institutions since the 1990s. These relationships were formed from the idea that production from the Groningen gas field would eventually cease, and that natural gas from Russia would be a key replacement for this gas. We took a 9% interest in the Nord Stream consortium in 2007 and we were exchanging knowledge with Russian organisations at the Energy Delta Institute. The Russian invasion of Ukraine put an abrupt end to this.

The European Commission was quick to impose sanctions on Russia and Russian companies, but not on the import of Russian gas. This presented Gasunie with a major dilemma. Continuing as before was out of the question for us, but given the major social and economic consequences for security of supply, we could not suspend the service altogether either. After all, Gasunie has a statutory duty to offer transport capacity in a non-discriminatory manner.

We ultimately decided against taking unilateral steps on top of the Dutch and European sanctions. Russian customers could therefore not be excluded from Gasunie's networks in the Netherlands and Germany as long as they were not on the sanctions list. We did, however, decide to freeze all non-operational relations and contacts, including scientific collaboration, and to suspend our involvement in the Nord Stream Shareholders' Committee, of which our CEO, Han Fennema, was a member. Operational contacts with Russian companies were reduced to the minimum level required to facilitate security of supply in the Netherlands and Europe through our infrastructure.

Reducing methane emissions

It is an unfortunate fact that our activities result in emissions of gases that are bad for the climate. Methane and CO₂ contribute to the greenhouse effect, which is why we have set targets to significantly reduce our emissions by 2030. We want to be in the European vanguard when it comes to cutting emissions.

Government bodies are also setting increasingly stringent requirements for monitoring, recording and reporting methane emissions and repairing leaks. An EU methane regulation will become effective at the end of 2023, which we must comply with. It's not yet clear what the legislation will look like, but the contours of that legislation are already visible.

Our current policy is that we invest a maximum of € 200 to avoid the emission of one metric tonne of CO₂ equivalent (this equals 35.7kg of methane). That is about twice what an EU Allowance unit (carbon credit) is currently worth. A higher amount in the new regulation is already part of our own proposals because we want to go far to reduce our emissions and keep these very low.

To the best of our knowledge at this time, the regulation states that we must do everything possible to reduce methane emissions and that we must repair *any* leaks found. Repairing small leaks costs a lot of time and money, resources that we can better spend on projects that also help others reduce their emissions and, this way, increase the overall positive impact on the climate. Moreover, we sometimes emit more methane when making repairs immediately (due to pipeline purging) than we would by sealing the leak over a longer period. And that creates a dilemma: do we comply with the law, or do we go with the best alternative for the climate?

EemsEnergyTerminal investment decision

In 2022, EU Member States worked hard to reduce their reliance on Russian gas. An effective means of achieving this is the use of floating storage and regasification units (FSRUs) for imported LNG. In September, Gasunie commissioned the EemsEnergyTerminal, which can produce 8 bcm (eventually 10 bcm) of natural gas annually from LNG imported from overseas suppliers via LNG tankers.

That natural gas does, however, come with a social price tag. The production and transport of LNG has a higher carbon footprint than pipeline gas. Furthermore, the LNG needs to be regasified before it can be fed into the GTS network, meaning its temperature of -162°C must be raised back up to atmospheric temperature, which requires a lot of energy.

The upshot is that EemsEnergyTerminal raised our own gas consumption in 2022 by about 25%. As a result, our carbon footprint in the Netherlands (Scopes 1 and 2) also increased (+20%), while our transported volumes actually decreased (-7%). When making the investment decision, we weighed facilitating security of supply (external economic value creation) against the maximum reduction of our emissions (internal social value creation) and concluded that we had to accept the higher emissions under these circumstances.

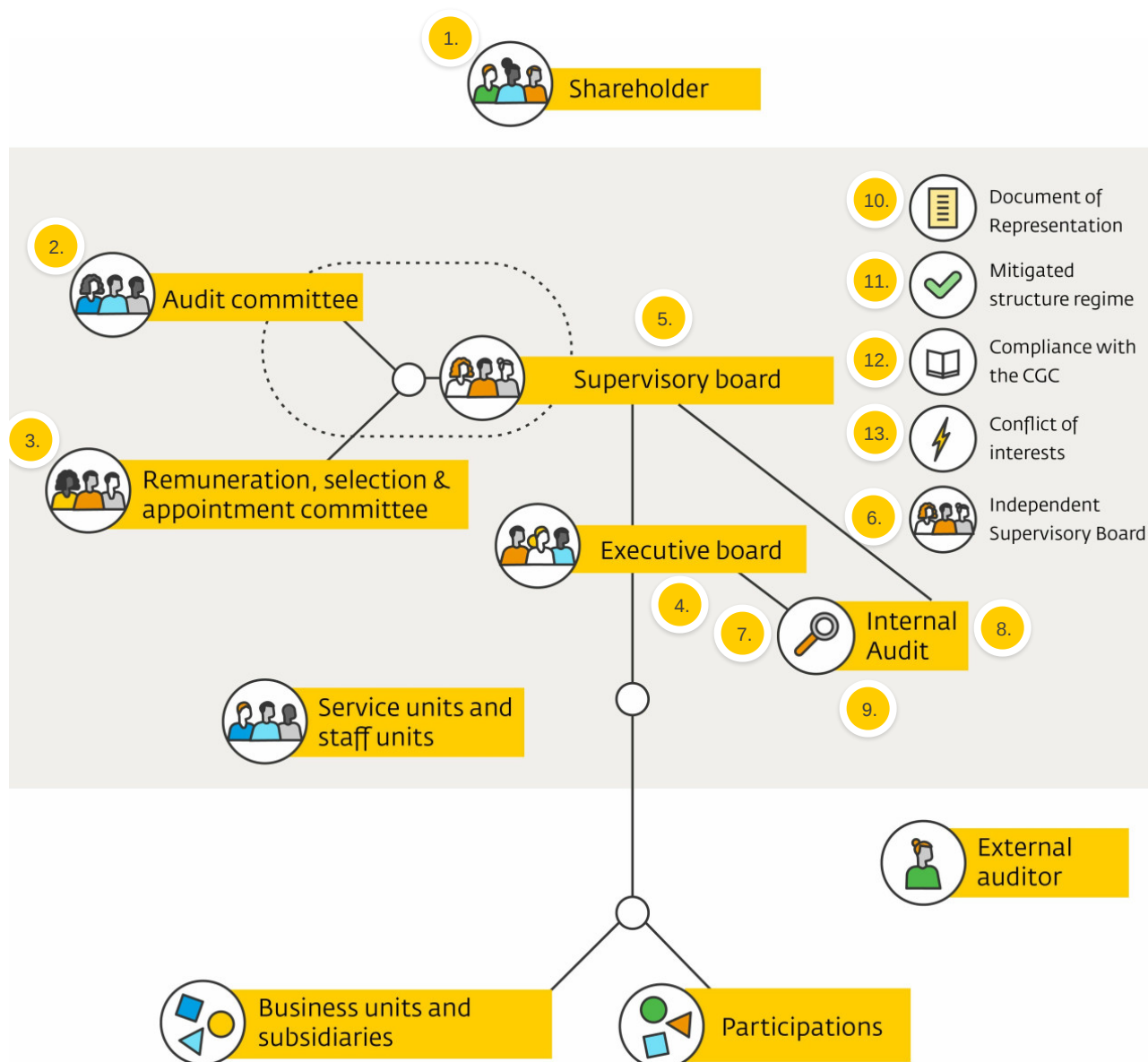
We will have to balance considerations in this way more often in the coming years. With our energy transition projects, we enable our customers to cut their carbon emissions, but at the same time these projects mean that there is the chance that our own carbon footprint will increase during construction of the new infrastructure. In the following annual reports, we intend to provide insight into both the positive and negative impact of our transition investments.

09 Governance

General

Corporate governance is all about the way that Gasunie is run, about how management is supervised and how we render account. Good corporate governance is a precondition for effectiveness and efficiency in achieving the goals we have set ourselves. It ensures adequate risk management and careful consideration of the interests of all of Gasunie's stakeholders.

Corporate governance at Gasunie



1. Shareholder

N.V. Nederlandse Gasunie (Gasunie) is a public limited company whose sole shareholder is the Dutch State. The shares are held by the Ministry of Finance.

2. Audit Committee

The Supervisory Board's Audit Committee primarily supervises the risk management and audit systems, the annual and semi-annual financial reporting and the financing of the company.

3. Remuneration, Selection and Appointment Committee

The Supervisory Board does not have a separate Remuneration Committee (best practice 2.3.2). Remuneration is covered by the combined Remuneration, Selection and Appointment Committee. This is justified by the fact that the remuneration policy for the Executive Board of Gasunie as a state-owned company is determined in close consultation with the Dutch government as the sole shareholder. The last recalibration took place in 2021.

5. Supervisory Board

The Supervisory Board consists of six members and acts as the employer of Gasunie's directors appointed under the articles of association, supervises the Executive Board and supports it with advice. In accordance with the Dutch Gas Act and the articles of association, important decisions to be made by GTS and other subsidiaries are also submitted for approval to the Supervisory Board.

7. Internal Audit (I)

Internal Audit provides independent, objective assurance, insights and advice on governance, risk management, management control, internal control and business processes. Internal Audit does this for the departments within Gasunie and its wholly-owned subsidiaries and majority shareholdings.

9. External auditor

The external auditor is appointed by the General Meeting, with the Supervisory Board being entitled to nominate an auditor. PricewaterhouseCoopers Accountants N.V. has served as Gasunie's external auditor from the 2015 financial year up to the end of the current reporting year. Ernst & Young Accountants LLP has been appointed as external auditor starting from the 2023 financial year.

4. Executive Board

The Executive Board comprises four members, with two roles mandated under Gasunie's articles of association supplemented by two others that are non-mandated.

6. Independence

With the exception of one member, all Supervisory Board members satisfy the requirements of independence within the meaning of the Dutch Corporate Governance Code. With regard to Anja Mutsaers, use is made of the regulation as laid down in best practices 2.1.7(i) and 2.1.8(iii), and additional agreements have been made to avoid any form, or possible impression of a conflict of interest. In the opinion of the Supervisory Board, this satisfies the requirement of independence within the meaning of the Dutch Corporate Governance Code.

8. Internal Audit (II)

In 2022, Internal Audit conducted a number of audits, including of recruitment and pre-employment screening, energy procurement, the payment process in both the Netherlands and Germany, and more. Besides this, the department looked at the reasons for the long lead time of the replacement of an internal application and made recommendations that should help to accelerate the completion of this project.

10. Document of Representation

The various business units render account to the Executive Board using the Document of Representation (DoR), providing formal feedback confirming to what degree minimum requirements for management control have been complied with. This document is discussed with the Supervisory Board every year.

11. Mitigated structure regime

The company is subject to a mitigated structure regime. The governance structure is based on Book 2 of the Dutch Civil Code, the Dutch Corporate Governance Code, the company's articles of association, and various internal rules of procedure. Various provisions affecting the governance of the company are also contained in the Dutch Gas Act.

12. Dutch Corporate Governance Code

Gasunie applies the provisions of the Dutch Corporate Governance Code ('the Code'). Although the Code is, strictly speaking, only applicable to listed companies, Gasunie follows the principles and best practice provisions of the Code insofar as they are relevant and applicable to Gasunie. The principles and provisions of the Code have for the most part been implemented in our articles of association and in various rules of procedure. An updated version of the Dutch Corporate Governance Code will be in force with effect from the 2023 financial year. In the coming period Gasunie will examine whether its governance structure should be refined or have changes made to it as a result.

13. Conflict of interests

We comply with best practice provision 2.7.4 of the Dutch Corporate Governance Code, which states that transactions carried out by members of the Executive Board or Supervisory Board involving a conflict of interests must be published in the annual report. No such transactions took place in 2022.

Diversity of Executive Board and Supervisory Board

Diversity is an explicit area of attention for Gasunie. The policy is aimed at ensuring Gasunie acts in accordance with the diversity requirements set out by law and in the Corporate Governance Code for future vacancies on the Executive Board and Supervisory Board.

The Act to amend Book 2 of the Dutch Civil Code in connection with making the ratio between the number of men and women on the management board and supervisory board of large public and private companies more balanced came into effect in 2022.

In terms of directors appointed under the articles of association, the composition of the Executive Board meets the legal target (30%) for a balanced distribution of seats between men and women on the management board: this is 50% (the CEO is a man, the CFO is a woman). When considering all directors on the Executive Board the percentage of women is 25%.

The Supervisory Board consists of six members, four of whom are men and two women, and thus meets the target set – both when taking into account the minimum number of Supervisory Board members under Gasunie's articles of association (i.e. three) and in general – for a balanced ratio between the number of men and women on a management board. One of the Supervisory Board members has German nationality.

Within ten months from the end of each financial year, Gasunie reports to the Social and Economic Council (SER) on (i) the number of men and women who are members of the Executive Board and the Supervisory Board at the end of the financial year, as well as those in particular categories of employees (to be determined by the company) in managerial positions; (ii) the targets (i.e. target figure); (iii) the plan to achieve these targets; and (iv) the reasons if one or more targets have not been achieved.

Dutch government's policy on state holdings

In July 2022, the Ministry of Finance presented the Dutch government's 2022 policy memorandum on state holdings ('Deelnemingenbeleid Rijksoverheid 2022'; 'the 2022 Memorandum'), in which the Ministry describes how the Dutch government manages its relationship with 'state holdings', i.e. companies in which it owns shares (like Gasunie). The 2022 Memorandum replaces the policy memorandum published in 2013 and focuses more firmly on the role of state holdings in safeguarding public interests and on the further professionalisation of active share ownership by the state. From the 2022 Memorandum it can be inferred that state holdings can play an important role in their position at the interface between the public and private realm and thus contribute to bringing about the energy and climate transition. Moreover, having these state holdings can serve as a means to contribute to security, both physical (economic, etc.) and emotional, in uncertain times.

Besides this, corporate social responsibility (CSR) is high on the agenda and financial resilience is one of the aspects that is addressed in the broader monitoring and guidance of the financial position of state holdings. In the case of Gasunie, the public interest is the assurance of the security of transmission, with efficiency, safety of the gas infrastructure, and sustainability being the key considerations. For Gasunie, CSR and contributing to the Sustainable Development Goals (through the Gasunie Green Deals) are an extension of its core tasks and the public interests it safeguards.

With the 2022 Memorandum, there is a more explicit focus on public interests, including the close involvement of the State in strategy, investments and broad activities, including foreign activities. The State has a long-term perspective and is less guided by (sometimes short-term) commercial motivations. This is reflected in the way in which the State, as a shareholder, looks at the financial position of state holdings, their investments and their dividend policy, albeit that the shareholder has more limited discretion regarding investments within the regulated framework than with investments outside this framework. In addition, as a shareholder the State promotes good corporate governance through policy on appointments, remuneration, strategy and CSR and, this way, aims to promote long-term value creation by taking into account the interests of all stakeholders.

Available documents

The following documents on our corporate governance are available (in Dutch and/or in English) on the Gasunie website:

- [Rules of procedure governing the principles and best practices of the Executive Board](#)
- [Rules of procedure governing the principles and best practices of the Supervisory Board](#)
- [Raising Concerns scheme](#)
- [Conduct Guidelines – Working Together](#)
- ['Apply or explain' overview in relation to application of the Dutch Corporate Governance Code](#)

Rules of procedure governing the principles and best practices of the Executive Board and Supervisory Board

The Rules of procedure governing the principles and best practices (of the Executive Board / Supervisory Board) reflect the principles and best practice provisions of the Dutch Corporate Governance Code, insofar as these are relevant to, and apply to the company.

Raising Concerns

The 'Raising Concerns' scheme ensures that employees can confidentially report inappropriate behaviour or an integrity concern. In the Netherlands, Gasunie has six internal confidential counsellors spread across the various Gasunie locations, as well as one external confidential counsellor, all of whom can be consulted on a confidential basis.

Conduct Guidelines – Working Together

The basic principle in drawing up the Conduct Guidelines was the question of what behaviour we need to be able to realise our ambitions for 2030 and what we expect from each other in terms of acting with integrity. The Conduct Guidelines were compiled in consultation with the Executive Board, the senior management and Gasunie staff who took part in focus groups.

The following documents on our corporate governance are available on the Gasunie intranet site for the Netherlands:

- Policy principles for dealing with information
- GTS Rules of Procedure

Policy principles for dealing with information

Every Gasunie employee is required to handle company resources and information with care. The 'Policy principles for dealing with information' have been drawn up to provide them support in this area. This document sets out the most important rules for handling information and the company resources made available at Gasunie for this purpose.

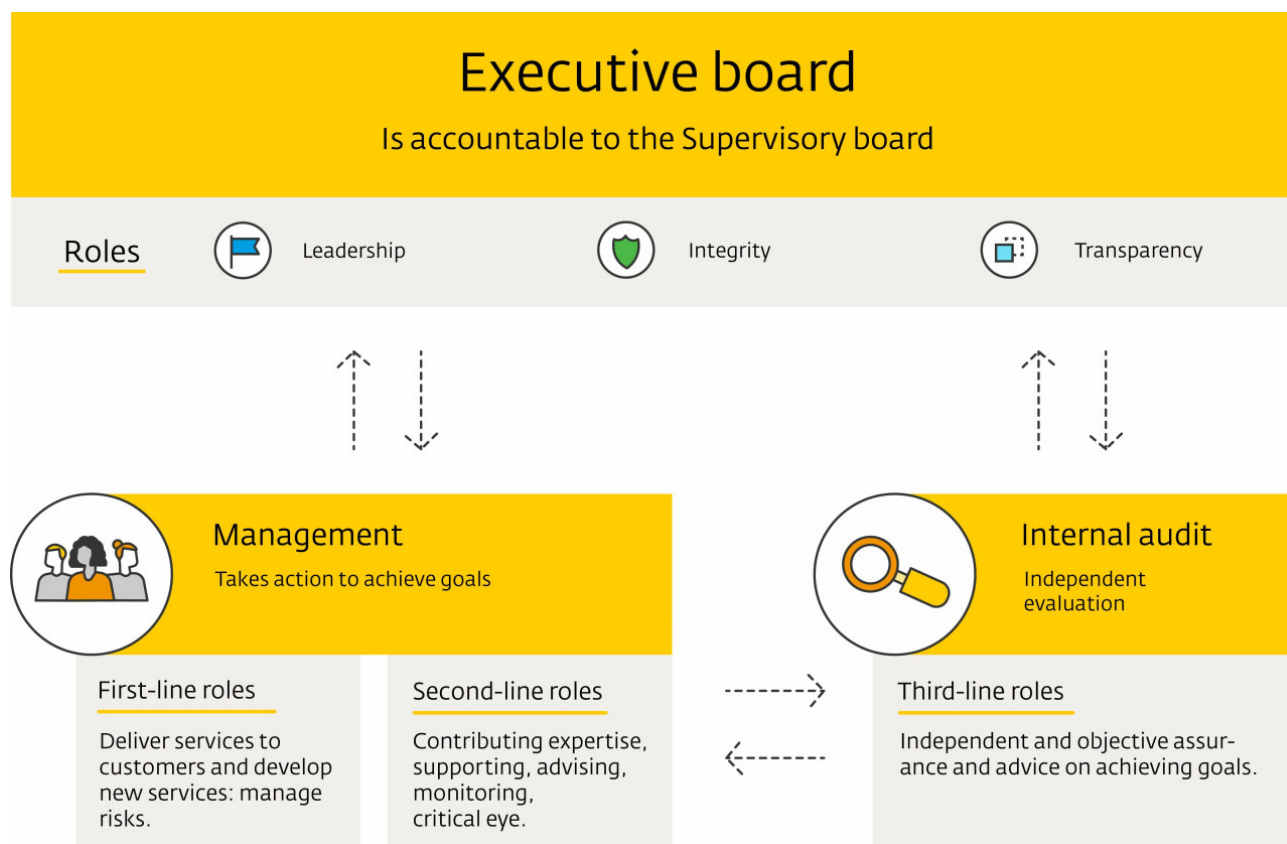
GTS Rules of Procedure

Under the GTS Rules of Procedure, employees who work for Gasunie Transport Services B.V. and have access to confidential information ensure that this information is not and cannot be made available or disclosed to any unauthorised person, organisation or process. Employees must sign this document each year and an audit of compliance with the document takes place every two years.

GUD employees sign a privacy agreement at the start of their employment and their contract of employment includes a confidentiality clause.

Governance and Management Control

Gasunie's Governance and Management Control architecture is based on the Three Lines Model. The basic principle underlying this model is that line management (the first line) bears operational responsibility for risk management. The second line, made up of specialists like those in Risk Management, Control and Compliance, supports and advises the first line. The third line comprises the Internal Audit department, which conducts audits to review the functioning and effectiveness of the risk management and control system.

Governance and Management Control at Gasunie

The Executive Board has final responsibility for risk management and is accountable to the Supervisory Board for this. The Supervisory Board regularly talks to individual members or the entire Executive Board about governance and management control, addressing things such as important risks and audit results. As a result, risk management is an activity that is performed at all levels of the organisation.

Risk management

Key aspects of our risk management efforts are to define the corporate risk appetite and run risk analyses at various levels of the organisation. The corporate risk appetite and corporate risk analysis are detailed in the following.

Every year, the Executive Board establishes the risk appetite with regard to the three pillars of the strategy. In so doing, we make a statement about the extent to which the organisation is prepared to accept risks relating to attaining its strategic objectives. We furthermore apply a number of general principles that cut across the strategic pillars and that we, as an organisation, must comply with at all times. Our risk appetite serves as a guideline in our strategic and operational decision-making.

Gasunie uses a number of tools to identify the various risks/categories of risks, as shown in the figure below



1. Corporate Risk Analysis (CRA)

Through an annual CRA, we analyse the main strategic and operational risks that could stand in the way of implementation of our strategy in the medium to long term and/or that could affect the execution of our business processes. The CRA is an integral part of our corporate business plan, which has a three-year horizon and we update every year.

3. Project Risk Analysis (PRA)

We conduct project risk analyses during the various stages of a project. We account for the most important project risks in the internal reports and audit plans of the departments involved in these projects.

5. Internal Control Plans (ICPs)

Any mitigating measures taken to control risks identified by operational risk analyses must be tested for effectiveness. We do so through internal control plans.

2. Business Risk Analysis (BRA)

For our business units and service providers we run a BRA every year. This analysis looks at (i) corporate risks assigned to the business unit or service provider in question and (ii) risks that are specific to the business unit or service provider in question. The BRA looks at short-to-medium-term risks and is an integral part of our business unit plans.

4. Operational Risk Analysis (ORA)

We conduct operational risk analyses of business processes. We record the results of ORAs in the internal reports and audit plans of the departments involved in these processes.

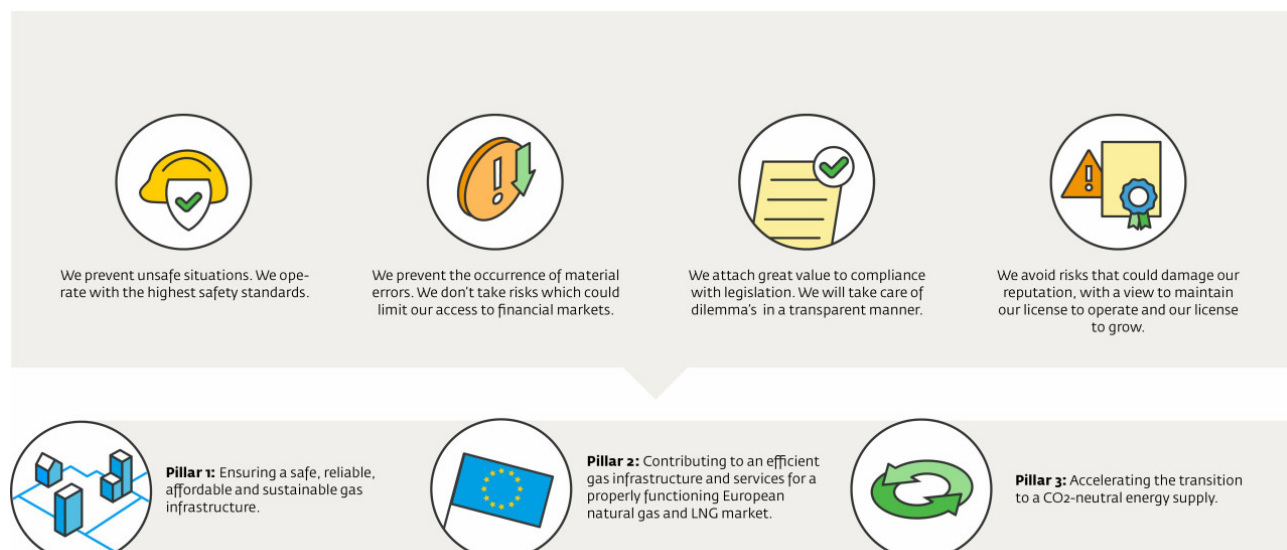
6. Process review

Process owners conduct an annual process review. They run down a checklist to assess whether they are in control and whether there are opportunities for improvement. The process owner is supported in this by the process manager and other experts. If the process review shows that the process owner needs to get a better view of the possible risks, because the substance of the process has changed, for example, we start an Operational Risk Analysis.

General principles

We endeavour to prevent unsafe situations that could endanger our fellow human beings, employees, contractors or the local community. We act on the basis of the highest safety standards in our sector. We do our utmost to avoid material errors in financial systems or external reports and we are not prepared to take risks that could limit our access to financial markets.

Our general principles when it comes to safety



We are strongly committed to complying with the law. In our operating activities, we may be confronted with dilemmas. As and when that happens we deal with them transparently. We try to avoid risks that could harm our reputation so that we can retain our social licence to operate and our licence to grow.

Changing view of risk

The turbulent developments in the European gas market have changed our view of risk. The EemsEnergyTerminal project demonstrates that we are willing and able to take risks to increase transmission security. We also accept the risk that our carbon emissions could increase as a result of this project and that this may harm our reputation.

Gasunie's view of risks

		Category					
		Strategic		Operations		Reporting	Compliance
		Financial	Reputation	Transport security	HSE	Financial	Law and Regulation
Pillars	1.  Pillar 1						
	2.  Pillar 2						
	3.  Pillar 3						

1. Pillar 1

The low regulated return in this first pillar goes hand in hand with a risk-averse financial profile. Funds must first be secured before strategic investment decisions are made.

2. Pillar 2

Financial risks relating to strategic investments are based on a generally acceptable balance between risk and return. Strategic investments are assessed on their public relevance, societal impact and contribution to supporting security of supply in Europe.

3. Pillar 3

An entrepreneurial approach is a prerequisite for creating value in the long term, which calls for a higher financial risk appetite for strategic investments. We are prepared to accept more uncertainty about the expected return for the sake of developing future business models.

Risk assessments

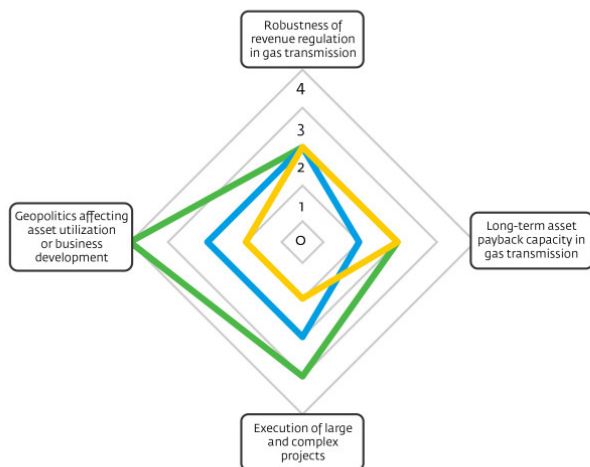
In the table below, we present a brief rundown of all the current corporate risks and our expectation on how these risks will develop. All the risks presented have the potential to have a significant material impact on the achievement of our strategic objectives or on the execution of our business processes.

Our strategic risks

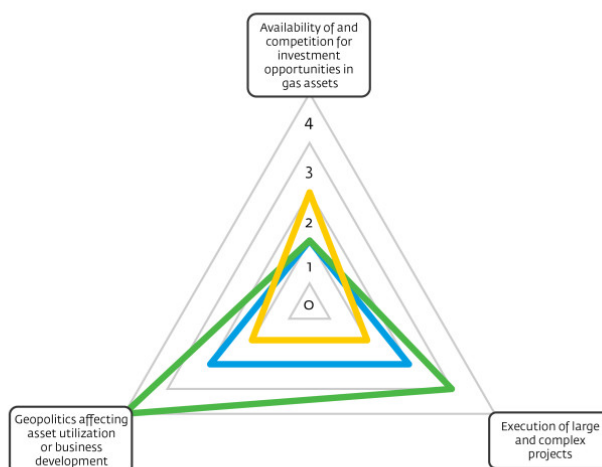
● 2021
 ● 2022
 ● Target
 1 = low risk 4 = high risk



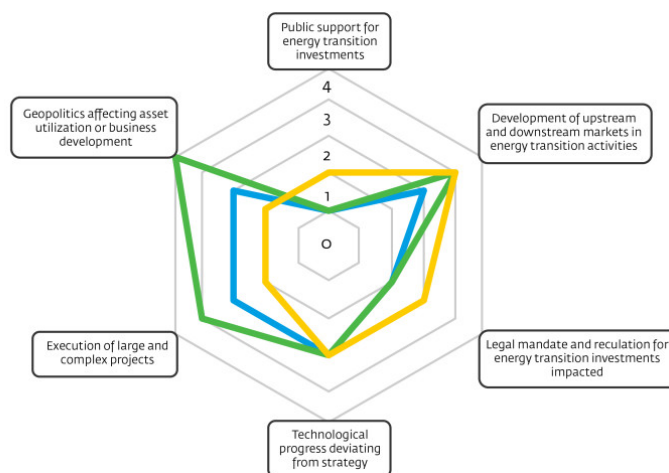
Optimize infrastructure:
Meeting external challenges with
resilience and adaptation



Connect Europe:
Successfully maintaining security of
supply in an uncertain environment



Accelerate the energy transition:
Grasping opportunities offered by increasing
public support for the energy transition



Our strategic risks

What is the risk?	How can we manage the risk?
Robustness of revenue regulation in gas transmission	Maintain dialogue with regulatory authorities and other stakeholders to optimise regulation in the context of decreasing utilisation of assets
	Optimise asset management in terms of cost and risk efficiency
	Promote international market integration
	Promote alternative uses of assets (e.g. for biomethane and hydrogen)
Long-term payback capacity of gas transmission assets	Maintain dialogue with regulatory authorities and other stakeholders to optimise regulation in the context of efficiency requirements and depreciation periods
	Promote alternative uses of assets (e.g. for biomethane and hydrogen)
	Take the possible switch to hydrogen into account when constructing new pipelines
Opportunities for investment in gas assets and competition on the available options	Actively monitor and prepare investment opportunities and maintain relationships with relevant parties
	Investigate brownfield business development opportunities for existing assets
	Investigate the reuse of assets for alternative energy carriers
Public support for investments in the energy transition	Reinforce stakeholder management and social engagement
	Convey the Gasunie narrative in public discussions of the energy transition
Development of upstream and downstream markets for energy transition activities	Invest directly in various parts of the value chain (within the legal constraints)
	Collaborate closely with parties across the entire value chain
	Develop initiatives to drive demand across the value chain
	Communicate with government bodies about the importance of market stimulation
Legal mandate and regulation for energy transition investments	Ensure continuing specific focus on public affairs representation in the Netherlands and the EU
	Expand public affairs representation in Germany
	Intensify collaboration with other TSOs on a European level
Technological developments that are incompatible with our strategy	Pursue diversification in New Energy portfolio
	Apply active portfolio management in New Energy portfolio (periodic evaluation)
	Incorporate technological developments when revising strategy
Reputation in relation to implementation of large-scale and complex projects	Ensure adequate allocation of financial and staffing resources for projects with a high social impact
	Strictly uphold high standards of quality and compliance with codes of conduct in project management
	Strengthen the development of scenarios in the early phases of projects
	Pursue active contract management in the implementation of projects (e.g. New Procurement Strategy project)
	Project process integration initiatives between departments
Geopolitical impact on asset utilisation and business development	More European/international integration to continue to guarantee transmission security
	Flexible use of existing assets (e.g. new LNG delivery routes)
	Maintain relationships with national and international stakeholders
	Pursue international representation and collaborations
	Conduct scenario analyses and draw on the results of these in contracts, decisions and business processes
	Promote our vision of Gasunie's role in future energy markets

Our operational risks

Risk	Summary of response measures
Inadequate ESG compliance affecting reputation or funding	Prioritise energy efficiency and methane reduction
	Issue green bonds with ESG conditions
	Be transparent with regard to ESG performance
IT security	Maintain heightened preparedness for cybersecurity threats
	Organise various awareness programmes and courses for employees
	Organise operational scenarios and stress tests on critical processes
	Keep up to date on matters like certifications, software, knowledge, developments, etc.
Health, Safety and Environment	Apply the Gasunie Technical Standards
	Encourage contractors and suppliers to pay close attention to HSE performance
	Optimise supplier inspections
	Apply risk-based asset management
Personnel and organisational changes	Internal optimisation of Strategic Personnel Planning in view of the high project workload in the coming years
	Pay ongoing attention to long-term employability (lifelong learning, retraining, conditions of employment) and talent development
	Intensify focus on Gasunie's positioning as an employer and on professionalising recruitment
	Focus on management and leadership development (IMPULS programme)
	Improve the onboarding process for the large numbers of new employees
	Investigate further the organisation and working environment based on hybrid working methods
Fraud	Incorporate sufficient checks and balances into fraud-sensitive processes
	Include the topic of fraud in various awareness programmes and simulations as standard
	Include fraud risks in operational risk analyses as standard
	Further development of existing awareness programmes
Supply chains	Enforce policy to limit the number of suppliers for critical components
	Maintain regular contact with suppliers of critical components
	Strengthen relationships with suppliers of critical components
	Earlier integration of supply chain in projects
Credit risk	Apply internal credit risk management policies
	Centralise credit risk management in the organisation
	Actively monitor the creditworthiness of selected parties

Risk management – looking back at 2022

- The war in Ukraine, high energy prices and supply chain shortages have created uncertainty that has a major impact on our operational processes and our projects. We handled this well by setting clear priorities with regard to security of supply and safeguarding our assets. The impact of these developments on our projects is that scope, schedules and budgets had to be adjusted.
- At corporate level, in 2022 we started a programme to set up a uniform risk and opportunity process at Gasunie.
- At project level, in 2022 we worked further on the introduction of improved, uniform procedures and standards and more intensive support for projects.
- Risk management is increasingly seen as an essential part of decision-making. A concrete example of this is the introduction of mandatory value assurance reviews for major projects.

Risk management – looking ahead to 2023

- Public support for the energy transition is growing strongly, in part because the public has seen that we need to end our dependence on Russian gas.
- All energy transition projects face risks relating to developments in the market. This can push back project schedules. The role of the government is very important in this.
- Uncertainties in supply chains and the availability of sufficiently qualified personnel for Gasunie, but also for its partners and contractors, will continue to exist in the coming years.
- We will continue our ongoing initiatives to strengthen risk management in 2023. This means that we will foster further integration with other departments, and with additional staff we can help more project teams identify and properly manage their risks.

Our project risks

In 2022, work continued on the further professionalisation of risk management within the projects. The challenge here is to properly coordinate the large amount of work we want to complete in the coming years and ensure that project learnings are leveraged across project teams. To achieve this, in 2022 a clear and unambiguous risk management framework, which gives all project teams the same structure to deal with risks, was developed. In addition, more support is available for project teams to effectively set up risk management and remain in control of the risks right from the start.

Assessing opportunities

Risk management at Gasunie focuses on both recognising threats and identifying opportunities for the company. The focus on seizing opportunities, in particular, has increased in recent years, as can be seen in the growing project portfolio, the support that Gasunie provides to partners for the development of new technologies to accelerate the energy transition, and Gasunie's Green Deals aimed at increasing the company's social value creation. In the future, we also want to further develop our ability to recognise – from within our risk management process – opportunities and turn these into reality, for example within the design and construction process of our projects.

Compliance management

Compliance at Gasunie focuses on promoting and enforcing compliance with national and international laws and regulations and compliance with procedures, standards and internal rules. The aim of compliance is to safeguard the integrity of the organisation, to protect management and employees, and to avoid legal or regulatory sanctions, material financial loss or loss of reputation (or the risk of such).

Gasunie's compliance management system is based on the international compliance management standard and laid down in our compliance regulations, which detail the responsibilities for compliance and our compliance monitoring and reporting. All Gasunie employees are responsible and accountable for their own behaviour. Managers have first-line responsibility for compliance with the rules within their unit or department. In the second line, the corporate compliance officer has an independent role and reports directly to the Executive Board. The Supervisory Board receives an annual report on the compliance system by way of the Compliance Letter.

Compliance policy results

Gasunie has several confidential counsellors for staff to turn to privately, spread over the various Gasunie sites, as well as an external coordinator for these counsellors. In 2022, a total of 29 people (2021: 19) consulted the confidential counsellors, raising a total of 37 (16) matters, of which 23 (13) related to inappropriate behaviour, 2 (3) related to integrity issues and 12 (8) related to other matters (labour conflicts, psychosocial problems, problems in their private life).

The increase in the number of reports may be related to increased media attention on inappropriate behaviour and the growth of the workforce. Additionally, in 2022 the confidential advisers worked on increasing their visibility, for example by giving a large number of presentations in the departments.

In 2022, all managers within the Dutch sections of Gasunie followed an e-learning course on inappropriate behaviour. We also offer 'Active Bystander' training to all employees, with nine of these training sessions involving around 180 employees held in 2022.

In 2022, one report was made to the committee of inquiry in the context of the Raising Concerns scheme. No investigation was carried out: because the issue in question had already been resolved, the person reporting the matter withdrew the report before the committee of inquiry could start an investigation.

In 2022, no cases of bribery or corruption were detected, either in the Netherlands or in Germany.

Report from the Supervisory Board

As the Supervisory Board, we supervise and give advice (on request and unsolicited) to the management with regard to formulating and achieving the objectives, strategy and policy of N.V. Nederlandse Gasunie. We act as the employer of the members appointed to the Executive Board under the articles of association. The Supervisory Board always acts in the company's best interest, weighing the interests of the company's stakeholders, such as the shareholder, employees, direct and indirect customers, and society ('the public interest') in doing so.

Our work

Response to the war in Ukraine

The Russian invasion of Ukraine at the end of February 2022 had a direct impact on Gasunie's activities, in areas like security of gas supply and the safety of our pipelines, among other risks. From the start of the crisis, the Supervisory Board asked for regular updates and discussed various aspects of safety, crisis response and crisis management with the Executive Board. In a category of its own was the rapid development of projects to facilitate the import of LNG: the construction of a new temporary LNG terminal at the port of Eemshaven and the expansion of the Gate terminal by 33% – both aimed at enabling Gasunie to meet the demand for gas for use in homes in the Netherlands – and the planned new terminal in Brunsbüttel, Germany.

Particularly with regard to EemsEnergyTerminal and the investment decision (as submitted to the shareholder) for Brunsbüttel, the Supervisory Board, together with the Executive Board, has increased the risk appetite significantly. This has been a conscious choice for public value in terms of ensuring that there is a sufficient supply of gas in the coming winter and losing no time in gaining a position where north-western Europe is no longer dependent on Russian gas. The focus for Gasunie was primarily on ensuring transmission security.

Gasunie has published market analyses and specified conditions for ensuring a sufficient supply of gas, such as reducing demand and filling gas storage facilities. Though these publications were primarily intended as a source of information for the government, by openly sharing this information, these publications have also contributed to the wider debate about the current and future energy system. We would like to compliment the Executive Board and all employees on the extraordinary pains they have taken in the implementation of the exceptional measures to mitigate the impact of the war on the gas market. Now that it appears that the war will continue for some time yet and the supply of gas will remain tight in 2023 and 2024, Gasunie can expect to face more challenges in the following years too.

Plan implementation in 2022

Implementation of the 2022 business plan was monitored and discussed on a quarterly basis during the regular consultations between the Supervisory Board, Executive Board and Audit Committee. The result for 2022 was dominated by the gas crisis, which resulted in high transmission capacity auction revenue for the network operators in the Netherlands and Germany, high costs for our own energy consumption, and extra income from the BBL pipeline as a result of reverse gas flows. We did not meet our operational or safety performance targets. Though this can be explained in part by a growing number of projects under construction, it is a matter that requires our attention in 2023.

The construction of the nitrogen plant has been delayed several times; we now expect the plant to be completed and delivered in 2023. The delay was caused to a large extent by the Covid-19 crisis and delays in the supply of building materials and building components, along with the main contractor and subcontractor not being able to see eye to eye, with this last situation in particular causing frustration. The Supervisory Board supported the Executive Board in its handling of discussions aimed at seeing that the construction could be completed as quickly, safely and diligently as possible. Once the plant has been completed, we will, together with the Executive Board, draw up the lessons learned from this project and see where processes can and need to be refined to keep such a situation from arising again in the future.

The Supervisory Board approved a number of decisions in 2022. In addition to investments in the regulated domain (network connections), these concerned decisions (unconditional and conditional) for investments like the Porthos CO₂ transport and storage project, the Brunsbüttel LNG terminal project, expansion of the Gate terminal and the EemsEnergyTerminal project, among others. A decision on the hydrogen transmission network will be made phase by phase, considering again at each phase whether there is sufficient market demand. We have established the investment framework for this together with the Ministry of Economic Affairs and Climate Policy. This required additional discussions and special approval, since this framework and the communicated milestones (2026–2028–2030) mean that, as regards financial conditions, the course has been largely set for the coming years.

The Supervisory Board sees that, in general, the parameters for investment decisions are changing. Many risks cannot be mitigated while, given the urgency of the energy transition and its social importance, real progress needs to be made. For example, in this reporting year several major investments were given the go ahead, even after giving explicit consideration to the greater financial risks: otherwise the socially relevant project would not be completed soon enough or possibly not proceed at all. This change in decision-making parameters is not only a consequence of the war in Ukraine and the phasing out of Russian gas, but also of the increasing urgency of accelerating the energy transition.

2023–2025 business plan

The business plan is largely devoted to successfully realising the Vision 2030 plans and projects and to Gasunie's contribution to achieving the international climate targets under the Paris Agreement and those of the Dutch Climate Agreement. Investments in this scenario total approximately € 8.5 billion up to 2030. In addition, the financial effects of, and uncertainties accompanying the methodology decision (concerning which Gasunie and other market parties have lodged an appeal), high gas prices, and the regulatory settlements of surplus income from capacity charges (additional auction revenue) are visible in the 2022 financial year.

Successfully realising the Vision 2030 plans and projects would result in up to 22 megatonnes of avoided carbon emissions along the transition pathway to 2030. The main contributors would be, once completed, the Dutch hydrogen network, the CO₂ storage projects Porthos and Aramis, and the green gas projects. A concrete picture of Gasunie's efforts can be seen in the objectives, pace and investments along this [transition pathway](#). This pathway is ambitious and the end destination can be reached (with a lot of effort). It is, however, a pathway strewn with internal and external uncertainties – about the energy transition, whether projects can be completed, market acceptance, regulations, geopolitical developments, market prices, and so on.

Gasunie endeavours to be a key pacesetter; however, it is not alone at the controls. After all, this is not just about standalone projects: it's about multi-party value chains that need to start functioning in the coming years. Collaborating with partners and responding agilely and effectively to external developments is crucial. In our discussions on the business plan, much has been said about the ambitions, the consequences and the requirements for the company and about scenarios to map out the uncertainties and their impact on agility, financeability, profitability and cash flow.

With its business plan and Vision 2030 programme, Gasunie is transforming from a gas transmission system operator into an energy infrastructure company, operating in the area of integrated sustainable energy systems, with international connections and interests. This transformation is big. It is a transformation towards a brand new profile in the area of activities, geographics, financials and risks, a transformation in the content of the work the employees do and the company culture in which they do it. Gasunie is transforming from being an organisation working in the background to facilitate the activities of others to a future-oriented, outward-oriented, decisive connecting party in the energy transition. As the Supervisory Board, we support Gasunie's recognition of the urgency of the situation and its resolute spirit, and we endeavour to assist the Executive Board through our advisory and supervisory role.

Consultations with the Works Council

Individual members of the Supervisory Board attended two consultative meetings with the Works Council in 2022. Fortunately, it was once again possible this year for all Supervisory Board members to attend the autumn meeting with the Works Council in person. In various rounds of talks at various tables, ideas on Gasunie's course and the associated challenges for the organisation were freely exchanged. Everyone considers these sessions to be very useful.

Preparatory consultations have been held with the Works Council on several occasions to discuss the recruitment of a nominee member to the Supervisory Board, with the objective of the shareholder appointing someone to replace Dirk Jan van den Berg in 2023.

Consultations with the shareholder

There were several informal meetings with representatives of the Ministry of Finance and two formal consultations, one in the spring and one in the autumn. As the shareholder, the Ministry played a crucial facilitating role in the decisions regarding the LNG capacity in the Netherlands and Germany, the Porthos project, and bringing about the framework agreements for the rollout of the hydrogen network. There were frequent discussions with the shareholder about the considerations that Gasunie (and Gasunie's shareholder and partners) have to make with regard to risks, returns and public value. These considerations, in the context of the urgency of the energy transition and the phase-out of Russian gas, must be made in a transparent and accountable manner, both for the individual investment decisions and at overall company level. To this end, the investment templates and the scenarios in the business plan have been improved. The shareholder was also involved in the discussions of the Executive Board and the Supervisory Board on the transition pathway methodology and the reporting on social and economic value creation.

2022 financial statements

The Supervisory Board discussed the 2022 annual report, and upon receipt of the positive recommendation given by the Audit Committee and the unqualified auditor's report from the external auditor PricewaterhouseCoopers Accountants N.V., it decided to submit the 2022 financial statements to the Annual General Meeting for adoption. In addition, the Supervisory Board supports the proposal of the Executive Board that from the net profit € 200 million be paid as dividend and that € 355 million be added to the other reserves.

Cooperation between the Supervisory Board and the Executive Board; external evaluation

The cooperation and interaction between the Supervisory Board and the Executive Board has been very intensive this year, particularly owing to all the extra projects relating to security of supply and the energy transition. We changed our governance on a number of points in this last year. These concern the inclusion of social value objectives and emission reduction according to the Transition Pathway Initiative methodology; improved standard investment proposals; paying more attention to strategic risks and scenarios; monitoring progress on the Strategic Personnel Plan; and the addition of international diversity (particularly German) to the Supervisory Board.

An external evaluation the Supervisory Board has shown that it functions well. Agenda items arising from the evaluation, for further elaboration in 2023, include the use of scenario analyses and working together with stakeholders to get a better view of the external uncertainties affecting the activities. An action point for the Executive Board and Supervisory Board has also emerged from this evaluation, i.e. make the new balance of risk-return-public value more explicit. It is important that the shareholder also be involved in this. The policy of the Dutch government on state holdings focuses, now more than ever, on public value and the energy transition when it comes to the role that companies such as Gasunie, TenneT and other state holdings are expected to play.

Composition and reviews

Anja Mutsaers and Johannes Meier have both been members of the Supervisory Board for a considerable time now (since autumn 2021). We are very pleased with the knowledge and experience they contribute and the impetus they give to diversity and professionalism, each in their own way. Ate Visser was reappointed for a second four-year term at the AGM held on 29 March 2022. Carolina Wielinga has been nominated for reappointment in 2023. Dirk Jan van den Berg will be leaving the Supervisory Board at the beginning of 2023 after having served two terms. The recruitment process for his successor is in full swing.

Core competencies of the Supervisory Board

Areas in which the members of the Supervisory Board have special skills or expertise.

Skill/Experience	Pieter Duisenberg	Dirk Jan van den Berg	Carolina Wielinga	Ate Visser	Johannes Meier	Anja Mutsaers
Management board	•	•	•	•	•	•
Grids, infrastructure				•		
Energy transition	•				•	•
Security of supply				•		
Finance	•		•	•	•	
ESG			•		•	
Business transformation	•	•				
Digital business processes			•		•	
Cybersecurity			•		•	
Technology, innovation				•	•	
Legal		•				•
Diversity elements:						
Gender	male	male	female	male	male	female
Year of birth	1967	1953	1970	1956	1963	1970
Nationality	Dutch	Dutch	Dutch	Dutch	German	Dutch

The Supervisory Board met 12 times in 2022 (in person and online). In addition, one plenary meeting was held with the full Supervisory Board and Works Council. Supervisory Board members also attended consultative meetings of the Works Council. Members of the Supervisory Board went on working visits to the nitrogen installations (the one in operation and the one under construction) near Zuidbroek, as well as to the EnergyStock and HyStock sites. The Chair of the Supervisory Board participated in a round table with the Chairs of the supervisory boards of Dutch companies that play a major role in the energy transition. In addition to each member's own individual continuing professional education activities, the Executive Board and Supervisory Board also organise a number of joint sessions each year. Deep-dive sessions were held on various matters in 2022: decision-making in an uncertain situation (anti-fragility); decision-making structures; regulated gas markets; and geopolitics.

Attendance at SB and committee meetings	SB	AC	BBC	Note
Pieter Duisenberg	12/12		6/6	
Dirk Jan van den Berg	12/12		6/6	
Martika Jonk	3/5		1/1	up to AGM 2022
Johannes Meier	12/12	5/5		
Anja Mutsaers	12/12		6/6	
Willem Schoeber	3/5	1/1		up to AGM 2022
Ate Visser	12/12	5/5		
Carolina Wielinga	8/12	5/5		

Remuneration, Selection and Appointment Committee

Members: Anja Mutsaers (Chair), Dirk Jan van den Berg, Pieter Duisenberg

The Remuneration, Selection and Appointment Committee held six online meetings in 2022 to discuss regular items, such as the achievement of the targets for the purpose of determining the Executive Board's variable remuneration for 2021, the adoption of new quantitative and qualitative targets for variable remuneration for the Executive Board for 2022, and the remuneration section of the annual report with regard to 2021. Members of the committee spent a lot of time during the year on the start-up process and the initial interviews of candidates to succeed Dirk Jan van den Berg. The Remuneration, Selection and Appointment Committee's deliberations and findings are reported in the plenary meetings of the Supervisory Board. The committee's meeting documents and minutes are made available to all Supervisory Board members.

We have the role of employer with respect to the members of the Executive Board according to the articles of association, and we are also responsible for a well-functioning Executive Board in general. To that end, the Remuneration, Selection and Appointment Committee periodically conducts formal performance reviews with all members of the Executive Board, most recently in January 2023. From the extensive contact we have with the members of the Executive Board, but also with the Works Council and other parties inside and outside the organisation, we have plenty of other input for forming an opinion on how the Executive Board manages the business. The Supervisory Board holds the view that the Executive Board's performance is good and aligned with the phase that Gasunie currently finds itself in.

The outcomes of the annual evaluation have a major impact on the amount of the variable remuneration to be paid out. In our view, this is consistent with the importance of achieving the company's long-term goals. They also discussed matters like safety, security of supply and corporate social responsibility, matters that are important for Gasunie's social licence to operate. The variable remuneration to be paid is determined by the full board on the advice of the Remuneration, Selection and Appointment Committee.

Audit Committee

Members: Carolina Wielinga (Chair), Ate Visser, Johannes Meier

The Audit Committee assists the Supervisory Board in supervising matters such as the set-up and proper functioning of the internal risk management and control systems, the financial reporting process and setting up and maintaining associated internal procedures, the financing of the company and the relationship with the internal and external auditors. The Audit Committee met five times in 2022. The regular meetings were not only attended by the members of the Audit Committee, but also the CFO, the internal auditor, the external auditor and the group controller. In addition, the committee met with the external auditor and the internal auditor without management being present.

The agenda included regular items like the periodical internal and external financial reports, the corporate business plan, taxation, financing, profit appropriation and dividend, the operational auditor's periodical reports and working schedule, the external auditor's audit plan, the 2021 annual report, including the financial statements for 2021, the management letter and the auditor's report, the Executive Board's Document of Representation, the risk matrix and the control of the main risks, developments in IT and the organisation, and the effectiveness of security to ensure safe and reliable gas transport. The Audit Committee is following the implementation of SAP4HANA as a special project. In 2022, a procedure to find a new auditor was completed with the selection of Ernst & Young. The transfer has now been initiated, with a view to Ernst & Young taking on the audit engagement with effect from the 2023 reporting year.

In 2022, the Audit Committee focused specifically on strategic risks and information security. With the war in Ukraine attention to this has intensified even further. Prior to the Audit Committee meetings, the chair of the Audit Committee speaks directly to the external auditor, usually in the presence of the CFO. The discussions and findings of the Audit Committee are reported in the plenary meetings of the Supervisory Board. The committee's meeting documents and minutes are made available to all Supervisory Board members.

A word of thanks

Though we on the Supervisory Board share the disappointment of the Executive Board and the entire company about the delayed completion of the nitrogen plant, above all we are proud of the decisiveness with which Gasunie acted this year in response to the war in Ukraine, and of the enormous progress that has been made in implementing the Vision 2030 programme. We would like to extend our heartfelt thanks to everyone in the company.

Groningen, March 2023

Supervisory Board of N.V. Nederlandse Gasunie

Pieter Duisenberg, Chair

Dirk Jan van den Berg, Vice-Chair

Anja Mutsaers

Ate Visser

Carolina Wielinga

Johannes Meier



The Supervisory Board of Gasunie. From left to right: Dirk Jan van den Berg, Ate Visser, Carolina Wielinga, Johannes Meier, Pieter Duisenberg and Anja Mutsaers.

Composition of the Supervisory Board

Mr P.J. (Pieter) Duisenberg

(Chair of the Supervisory Board)

(1967, Dutch nationality, man)

Date of first appointment: 1 September 2019

First term ends in 2024 (AGM)

Member of the Remuneration, Selection and Appointment Committee

Other board positions

- Chair, Universities of the Netherlands (UNL) (principal position)
- Chair, Stichting van het Onderwijs (StvhO)
- Vice-Chair, Managing Committee of Neth-Er
- Member of the Supervisory Board, Netherlands School of Public Administration (NSOB)
- Member of the Supervisory Board, Stadion Feijenoord

D.J. (Dirk Jan) van den Berg

(vice-chair of the Supervisory Board)

(1953, Dutch nationality, man)

Date of first appointment: 1 October 2014

Reappointment date: 21 March 2019 (AGM)

Resignation date: 29 March 2023 (AGM)

Member of the Remuneration, Selection, and Appointment Committee

Other board positions

- Chair, Zorgverzekeraars Nederland (principal position)
- Member of the Supervisory Board, NWO
- Member of the Supervisory Board, Air France-KLM
- Chair, Atlantische Commissie
- Chair of the Supervisory Board, FMO (Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V.)
- Chair of the Board, Tradesparent BV

Ms C. (Carolina) Wielinga

(1970, Dutch nationality, woman)

Date of first appointment: 15 April 2019

First term ends in 2023

Member of the Audit Committee

Other board positions

- Chief Financial Officer, BDR Thermea Group B.V. (principal position)
- Chair of the Supervisory Board, NX Filtration

A.S. (Ate) Visser

(1956, Dutch nationality, man)

Date of first appointment: 6 July 2018

Reappointment date: 29 March 2022 (AGM)

Member of the Audit Committee

Other board positions

- Member of the Executive Advisory Council, RLG International Inc.
- Member of the Supervisory Board, Stargate Oil Terminal Rotterdam B.V. (up to 31 December 2022)
- Director, Immaterial Ltd.
- Chair of the Board, Recircle Ltd.
- Member of the Advisory Board, NL Space Campus

Prof. J. (Johannes) Meier

(1963, German nationality, man)

Date of first appointment: 1 September 2021

First term ends in 2025 (AGM)

Member of the Audit Committee

Other board positions

- Managing Director and Founder, Xi GmbH (Gütersloh, Germany) (principal position)
- Non-executive Director, New Work SE (Hamburg, Germany)
- Chair of the Advisory Board, Stiftung Mercator (Essen, Germany)
- Member of the Advisory Board, Meridian Stiftung (Essen, Germany)
- Member of the Board, UNICEF Germany (Cologne, Germany)

A.L.M. (Anja) Mutsaers

(1970, Dutch nationality, woman)

Date of first appointment: 1 December 2021

First term ends in 2026 (AGM)

Member of the Remuneration, Selection and Appointment Committee

Other board positions

- Practice Partner, De Brauw Blackstone Westbroek (principal position)
- Member of the Supervisory Board, Heijmans N.V.

Composition of the Executive Board

J.J. (Han) Fennema, CEO and Chair of the Executive Board

(1964, Dutch nationality, man)

Han Fennema joined the Executive Board on 1 January 2014, taking on the position of CEO and Chair of the Executive Board on 1 March 2014. He was reappointed on 01 March 2022.

As chair of the Executive Board, Han Fennema has certain specific tasks and responsibilities, which are closely related to his coordinating role as CEO and are mentioned in clause 4.2 of the rules of procedure containing the principles and best practices of the Executive Board. He is also responsible for the GUD business unit and the Human Resources, Corporate Business Development, Communications, Public Affairs, Audit and Safety departments.

Between 2010 and 2014, Han Fennema was the CEO of Enexis, a position he combined with the chairmanship of Netbeheer Nederland from 2011 to 2013. Prior to that, he worked at Eneco and Exxon Mobil, among other companies. Han Fennema has a degree in computer science from the University of Twente.

Other positions

- Member of the Board, Koninklijke Vereniging van Gasfabrikanten in Nederland (KVGN), up to 23 May 2022
- Member of the Supervisory Board at the Hanze University of Applied Sciences in Groningen (Vice-Chair)
- Member of the Shareholders' Committee, Nord Stream AG (up to 3 March 2022)
- Member of the International Supervisory Board, Energy Delta Institute
- Member of the Advisory Board, Clingendael International Energy Programme
- Member of the Executive Committee, International Gas Union (up to 27 October 2022)
- Member of the Advisory Committee, TNO Energy Transition
- Member of the Board, German-Dutch Chamber of Commerce (DNHK)

J. (Janneke) Hermes, CFO

(1978, Dutch nationality, woman)

Janneke Hermes has been Gasunie's CFO and member of the Executive Board since 1 October 2019. On the Executive Board, Janneke Hermes is responsible for financial reporting and the associated rendering of account to the Audit Committee and the Supervisory Board. In addition, she is responsible for: Finance & Control, Treasury, Risk Management, Procurement, IT and Legal Affairs.

Janneke Hermes has held various management positions at Gasunie, including that of Treasury Control Manager (2005-2007), manager of employment terms and conditions (2014-2016), and Corporate Finance Manager since 2016. Janneke Hermes studied econometrics at the University of Groningen and followed the New Board Program at Nyenrode Business University.

Other positions

- Board member, N.V. Nederlandse Gasunie pension fund, until 1 July 2022
- Member of the Supervisory Board, Openbaar Onderwijs Groningen
- Member of the faculty supervisory board, Executive Master of Finance & Control, University of Groningen

B.J. (Bart Jan) Hoevers, titular member

(1971, Dutch nationality, man)

Bart Jan Hoevers joined the Executive Board as a titular member on 1 September 2017. Bart Jan Hoevers was reappointed on 1 September 2021. Bart Jan Hoevers is Managing Director of Gasunie Transport Services B.V. On the Executive Board, he is responsible for the Unit Operations and Projects focus areas.

Bart Jan Hoevers has been working at Gasunie since 2007, starting out as a business development project manager before moving on to the positions of Regulatory Affairs Manager and Network Development Manager. Prior to joining Gasunie, he worked at the Dutch Ministry of Finance, where he specialised in state holdings, and at the Dutch central bank (DNB). Hoevers studied monetary economics at the University of Groningen.

Other positions

- Member of Members' Council, Netbeheer Nederland
- Board member, European Network of Transmission System Operators for Gas
- Chair of the Supervisory Board, Beheerder Afsprakenstelsel (BAS) B.V.

U. (Ulco) Vermeulen, titular member

(1959, Dutch nationality, man)

Ulco Vermeulen joined the Executive Board as a titular member on 1 May 2016. He was reappointed on 01 May 2020.

Ulco Vermeulen is the Director of Business Development & Participations and is responsible for the Participations focus area. Vermeulen studied economics at the University of Groningen.

Other positions

- Member of the Supervisory Board, Anthony Veder Group N.V.
- Member of the Supervisory Board, ICE Endex Holding B.V.
- Board member, Green Gas Platform
- Member of the International Supervisory Board, Energy Delta Institute
- Member of the Supervisory Board, New Energy Coalition
- Chair of the Board, TKI Gas
- Member of the Supervisory Board, Ommelander Ziekenhuis Groningen

New Executive Board member Hans Coenen

On 1 April 2023, Hans Coenen will join Gasunie's Executive Board. He has been appointed for a term of four years and will succeed Ulco Vermeulen on the Executive Board, who is stepping down, on his own initiative, as the board member responsible for business development and participations on 1 July 2023. Ulco Vermeulen will remain affiliated with Gasunie until the end of 2024 as special advisor to the Executive Board, with a focus on the development of international hydrogen supply chains. Hans Coenen has worked at Gasunie since 1990, most recently as director of business development and strategy.

Remuneration policy for the Executive Board

The remuneration policy was adopted by the Annual General Meeting on 14 July 2021, as proposed by the Supervisory Board, with due account taken of the recommendation of the Remuneration, Selection and Appointment Committee. No changes were made to the 2022 remuneration policy compared to previous years.

Aims and principles underlying the remuneration policy

The aim of the remuneration policy is to attract, motivate and retain Executive Board members of the right quality and with the right experience, both from within the company and in the form of proven talent from the market. The remuneration reflects the responsibility borne by the members of the Executive Board, and is considered in the light of the applicable remuneration principles in the market (as explained below). Gasunie needs this managerial talent to achieve its strategic objectives. This policy is implemented based on the following considerations:

- In principle, having the Dutch state as a 100% shareholder, Gasunie applies the same criteria that are applied to the remuneration policy in state-owned companies. If the Supervisory Board feels that this may lead to unacceptable risks for the company, it will consult with the shareholder.
- Gasunie bases remuneration packages for members of the Executive Board on a market comparison, based on a relevant reference group in the labour market. This group consists of public, semi-public, private and international companies that are sufficiently comparable to Gasunie, both in terms of size (number of employees, assets and revenues) and in terms of activities. The comparison mainly includes companies from the energy, distribution, installation, construction and engineering consultancy sectors.
- The structure of the remuneration of members of the Executive Board is determined on the basis of market comparisons that also take into account the pay ratios within the company, thus creating a logically continuing salary line from the posts in the Executive Board to the posts under the Executive Board.
- Application of the variable remuneration policy depends on the achievement of short and long-term targets with respect to operational and strategic performance.

Remuneration structure

The remuneration consists of:

- a fixed component (annual basic salary)
- a variable component, dependent on the attainment of both short and long-term targets, as specified in the texts below
- the employer's payment towards the pension contribution
- other secondary employment conditions.

Annual basic salary

When appointing members of the Executive Board, the Supervisory Board will limit the sum of the fixed and variable annual salary on appointment to a maximum of € 397,205 (2021 level) for the chair of the Executive Board. The Supervisory Board decides on the level of annual salary increments. If the maximum salary has been reached, further growth is limited to the across-the-board increments laid down in the collective labour agreement.

Variable remuneration

The variable remuneration is based on the remuneration policy that has been approved by the shareholder. The maximum variable remuneration is 20% of the annual basic salary. The targets that must be attained in order to qualify for variable remuneration are agreed annually. These must be ambitious and reflect the company's strategy focused on long-term value creation. The achievement of the objectives is determined on a discretionary basis, taking into account all circumstances and developments over the past year. The Supervisory Board is authorised to adjust the variable component within the limits mentioned above if it is likely to lead to unfair outcomes due to exceptional circumstances during the performance period. The Supervisory Board is also authorised to reclaim from members of the Executive Board a variable bonus that was awarded on the basis of inaccurate financial or other data or 'incorrect conduct'.

The Supervisory Board has chosen performance criteria that relate to the implementation of Gasunie's strategic goals, both short and long-term. In defining the company's strategy, the social function of Gasunie's activities and their effects on society are explicitly taken into account. Performance criteria have therefore also been defined, relating to safety and transport security.

The variable remuneration elements are divided over five targets, each with a weighting of 4%. Four regular targets relate to achieving Gasunie's business objectives in a safe, affordable and reliable manner, and to significantly advancing the company in achieving its long-term strategic objectives. Each year, the Supervisory Board sets a specific fifth target that focuses on a topic concerning which extra attention is requested in that year. For 2022, this target related to the review of the governance process and project guidelines.

Reasoning behind variable remuneration

The Supervisory Board has set the variable remuneration of the Executive Board for 2022 at 16%. The Remuneration, Selection and Appointment Committee has given its advice on the achievement of the objectives, and the quantitative elements have been verified by the internal auditor.

The year 2022 was a multifaceted year for Gasunie. Management and employees showed flexibility and worked tirelessly to absorb the impact that the Russian invasion of Ukraine had on the gas market. By taking only six months to have the EemsEnergyTerminal up and running, Gasunie set a precedent in Europe. Considerable progress was also made on the energy transition front, with a decision in principle reached on the development of the hydrogen network in the Netherlands and a deal struck with the Dutch government on the conditions for a € 705 million grant. This resulted in strong growth in business, strong organisational development, and a strong positioning for Gasunie.

On the other hand, safety performance fell significantly short of the target and Gasunie was unable - despite the Executive Board's efforts - to get the new nitrogen plant in Zuidbroek commissioned in 2022. This undermines Gasunie's capacity to implement complex projects, which is an important condition in retaining government support for the energy transition ambitions. At the same time, however, Gasunie's financial performance, driven by the EemsEnergyTerminal project and considerable incidental costs (which will have to be returned to the market), produced a solid financial result. Progress was made on the review of the governance process and project guidelines, albeit that not all elements of the review were conducted in full. Based on the above, the Supervisory Board has decided to allocate variable remuneration as follows:

Variable remuneration	Weight	Realisation
Operational Excellence	4%	1%
Business Expansion	4%	4%
Development of the organization	4%	4%
Positioning of (natural) gas and GU	4%	4%
Review governance process and project guidelines	4%	3%
Total	20%	16%

Variable remuneration is paid out following approval by the General Meeting of Shareholders.

Pension

The Gasunie pension plan applies to members of the Executive Board. This is based on average pay and includes a personal contribution from the members of the Executive Board in accordance with the rules that also apply to other Gasunie employees.

Other secondary employment conditions

Gasunie has put together a package of secondary employment conditions for its Executive Board members, which also applies to other staff.

Other conditions

Term of office

Members of the Executive Board are appointed for a period of four years, with the possibility of extension by four years each time. The members of the Executive Board under the articles of association have an employment contract with Gasunie for the same duration as their term in office. Their employment contract therefore ends automatically if they are not reappointed.

Notice period

Members of the Executive Board must provide three months' notice of termination of their employment contract; for the company, a notice period of six months applies.

Severance pay

Severance pay for Executive Board members will be limited to a maximum of one year's basic salary (i.e. the fixed part of the remuneration), in accordance with the Corporate Governance Code, except where such is clearly unreasonable. This

compensation also includes any transition compensation. In principle, no severance pay is granted if a member of the Executive Board is not reappointed; a proposal from the Supervisory Board to deviate from this principle requires the approval of the shareholder.

Change of control

Executive Board members are covered by a 'change of control' clause, which states that if they are forced to leave the company due to a merger with, or the acquisition of the company by, an external party, or in the event of a fundamental change in the nature, management or structure of the company that is beyond the control of the Executive Board, they will be awarded compensation up to a maximum of one year's basic salary (i.e. the fixed part of the remuneration), regardless of which party terminates the employment contract.

Remuneration package for 2022

Based on the policy outlined above, the Supervisory Board granted the following annual basic salaries and variable bonuses for members of the Executive Board.

In euros	Annual basic salary in 2022	Variable remuneration (for performance in 2022)
Mr J.J. Fennema	340,736	54,518
Ms J. Hermes	299,848	47,976
Mr U. Vermeulen	272,577	43,612
Mr B.J. Hoevers	272,577	43,612

Pay ratio

The pay ratio at Gasunie is 4.96. This is the ratio between the total remuneration of the highest paid employee and the median of the total remuneration of all other employees in the Netherlands. The total remuneration is based on the sum of the annual taxable pay and the pension costs (employer's contribution). In calculating the median, only those employees are taken into account who were employed for the entire year. The salary increase for the highest paid employee equals that for all other Gasunie employees in the Netherlands.

Declaration by the Executive Board

In Control Statement

The Executive Board is aware that no risk management systems, no matter how professional, can offer absolute certainty that the company objectives will be achieved or that such systems can fully prevent material inaccuracies, loss, fraud or violations of the laws and regulations.

With respect to the financial reporting risks, the Executive Board declares that the internal risk management and audit systems provide a sufficient degree of certainty, that the financial reporting does not contain any material inaccuracies and that the risk management and audit systems in the year under review functioned adequately. Any deficiencies are included in the report.

Material risks that are relevant for the coming year are part of this annual report. The expectation is that the continuity of the company is guaranteed for the coming twelve months.

Statement of the Executive Board

(as defined in Article 5:25c, paragraph 2[c] of the Dutch Financial Supervision Act)

The members of the Executive Board hereby declare that, to the best of their knowledge,

- the financial statements give a true and fair view of the assets, liabilities, financial position and result of the company and the undertakings included in the consolidation taken as a whole; and that
- the annual report presents a fair view of the situation as at the balance sheet date, the course of affairs during the financial year of the company and its affiliates whose data have been included in its financial statements and that the essential risks facing the company have been described in the annual report.

The Executive Board,

Mr J.J. Fennema*, Chair

Ms J. Hermes*

Mr B.J. Hoevers

Mr U. Vermeulen

Groningen, 7 March 2023

* Director under the articles of association

Annual report 2022

Financial statements



Consolidated financial statements

Consolidated statement of financial position as at 31 December 2022

(before appropriation of result)

<i>In millions of euros</i>	<i>Notes</i>	31 Dec. 2022	31 Dec. 2021
Assets			
Fixed assets			
- tangible fixed assets	4.5	9,457.0	9,077.5
- investments in joint ventures	7	372.3	284.0
- investments in associates	8	0.6	0.5
- other participating interests	9	7.0	515.2
- deferred tax assets	10	239.2	258.0
Total fixed assets		10,076.1	10,135.2
Current assets			
- inventories	11	196.6	49.7
- trade and other receivables	12	361.8	228.6
- corporate income tax	13	2.6	28.0
- cash and cash equivalents	14	435.9	38.3
Total current assets		996.9	344.6
Assets held for sale	7	32.2	-
Total assets		11,105.2	10,479.8

<i>In millions of euros</i>	<i>Notes</i>	31 Dec. 2022	31 Dec. 2021
Liabilities			
Total equity			
attributable to the shareholders	15	6,304.4	6,429.3
Non-current liabilities			
- interest-bearing loans	16	2,775.5	2,506.0
- lease liabilities	17	411.0	96.9
- contract liabilities	18	60.7	46.2
- deferred tax liabilities	19	170.2	193.9
- employee benefits	20	86.2	118.2
- other provisions	21	97.0	28.8
- derivative financial instruments	22	15.9	-
Total non-current liabilities		3,616.5	2,990.0
Current liabilities			
- current financing liabilities	23	225.0	744.2
- lease liabilities	17	70.1	7.8
- contract liabilities	18	10.1	3.6
- trade and other payables	24	846.4	304.9
- corporate income tax	13	32.7	-
Total current liabilities		1,184.3	1,060.5
Total liabilities		11,105.2	10,479.8

Consolidated statement of profit and loss for 2022

<i>In millions of euros</i>	<i>Notes</i>	2022	2021
Continuing operations	27		
Net revenue		2,257.6	1,386.3
Capitalised expenses	5	71.9	61.6
Personnel expenses	28	-221.9	-198.3
Depreciation costs	5.29	-365.7	-347.9
Impairments	4	-159.1	-
Other costs	30	-853.9	-486.6
Total expenses		-1,528.7	-971.2
Operating result		728.9	415.1
Financial income	31	24.4	2.3
Financial expenses	32	-66.9	-59.3
Share in result of joint ventures	7	34.3	29.3
Share in result of associates	8	0.1	-
Dividend received from other participating interests	9	-	32.5
Result before taxation		720.8	419.9
Income taxes	33	-165.9	-109.2
Result after taxation		554.9	310.7

Consolidated statement of other comprehensive income for 2022

<i>In millions of euros</i>	<i>Notes</i>	2022	2021
Result after taxation according to consolidated statement of profit and loss		554.9	310.7
Sum of actuarial gains and losses on employee benefits	20.43	31.7	10.9
of which corporate income tax		-9.4	-3.2
Changes in other participating interests measured at fair value	9.42	-508.1	-1.1
Total of results taken to equity which will not be reclassified to profit and loss		-485.8	6.6
Changes in the cash flow hedge reserve concerning joint ventures and associates	7.43	23.7	11.4
Total of results taken to equity which will be reclassified subsequently to profit and loss		23.7	11.4
Other comprehensive income		-462.1	18.0
Total comprehensive income for the year		92.8	328.7
Attributable to the shareholders		92.8	328.7

Consolidated statement of changes in equity for 2022

<i>In millions of euros</i>	Share capital	Fair value reserve	Other reserves	Unappropriated result	Total
2022					
Balance as at 1 January 2022	0.2	335.4	5,782.9	310.7	6,429.2
Result for the financial year	-	-	-	554.9	554.9
Other comprehensive income for the financial year	-	-508.1	46.0	-	-462.1
Dividend paid for 2021	-	-	-	-217.5	-217.5
Added to other reserves	-	-	93.2	-93.2	0.0
Balance as at 31 December 2022	0.2	-172.7	5,922.1	554.9	6,304.4
2021					
Balance as at 1 January 2021	0.2	336.5	5,404.6	599.7	6,341.0
Result for the financial year	-	-	-	310.7	310.7
Other comprehensive income for the financial year	-	-1.1	19.1	-	18.0
Movement in deferred taxation	-	-	21.8	-	21.8
Dividend paid for 2020	-	-	-	-262.3	-262.3
Added to other reserves	-	-	337.4	-337.4	-
Balance as at 31 December 2021	0.2	335.4	5,782.9	310.7	6,429.2

Consolidated cash flow statement for 2022

<i>In millions of euros</i>	<i>Notes</i>	2022	2021
<i>Cash flow from operating activities</i>			
Revenues	3.27	2,257.6	1,386.3
Total expenses	28,29,30	-1,528.7	-971.2
Operating result		728.9	415.1
Adjustments for:			
- depreciation costs	5.29	362.1	347.4
- impairments	4.5	159.1	-
- change in inventories	11	-139.8	-2.5
- change in net working capital	12.24	441.2	54.3
- change in provisions	20.21	36.3	-10.9
- change in derivative financial instruments	22	-15.9	-
- result from disposals	29	3.4	0.5
Cash flow from operating activities		1,575.3	803.9
Interest received	31	3.4	1.2
Dividend received from joint ventures	7	27.9	17.8
Dividend received from other participating interests	9	-	32.5
Interest paid	32	-69.0	-77.7
Corporate income tax paid	33	-122.2	-101.5
Cash flow from operating activities		1,415.4	676.2

<i>In millions of euros</i>	<i>Notes</i>	2022	2021
<i>Cash flow from investing activities</i>			
Investments in tangible fixed assets	5	-426.6	-298.9
Disposals of tangible fixed assets	5	-	11.4
Investments in joint ventures	7	-87.8	-19.9
Investments in other equity interests	8.9	-	-7.0
Cash flow from investing activities		-514.4	-314.4
<i>Cash flow from financing activities</i>			
Uptake of long-term loans	16	493.1	638.7
Repayment of long-term loans	16	-494.2	-733.2
Lease payments	17	-35.9	-9.6
Uptake of short-term financing	23	1,175.0	2,340.0
Repayment of short-term financing	23	-1,425.0	-2,315.0
Dividend paid	45	-217.5	-262.3
Cash flow from financing activities		-504.5	-341.4
Net cash flow for the financial year		396.5	20.4
Cash and cash equivalents at previous year-end	14	38.3	17.9
Effects of exchange rate changes on cash and cash equivalents		1.1	-
Cash and cash equivalents at year-end	14	435.9	38.3

Notes to the consolidated financial statements

Notes to the consolidated financial statements

General

Preparation and adoption of the financial statements

The 2022 financial statements were prepared by the Executive Board on 7 March 2023. The financial statements as prepared will be submitted for adoption to the General Meeting of Shareholders to be held on 29 March 2023.

Reporting entity

N.V. Nederlandse Gasunie (hereinafter also called 'Gasunie', 'the company' and 'we') is a European energy infrastructure company. The company is domiciled in Groningen, the Netherlands.

The company's primary activity is to provide regulated transmission services in the Netherlands and Germany. Alongside this, Gasunie is making extensive use of its infrastructure and knowledge for the further development and integration of alternative energy sources and carriers, such as hydrogen, heat and green gas, as well as the development of CCS. Gasunie is moreover involved in joint arrangements for pipelines that connect the Gasunie transport network with markets outside the Netherlands. Gasunie also provides other energy infrastructure services, including LNG and gas storage and the certification of green gas and hydrogen.

The company is a public limited company and has its registered and actual office at Concourslaan 17, Groningen, the Netherlands, and is registered with the Chamber of Commerce under number 02029700. N.V. Nederlandse Gasunie is the ultimate parent of the group. All shares in N.V. Nederlandse Gasunie issued as at the balance sheet date are held by the Dutch State.

Reporting period

These financial statements relate to the 2022 financial year, which ended on the balance sheet date of 31 December 2022.

Presentation and functional currency

The financial statements are presented in euros, which is also the functional currency of the company. Unless otherwise specified, all amounts are in millions of euros.

Going concern

These financial statements have been prepared on the basis of the going-concern assumption. Management believes that there is no uncertainty about using the going-concern assumption.

Elements of the directors' report and the financial statements

The directors' report, as defined in Article 2:391 of the Dutch Civil Code, consists of the following sections of the annual report and the financial statements:

- Value creation at Gasunie
- Foreword by the Executive Board, and key figures
- Strategy
- External economic value creation
- External social value creation
- Internal economic value creation
- Internal social value creation
- Governance (except the 'Report of the Supervisory Board')
- Declaration by the Executive Board
- Information on financial instruments (note 25 'Financial instruments' to the consolidated financial statements)
- Annexes (except the 'Report of the Works Council')

The consolidated financial statements comprise the consolidated statement of financial position, the consolidated statement of profit and loss, the consolidated statement of other comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement. These statements include references to the notes to the financial statements. The notes to the financial statements in the consolidated financial statements are an integral part of the consolidated financial statements. The consolidated financial statements and the company financial statements jointly form the company's statutory financial statements.

Basis for preparation

Statement of compliance

Under Regulation (EC) no. 1606/2002 of the European Parliament, the company's consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), as adopted by the European Union and in line with the provisions of Part 9 of Book 2 of the Dutch Civil Code.

IFRS comprises both the International Financial Reporting Standards (IFRS) and the International Accounting Standards (IAS) published by the International Accounting Standards Board and the interpretations of IFRS and IAS standards published by the IFRS Interpretations Committee (IFRIC) and Standing Interpretations Committee (SIC) respectively.

New and amended standards for financial reporting

Unless stated otherwise, the following amendments to standards became effective at the start of the 2022 financial year:

- Amendments to IFRS 3 Business Combinations
- Amendments to IAS 16 Property, Plant and Equipment
- Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets
- Annual Improvements 2018-2020.

The following amendments to standards will become effective at the start of the 2023 financial year:

- Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting policies
- Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates
- IFRS 17 Insurance Contracts; including Amendments to IFRS 17
- Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction
- Amendments to IFRS 17 Insurance Contracts: Initial Application of IFRS 17 and IFRS 9 – Comparative Information.

Furthermore, the standards or amendments to them listed below are expected to become effective in the future. EU endorsement has not yet been given for these standards:

- Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current and Classification of Liabilities as Current or Non-current – Deferral of Effective Date
- Amendments to IAS 1 Presentation of Financial Statements: Non-current Liabilities with Covenants
- Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback.

Our analysis revealed that the already adopted standards and those still to be endorsed have or will have no material impact on the company's equity, cash flow and result and that there are no significant additional disclosures required. For that reason, the consequences of these amendments for the company have not been described in detail in these financial statements.

Management judgements and estimates

In preparing the financial statements, management has used estimates and assessments that could affect the assets and liabilities presented as at the balance sheet date and the result for the financial year. The actual results may differ from these estimates. The estimates and underlying assumptions are reviewed at regular intervals. Revisions to estimates are recognised in the period in which the estimate is revised and in future periods that are affected by the review.

The nature of the judgements and estimates, including the assumptions that accompany the uncertainties, are included in the note to the relevant items in the financial statements if they are deemed necessary for providing the required disclosure.

The effect of management's judgements and estimates is significant for the:

- measurement and determination of the useful life of the fixed assets (as included in note 4 'Impairment tests' and note 5 'Tangible fixed assets');
- measurement of other participating interests (as included in note 9 'Other participating interests');
- measurement and determination of the provision for abandonment costs and redevelopment (as included in note 21 'Other provisions');
- measurement of deferred tax assets (as included in note 10 'Deferred tax assets');
- measurement of pension obligations (as included in note 20 'Employee benefits');
- classification of the equity interests (as included in note 6 'Investments in joint operations' and note 7 'Investments in joint ventures'); measurement of the derivative financial instruments (as included in note 22 'Derivative financial instruments');

In certain cases, the aforementioned judgements and estimates are also affected by developments in the area of the energy transition and tightened environmental and climate targets. We take these developments into account in our judgements and estimates.

Determination of fair value

The determination of fair value is required for a number of accounting policies and disclosures. The fair value of a financial instrument is the amount for which an asset could be traded or a liability settled between parties knowledgeable about the matter who are willing to enter into a transaction and are independent of each other.

- The fair value of listed financial instruments is determined on the basis of the exit price.
- We determine the fair value of non-listed financial instruments by calculating the present value of the expected cash flows at a discount rate equal to the applicable risk-free market rate for the remaining term, plus credit and liquidity surcharges.
- We determine the fair value of derivatives for which no collateral is exchanged by calculating the present value of the cash flows by means of the relevant swap curve plus credit and liquidity surcharges.

When determining the fair value of an asset or a liability, we make as much use as possible of market-observable data. We use a fair value hierarchy of disclosures, classifying fair values according to the quality of inputs used in our fair value estimates ('fair value levelling'). The various levels are defined as follows:

- Level 1: Based on quoted prices on active markets for the same instrument.
- Level 2: Based on prices on active markets for comparable instruments, or based on other valuation methods, with all required key data being derived directly or indirectly from publicly available market information.
- Level 3: Based on valuation methods, with all the required key data not being derived from publicly available market information.

If the information we use for determining the fair value of an asset or liability can be classified at different levels of the fair value hierarchy, we classify the fair value determined in its entirety at the lowest applicable level.

We recognise reclassifications between levels of the fair value hierarchy at the end of the reporting period in which the change has taken place. We continually assess changes to significant information we use and, where necessary, adjust the fair value determination accordingly.

Significant accounting policies for financial reporting

Consolidation principles

General

The consolidated financial statements include the financial data of the parent entity N.V. Nederlandse Gasunie and its group companies. Group companies are companies over which the company can exercise control.

The company exercises control if, directly or indirectly:

- it has power over the relevant activities of the group company in question, is exposed to or entitled to variable returns from its involvement with the company; and
- has the ability to use its power over the group company to influence the amount of the investor's returns.

Generally, it is presumed that if the company has more than 50% of voting rights, it exercises control. However, we consider all facts and circumstances when assessing each participating interest. When circumstances change, we reassess whether or not we exercise control.

We fully consolidate group companies from the date on which dominant control of the group company is obtained until the date that dominant control no longer exists. We measure the items in the consolidated financial statements in accordance with the company's accounting policies.

Intra-group balances and transactions are eliminated, as are any unrealised profit and losses from intra-group transactions.

Consolidation scope

In note 56 'List of group companies and participating interests' we have included a list of all the group companies in the consolidation.

Business combinations and goodwill

We recognise business combinations, such as mergers or acquisitions, in accordance with the acquisition method as described in IFRS 3 'Business Combinations'. The acquisition price is calculated as the sum of the assets transferred, liabilities entered into or acquired, and, where relevant, equity instruments issued by the acquiring party. We take costs relating to the business combination directly to profit and loss. The identifiable assets, liabilities and contingent liabilities acquired as part of the business combinations are recognised by company, as the acquiring party, at fair value on the date of acquisition. Conditional payments are initially measured at fair value on the date of acquisition. We measure a conditional payment that qualifies as a financial instrument at fair value and recognise changes in fair value in profit and loss at the time these changes occur.

We designate any surplus of the acquisition price above the share in the fair value of the net identifiable assets, liabilities and contingent liabilities as goodwill and recognise this under intangible fixed assets. After initial recognition, we measure goodwill at cost less any accumulated impairments.

Principles for the translation of foreign currencies

We measure transactions denominated in foreign currencies in the functional currency on initial recognition by translating them at the foreign exchange rate between the functional currency and foreign currency applicable on the date of the transaction.

We translate monetary assets and liabilities denominated in foreign currencies at the balance sheet date into the functional currency at the exchange rate applicable on that date. We recognise exchange differences arising from the translation of monetary items into foreign currency in profit and loss in the period in which they arise, unless hedge accounting is applied to these transactions.

We translate non-monetary assets and liabilities denominated in foreign currencies measured at historical cost into the functional currency at the exchange rate applicable on the transaction date.

We recognise exchange rate differences that occur when translating eligible cash flow hedges, to the extent that the hedge is effective, in other comprehensive income.

Accounting policies for the measurement of assets and liabilities and the determination of the results

General

The principles adopted for measuring assets and liabilities and determining the results are based on historical costs, unless otherwise specified. The accounting policies used for the measurement of assets and liabilities and the determination of the results were unchanged compared to the previous financial year.

Fixed assets

Tangible fixed assets

We measure tangible fixed assets at cost, less any accumulated depreciation and accumulated impairments. When initially measured, the costs of periodic major repairs are recognised in the carrying amount of the asset on the basis of the component approach. This also applies, where appropriate, to the costs of abandonment, redevelopment and/or demobilisation. We capitalise interest expenses if they relate to the purchase, construction or production of qualifying assets, provided the assets need a substantial period (more than one year) before being ready for their intended use.

We determine depreciation by writing off the costs of the tangible fixed assets, less their estimated residual value, on a straight-line basis over their estimated useful life. We do not calculate depreciation on land, sites or the volumes of line pack in the pipelines and cushion gas in the caverns.

A substantial part of the assets is intended for regulated business operations. Regulation of future cash flows by the regulatory authority will determine the recoverable amount of the regulated assets. Management is required to make significant estimates and judgements, in particular with regard to the useful life, residual value and future cash flows from gas transportation. The residual value of the asset, the useful life and the depreciation methods are reviewed annually and adjusted if necessary. Note 5 'Tangible fixed assets' contains a more detailed explanation of the expected useful life of the assets.

Tangible fixed assets are divided into categories. The useful life and associated depreciation period is determined for each category. In note 5 'Tangible fixed assets' we describe the categories and give the depreciation period for each category.

We deduct third-party contributions to the cost of construction of the energy infrastructure from the investments, insofar as such contributions are either government-sourced (including grants) or not related to transport capacity. We recognise customer contributions to investments that are related to transport capacity in the balance sheet as contract liabilities in line with the provisions of IFRS 15; we credit these to profit and loss at regular intervals in accordance with the term of the contract with the customer. If there is a significant financing component in the customer contributions, the finance expenses are recognised under financial expenses. We describe this recognition in more detail under 'Net revenue' in these principles.

We recognise tangible fixed assets not yet in operation as at the balance sheet date as 'Fixed operating assets under construction'. On commissioning, we classify the relevant assets according to their type in one of the main categories. We include the volumes of line pack in the pipelines and cushion gas in the caverns (needed for gas transmission and storage and related services) under 'Other fixed operating assets'. If any changes occur in the volume of line pack and/or cushion gas, the average gas price for the period in which the change took place is used as the cost price.

We recognise any profit or loss on disposal of a tangible fixed asset under depreciation costs in profit and loss at the time of decommissioning.

Tangible fixed assets for which the company has the right of use under the terms of a lease agreement are also included in the balance sheet. See also the accounting principles under the heading 'Leasing'.

Investments in joint operations

Investments in joint operations are participating interests in which the company exercises joint control and in which the company has the rights to assets and liabilities with respect to the participating interest's debts.

The rights to the assets and liabilities with respect to the participating interest's debts, and the associated rights relating to the joint operations' revenues and expenses are included in the financial statements.

Investments in joint ventures

Investments in joint ventures are participating interests in which the company exercises joint control with other parties and has rights to the participating interests' net assets.

We measure these participating interests using the equity method. In accordance with this method, the participating interests are measured at cost (including goodwill) plus the share in the result and the share in other comprehensive income from the moment of acquisition less the share in dividend payments. The company's share in the result of joint ventures is recognised in the statement of profit and loss and in the consolidated statement of other comprehensive income.

Investments in associates

Investments in associates are participating interests in which the company exercises significant influence on operating and financial principles, but has no control.

We measure these participating interests using the equity method. In accordance with this method, the participating interests are measured at cost (including goodwill) plus the share in the result and the share in other comprehensive income from the moment of acquisition less the share in dividend payments. We recognise the company's share in the result of associates in the statement of profit and loss.

Elimination of transactions with participating interests

We eliminate unrealised profit from transactions with participating interests measured using the equity method in proportion to the company's share in the participating interest.

Other participating interests

On the basis of IFRS 9, we measure other participating interests at fair value after initial recognition, taking unrealised gains or losses to other comprehensive income. No recycling takes place through the profit and loss account.

When determining the fair value of the other participating interests, management makes assumptions and estimates, including relating to expected dividends, cash flows and discount rates. In note 9 'Other participating interests' and note 24 'Financial instruments' we describe the most important assumptions.

If the fair value cannot be reliably determined based on these assumptions, we use the cost or net asset value as the basis for fair value and state such in the notes to the financial statements.

We take the share in the result of other participating interests to profit and loss as soon as the formal decision has been made that these participating interests will pay dividends or as soon as the dividend has been made available for payment.

Impairment of fixed assets

At the end of every reporting period, the company investigates whether there is any impairment of fixed assets, including tangible and financial fixed assets. Management determines the recoverable amount of the assets. The recoverable amount is the higher of the fair value less costs to sell (e.g. based on a sales contract less the costs to be incurred for the sale) and the value in use (based on the results of a value-in-use calculation for example). If the recoverable amount is less than the carrying amount, the difference is taken to profit and loss. Due to the nature of the tangible fixed assets, it is often not possible to determine the recoverable amount of an individual asset. In such cases, we determine the recoverable amount of the cash-generating unit to which the asset belongs.

The company also investigates whether an impairment recognised in previous periods no longer exists or has decreased. If an impairment loss recognised in the past is found to no longer exist or to have decreased, the increased carrying amount of the relevant asset or cash-generating unit will not be set higher than the carrying amount which would have been determined if no impairment for the asset or cash-generating unit had been recognised. Any reversal of an impairment recognised in the past is recognised in the profit and loss account.

Current assets

Inventories

We recognise inventories at cost based on the lower of average cost, applying the FIFO principle, or recoverable amount. Cost comprises the acquisition price or the cost of manufacture plus any other costs involved in taking inventories to their current place and keeping them in their current condition. The recoverable amount is based on the most reliable estimate of the amount that the inventories will generate less any costs to be incurred.

Trade and other receivables

At initial recognition, we measure trade and other receivables at fair value. After initial recognition, we recognise trade and other receivables at amortised cost because the company's business model concerns the collection of contractual cash flows under the aforementioned receivables and the cash flows relate solely to the payment of principal and interest.

Owing to the short term of the trade and other receivables, the company uses the simplified IFRS 9 method to measure trade and other receivables (based on the lifetime expected losses). In this context, a provision is created to cover the expected credit losses, based on amounts yet to be received and the probability of non-payment. Any securities provided that may mitigate the credit loss are also taken into account.

Trade receivables also include the amounts that have not yet been invoiced as at the balance sheet date for services rendered during the financial year.

Cash and cash equivalents

Cash and cash equivalents include the available financial resources in the form of balances at banks and other third parties, such as bank accounts, deposits or call funds. We only recognise a deposit as a cash equivalent if we can readily convert that deposit into a known cash amount within 90 days and the deposit is not subject to a significant risk of changes in value.

We hold cash equivalents for the purpose of meeting current liabilities and do not normally use these for investments or other purposes.

Derivative financial instruments

Derivative financial instruments – with application of hedge accounting

As required, the company makes use of derivative financial instruments in certain cases to manage financial risks arising from future transactions (cash flows). We initially recognise these instruments at fair value on the date on which the contract is concluded (the value is generally zero at the outset). We subsequently remeasure the fair value at the end of every reporting period. We recognise gains or losses on the effective part of the hedging instrument in the cash flow hedge reserve in equity, net of deferred taxation. We take any ineffective parts directly to profit and loss.

When a hedging instrument is wound up, gains or losses on the effective part continue to be recognised in equity for as long as the underlying cash flow is expected to occur. If we no longer expect underlying cash flow, we take the gains or losses on the effective part, which has been deferred in equity, directly to profit and loss.

We recognise effective derivative financial instruments designated for hedge accounting in the same way as the hedged position. Depending on the nature and the term of the underlying contract, we classify the instruments as either non-current or current.

Derivative financial instruments – without application of hedge accounting

We immediately recognise changes in the fair value of other derivative financial instruments for which no cash flow hedge accounting is used in profit and loss from initial recognition onwards.

Commodity contracts

In accordance with IFRS 9.2.4, we do not include contracts entered into for the procurement of commodities, such as energy for the company's operating activities, in the balance sheet.

Non-current liabilities

Non-current liabilities are liabilities with a remaining nominal term of more than one year. We include repayment obligations that are due within a year under current liabilities.

Interest-bearing loans are initially recognised at fair value less transaction costs. After initial recognition, we measure interest-bearing loans at amortised cost on the basis of the effective interest method, recognising the transaction costs and the discount in profit and loss in the period to which they relate. We recognise discount and transaction costs not yet taken to profit and loss as a reduction in the non-current liabilities to which they relate.

For certain loans, the coupon interest payable is based partly on whether future sustainability targets are met. If these sustainability targets are not met, the coupon interest rate is increased. At the end of every reporting period, the company evaluates whether it expects to meet the sustainability targets. If the company expects that the sustainability targets will not be met, the effective interest rate will be adjusted accordingly from that moment, and the additional interest expenses will be taken to profit and loss based on the effective interest method.

When the contractual obligation has lapsed or expired, loans are no longer recognised in the balance sheet.

Employee benefits

Employee benefits are recognised as an expense in profit and loss in the period in which the work is performed and, until paid out, as a liability in the balance sheet. Personnel expenses include all costs related to employee benefits during and after employment. In addition to the liabilities that are legally enforceable, the company's liabilities with respect to employee benefits also include any liabilities involving a situation where the company has no realistic alternative other than to comply with the obligation ('constructive obligations').

Liabilities for employee benefits concern pension obligations, long-service awards and the costs of post-employment fringe benefits for non-active and retired employees.

Personnel-related provisions

Personnel-related provisions comprise the provision for pension obligations and other personnel-related provisions.

Pension plans

The company has entered into pension plans entitling its employees to a number of benefits, including a retirement pension and a dependants' pension.

The pension plan for employees of Gasunie in the Netherlands is a defined contribution pension plan. This plan will remain in effect until the transition to the new Dutch pension system and will end in any case no later than 31 December 2026. This means that the company has committed itself to paying a fixed, predetermined contribution while this plan is in effect. This contribution is based on a conditional average-salary pension plan in line with prevailing tax and pension legislation. Pension accrual in a conditional average-salary pension plan has been capped at 1.875% per annum of average pensionable earnings up to the statutory maximum pensionable salary. Pension entitlements are not guaranteed. The premiums payable in respect of employees' pension entitlements are paid to Stichting Pensioenfonds Gasunie, which administers the pension plan.

Employees of Gasunie Deutschland who joined the company in or after 2012 are enrolled in a pension plan reinsured with a pension fund. This pension plan also qualifies as a defined contribution plan. Set on an annual basis, the employer's contribution for 2022 is 3% of the pensionable salary up to the threshold and 15% of the pensionable salary above the threshold.

The basic principle for recognition of the aforementioned plans is that the pension expense to be recognised in the reporting period equals the pension premiums payable to the pension provider for that same period. To the extent that the payable premiums have not yet been paid by the balance sheet date, a liability is recognised for these premiums. If premiums prepaid by the balance sheet date exceed the total premiums payable, we will include an accrued income item to the extent that the funds will refund the excess premiums paid or offset this amount against future premiums.

The present value of the provision for pension obligations for employees of Gasunie Deutschland who joined before 2012 is calculated as per the projected unit credit method. Significant assumptions have been made in the calculation about the market interest rate on high-quality corporate bonds for the purpose of determining the discount rate, expected future increases in salary, expected future increases in pensions and average life expectancy. For more information on these variables, please see note 20 'Employee benefits' to the consolidated financial statements.

We recognise actuarial gains and losses and experience adjustments in the statement of other comprehensive income and subsequently take these to equity in the period in which they occur, net of deferred taxation. The relevant actuarial calculations are drawn up and assessed by external actuaries every year.

Other personnel-related provisions are described below.

Provision for long-service awards

This provision relates to long-service awards paid by the company to its employees. Account is taken of the likelihood that the award will be made and of a pre-tax discount rate that incorporates the prevailing market assessments of the time value of money and the risks inherent in the obligation.

Provision for costs of post-employment fringe benefits for non-active and retired employees

This provision relates to the allowance that the company pays to its employees after they retire. It represents the present value of the benefits already committed to non-active and retired employees. Account is taken of life expectancy and a pre-tax discount rate that incorporates the prevailing market assessments of the time value of money and the risks inherent in the obligation.

At the end of every reporting period, we assess the assumptions on which the personnel-related provisions are based and adjust these based on mortality tables, interest and cost developments and other relevant information.

Other provisions

A provision is included in the balance sheet if:

- there is a legally enforceable or factual liability resulting from a past event;
- a reliable estimate of the above can be made; and
- it is probable that an outflow of resources is required to settle that liability.

The amount recognised as a provision is the best possible estimate as at the balance sheet date of the expenditure required to meet the existing liability, taking into account the probability of the event.

Other provisions comprise the provision for certain abandonment costs and redevelopment and the provision for demobilisation and other obligations relating to site clearing and new construction.

Provision for abandonment costs and redevelopment

This provision is recognised due to the company's decisions to decommission, remove or redevelop specific identifiable assets within the foreseeable future as required under legislation where applicable. The size of the provision is partially determined on the basis of experience figures derived from previous abandonments and redevelopment.

The provision is measured based on the present value of the expenditure deemed necessary to settle the liability. The discount rate is determined before taxation and takes into account the prevailing market assessments of the time value of money and the risks inherent in the liability.

Provision for demobilisation and other obligations relating to site clearing and new construction

This provision is made to meet the costs relating to contractual obligations that arise during and at the end of the term of various leases and other contracts. The size of the provision has been determined based on the contractually agreed maximum amounts or, where these were not available, detailed calculations based on which the expected costs have been estimated.

The provision is measured based on the present value of the expenditure deemed necessary to settle the liability. The discount rate is determined before taxation and takes into account the prevailing market assessments of the time value of money and the risks inherent in the liability.

Leases

Initial recognition and measurement of leases is as follows:

- The company breaks down lease liabilities into lease and non-lease components. The non-lease components are not considered to fall within the scope of IFRS 16. We recognise the costs resulting from these non-lease components in profit and loss in the period to which they refer.
- We determine the expected term of the lease liability on the basis of the contractual term of the agreement, taking into account any potential optional extensions, in the event that the company may reasonably be expected to use them.
- If applicable, we take residual value guarantees, significant variable lease payments and penalty clauses into account when measuring the lease liabilities.
- In principle, the present value of the lease liabilities is calculated at the implicit interest rate. Where the implicit interest rate cannot be directly derived from the leases, we use the company's incremental borrowing rate. We use a borrowing rate representative of the portfolio as a whole for portfolios of leases with similar conditions.
- We initially include the right-of-use asset connected with the lease in the balance sheet at the present value of the lease liability, plus any directly attributable costs and costs of abandonment, redevelopment and/or demobilisation.
- Leases with a term of less than one year or with a contract value of less than € 5,000 are not included in the balance sheet, in accordance with the provisions of IFRS 16.

The assets associated with the lease liability are recognised under tangible fixed assets in the main category right-of-use assets.

The subsequent measurement of the leases as follows:

- We measure right-of-use assets at cost, less straight-line depreciation calculated over the expected term of the lease agreement and with possible impairment losses. An explanation of how the cost price is determined is given above under 'initial recognition and measurement of leases'.
- After initial recognition, we measure the lease liabilities at amortised cost based on the effective interest method. If the principles in the lease change (e.g. due to indexation or other modifications), we remeasure and recognise the carrying amount of the lease liability and the right-of-use asset in the balance sheet.

Current liabilities and other financial obligations

After initial recognition, we measure current liabilities and other financial obligations at amortised cost based on the effective interest method. The effective interest is recognised directly in profit and loss.

Determination of the result

The result is calculated as the difference between the net realisable value of services rendered and the costs and other expenses incurred over the year. The revenues from transactions are recognised in the year in which they are realised.

Net revenue

Net revenue is the sum of revenues from gas transport, gas storage and related services provided to third parties, after deduction of discounts (for non-regulated services) and taxation on these revenues, such as VAT. Revenues are subject to the company's estimates of the risk of loss of credit due to non-payment and, in the case of contract liabilities by virtue of customer contributions, the relevant interest rate.

If we can reliably estimate the result of a transaction involving the rendering of a service, we recognise the revenues relating to the service in proportion to the services rendered in the financial year. The company provides services in the field of gas transport, storage and related activities. These services are offered as capacity services. This gives customers the right to use pre-agreed capacities for a pre-contracted period (hour, day, month, etc.). The company regards the service as delivered over the period concerned and recognises the revenue accordingly. The realisation of net revenues can be reliably determined. The company's only compensation from customers are the amounts determined in accordance with the contractually agreed remuneration methods.

The tariffs for regulated activities are determined by independent regulatory authorities in the Netherlands and Germany. No discounts are applied to regulated revenues. Customer contributions to the cost of construction or improvement of the transport infrastructure or discounts/prepayments in the non-regulated sector are a possibility, however. These are considered to be contract liabilities under IFRS 15 and are recognised in the balance sheet. They are periodically credited or charged to profit and loss over the expected useful life of the asset. In the event that a contract liability or contract receivable contains a significant financing component, the value of this component is determined based on an estimate of the relevant interest rate. We recognise the financing component in the financial income and expenses in the period to which it relates.

Capitalised expenses

Capitalised expenses include operating expenses incurred by the company in connection with the construction of tangible fixed assets. These costs mainly comprise the cost of the company's own employees and hired workers, plus part of the overhead expenses of support departments.

Government grants

We credit operating grants to profit and loss in the year to which the subsidised spending is allocated. We include any pre-payments under current liabilities.

Pre-paid investment grants are initially presented under the other liabilities. As soon as investment spending starts and meets the conditions for capitalisation, we then deduct the investment grants from the tangible fixed assets for which the grant is intended.

Other costs

These costs are determined on a historical basis, taking into account the accounting policies set out above. We recognise the costs in the reporting period to which they relate.

Financial income and expenses

Included in this item are income and expenses relating to financing and similar income and expenses. We recognise interest income and similar income in the period to which it relates, taking into account the effective interest rate for the asset concerned, provided the income can be measured and is likely to be received. We recognise interest expenses and similar expenses in the period to which they relate. Financial expenses also include the amortisation of discount and transaction costs.

The recognition of capitalised interest expenses is described under the heading 'Tangible fixed assets' in these principles.

Income taxes

Taxes on the result include income tax and deferred taxation due over the reporting period and previous periods. These taxes are taken to profit and loss, except when they relate to items recognised directly in equity, in which case the tax effect is also recognised directly in equity.

The tax owed for the financial year is the tax expected to be payable on the taxable profit for that financial year, calculated on the basis of tax rates determined on the reporting date or materially decided upon on the reporting date, plus any corrections to the tax owed for previous years. We calculate the tax owed taking into account tax-exempt items and costs that are either non-deductible or only partly deductible.

If the carrying amount of assets and liabilities for financial reporting purposes differs from their carrying amounts for tax purposes, these are classed as temporary differences. We recognise a deferred tax liability for all taxable temporary differences. A deferred tax asset is recognised for all deductible temporary differences, to the extent that it is likely that sufficient taxable profit will be available for future set-off. For this purpose, the company makes assumptions about the future taxable profits and the point at which the temporary differences are realised.

We measure deferred tax liabilities and assets at the nominal value. The tax rates used for the measurement are those that are expected to apply in the period in which the deferred tax items will be realised based on the tax rates and tax legislation in force or materially decided upon as at the balance sheet date. We recognise the movements in corporate income tax arising from possible rate changes in profit and loss, with the exception of the movements that were originally taken directly to equity. We take these movements directly to equity.

Tax assets and liabilities, whether deferred or not, are presented as a net amount if:

- there is a legally enforceable right to set off tax assets and liabilities, and the assets and liabilities relate to income tax imposed by the same tax authority on the same taxable entity; and/or;
- taxable entities intend to set off the tax assets and liabilities, or the tax assets and liabilities are realised simultaneously on different types of tax.

N.V. Nederlandse Gasunie and its wholly-owned Dutch group companies constitute a fiscal unity for Dutch corporate income tax purposes. Gasunie Deutschland GmbH & Co. KG (Gasunie Deutschland) and its wholly-owned German group companies constitute a fiscal unity for German corporate income tax.

Financial information by operating segment

Information on operations about which separate financial information is available and whose operating results are regularly assessed by management should be described per segment. The company has defined the following operational segments:

- Gasunie Transport Services
- Gasunie Deutschland
- Participations

For more detailed financial information by operating segment, please see note 3 'Financial information by operating segment' of the additional notes to the consolidated financial statements.

Cash flow statement

We determine the cash flow from operating activities using the indirect method, based on the net revenue presented in the consolidated statement of profit and loss. The cash in the cash flow statement consists of cash and cash equivalents that can be converted into a known cash amount without restrictions and without significant risk of impairments as a consequence of the transaction.

The company recognises interest received and paid, dividends received from joint ventures, associates and other participating interests and corporate income tax paid under 'cash flow from operating activities'.

The acquisition price of acquisitions is included under 'cash flow from investment activities' insofar as payment was made in cash. The cash available in the acquired participating interest or operations is deducted from the purchase price.

We allocate cash flows from derivative financial instruments recognised as cash flow hedges to the same category as the cash flows from the hedged positions.

Events after the balance sheet date

We recognise events that provide further information about the actual situation at the balance sheet date and that appear before the date on which the financial statements are prepared in the financial statements.

We do not recognise events that do not provide further information about the actual situation on the balance sheet date in the financial statements. If such events are important for users to form an opinion of the financial statements, we explain the nature and estimated financial effects in the financial statements.

Additional notes to the consolidated financial statements

1. Significant matters and events in 2022

Geopolitical and related developments on the energy markets and their impact on Gasunie

In 2022, the European gas market entered a new era. In February, Russia invaded Ukraine, dramatically changing the geopolitical landscape. This has had major consequences for the energy markets. The flow of Russian gas coming into Europe has dropped, causing an historic increase in gas prices. Meanwhile, European countries have pursued policies to reduce their dependence on Russian gas. Partly as a result of this, we see that the physical gas flows have reversed direction compared to previous years.

The Russian invasion of Ukraine had a direct impact on Gasunie's operational activities, and it could be seen that this then also affected our financial results and financial position. This has affected several items in the financial statements. Below we summarise the most important consequences.

Increased revenue and energy costs

Net revenue rose by approximately € 870 million compared to the previous financial year. The increase in revenue comes partly on the back of higher revenues from regulated-capacity auctions and the sale of 'interruptible transmission capacity'. Where our gas flows previously had an east-to-west orientation, in 2022 we saw a reversal in this tendency. As a result, the Netherlands received significantly larger gas volumes from Norway, the UK and Belgium and through the import of LNG. Germany saw its supplies from Norway and the Netherlands increase sharply.

In accordance with the regulatory systems that apply in the Netherlands and in Germany, we will return the regulated revenue that exceeds the permitted revenue to the market in the coming years. If the actual revenue deviates from the revenue permitted by the regulatory authority, the difference is settled in the tariffs for subsequent years. Under the current IFRS standards, we are not allowed to recognise future settlements in the balance sheet nor deduct them from revenue or result. We only recognise these settlements in the year in which the settlement takes place. Our revenue in 2022 was substantially higher than the revenue permitted by the regulatory authority. However, this also means that in subsequent financial years we will settle the excess in the tariffs that market parties pay for regulated natural gas transmission; this will then have a dampening effect on the permitted revenue during that period.

Gasunie has also been directly affected by the higher energy prices. Energy and network operation costs increased by around € 290 million. We use gas and electricity for gas transmission and gas storage and to produce the nitrogen used in gas quality conversion. The increase in costs compared to 2021 is due mainly to significantly higher energy prices and a slight increase in the use of compression capacity. Given that, under the current regulatory methodology, the regulatory authority has, for the time being, allocated the price risk to the network operator, we are not able to fully pass on the increased energy costs to our customers in the regulated domain in the Netherlands.

Further information on revenue is included in note 3 'Financial information by operating segment' and note 27 'Net revenue'. Note 30 'Other costs' provides further information on energy costs.

Nord Stream developments

Gasunie has a 9% financial interest in the Nord Stream pipeline, which has been operational since 2012. The risk profile of Gasunie's shareholding in Nord Stream had already increased substantially as a result of Russia's invasion of Ukraine on 24 February 2022 and the gradual reduction of gas flows in the months following this. We had already made a fair value adjustment of our interest in Nord Stream in response to this higher risk profile – from approx. € 500 million to approx. € 240 million – when we drew up the interim financial statements as at 30 June 2022.

On 26 September 2022, both Nord Stream transport pipelines were seriously damaged by a number of explosions, with the result that they could no longer be used to transport gas. At the end of 2022, we considered several scenarios regarding the future of the Nord Stream pipeline and assessed the financial implications of each. Based on our updated risk assessment, including our expectations regarding future dividends, we have decided to set the value of our interest in Nord Stream at year-end 2022 at zero.

More detailed information about the valuation of our interest in Nord Stream can be found in note 9 'Other participating interests'.

Investments in reducing dependence on Russian gas and guaranteeing security of supply

In 2022, we invested heavily in reducing dependence on Russian gas. One of the key measures being taken to reduce dependence on Russian gas and guarantee security of supply is facilitating the supply of natural gas to the Netherlands and the rest of Europe from an alternative source. Gasunie has been contributing to this through its newly established group company EemsEnergyTerminal B.V. (EemsEnergyTerminal). Two floating storage and regasification units (FSRUs), berthed at the terminal at the port of Eemshaven since September 2022, are being used to store and regasify LNG shipped in by LNG tanker ships. After having been returned to a gaseous state, the natural gas is fed into GTS' gas transmission network.

The activities of EemsEnergyTerminal have a significant impact on a number of elements of the financial statements. This mainly concerns investments in property, plant and equipment and right-of-use assets (as specified in note 5 'Tangible fixed assets') and the associated lease liabilities (as specified in note 17 'Lease liabilities').

In addition, GTS has taken measures to secure peak capacity for suppliers of small scale consumers in the Netherlands. Although this function is not new, in 2022 it will be fulfilled differently than it has been previously. Where this was previously outsourced in part to market parties, given the volatile gas market, GTS procured the gas required to meet its obligation to provide peak capacity itself. At the end of 2022, this led to us recognising approximately € 100 million for physical gas inventories on the balance sheet. These gas inventories are exclusively intended and held to cover peak capacity requirements and not for trading purposes, this in accordance with GTS' statutory duty in this regard. Note 11 'Inventories' provides more information on these gas inventories.

Credit risk and controls

For market parties, the increase in energy prices is accompanied by greater financial risks in the energy markets, and to cover this increased credit risk parties active in the energy markets are demanding higher financial security and/or demanding this sooner. This concerns collateral in the form of bank guarantees, security deposits or shareholder guarantees. Where appropriate, Gasunie also asks for guarantees from customers who want to reserve transmission and/or storage capacity. We determine the nature and scope of the guarantees based on the risk we face for the specific customer. At year-end 2022, we obtained guarantees totalling around € 850 million to cover the credit risk on capacity reservations, approximately € 300 million of which had been paid to us in the form of cash collateral at year-end 2022. This is an increase of around € 250 million compared to 2022.

Gasunie continuously monitors the credit risk. In 2022, for one of our customers in Germany who could otherwise be considered creditworthy, we had to write down approximately € 9 million in outstanding receivables due to non-compliance with contractual payment obligations. Gasunie strives to collect this receivable anyway. Should collection of the receivable turn out not to be possible then the write-down of this receivable will be compensated under the applicable regulatory methodology. The customer concerned does not have any transportation agreement with Gasunie Deutschland anymore at year-end 2022.

Partly due to the increase in collateral funds, at year-end 2022 we had a surplus in our short-term liquidity position compared to the normal situation where we maintain a modest liquidity balance. As a result, at year-end 2022, unlike in previous years, we did not need to make use of short-term deposit loans or Euro Commercial Paper (ECP).

Note 25 'Financial instruments' provides more information about the credit risk. Information about our liquidity position is included in the cash flow statement, in note 14 'Cash and cash equivalents' and note 23 'Current financing liabilities'.

Measurement of tangible fixed assets

At the end of 2022, we determined the value of a number of key business units using an impairment test based on value in use (a 'value-in-use calculation'). This concerns the measurement of GTS' gas transmission network in the Netherlands and that of Gasunie Deutschland in Germany and the measurement of the BBL interconnector pipeline between the Netherlands and the UK, which is 60% owned by Gasunie through our joint operation BBL Company. We provide a summary of the key findings of the value-in-use calculation below; a detailed explanation is provided in note 4 'Impairment tests'.

Gas transport network in the Netherlands

The reason for the value-in-use calculation GTS made at year-end 2022 was the significant increase in energy prices in 2022 in combination with the fact that the regulatory conditions offer no possibility to settle this in full in the future. Alongside this the relevant market interest rates also increased at the end of 2022. These market interest rates form the basis for the IFRS discount rate, which is used in the value-in-use calculation.

From the calculation of value in use at year-end 2022, it was determined that the recoverable amount of the gas transport network in the Netherlands is roughly equal to its carrying amount.

Gas transport network in Germany

The reason for the value-in-use calculation made at year-end 2022 by Gasunie Deutschland and a number of its joint ventures was the publication of the new guidance that forms the basis for the regulation of transmission activities in Germany for the 2023-2027 period.

From the calculation of value in use at year-end 2022, it was determined that the recoverable amount of the gas transport network in Germany is approximately € 117 million lower than the carrying amount of the assets. This amount has been recognised in profit and loss for an amount of € 109 million as an impairment of tangible fixed assets, and an amount of € 8 million has been included in the result from joint ventures.

BBL interconnector

The reason for the value-in-use calculation for our 60% interest in the BBL interconnector was a change in long-term assumptions with regard to natural gas demand in the UK and, as a result, the need for transport capacity between the UK and Europe (including through the BBL interconnector). mainly due to recent developments in the European energy markets. Adjusting these expectations affects the level of the cash flows and, by extension, the valuation of our interest in the BBL interconnector.

From the calculation of the value in use at year-end 2022, it was determined that the recoverable amount of the BBL interconnector for the share held by Gasunie is approximately € 50 million lower than the carrying amount of the assets. This amount has been recognised in profit and loss as an impairment on tangible fixed assets.

Dividend payment

In 2022, the company paid out € 217.5 million (2021 financial year: € 262.3 million) in dividend to its sole shareholder, the Dutch State. This was the appropriation of the result for the 2021 financial year following a decision by the General Meeting of 29 March 2022. For further details, see note 45 'Unappropriated result'.

2. Business combinations and new entities

As in 2021, no business combinations were formed in 2022, though several new entities were established in the reporting year. The focus of these new entities is on developing activities around CCS, heat, hydrogen and such. We also set up EemsEnergyTerminal in 2022, with the aim of reducing dependence on Russian gas and guaranteeing security of supply. The establishment of this entity had a significant impact on several items in the financial statements, as explained in note 1 'Significant matters and events in 2022'.

The establishment of the other entities had no significant effect on the consolidated result and the consolidated cash flows for 2022 nor on the consolidated equity at year-end 2022 and, accordingly, we have not explained these in detail in these financial statements. The newly established entities have been included in note 56 'List of group companies and participating interests'.

3. Financial information by operating segment

The financial information is segmented in line with the company's activities. The operating segments reflect the management structure. The company differentiates between the following segments:

- **Gasunie Transport Services**

This segment covers network operations in the Netherlands and is responsible for managing natural gas transmission, developing the natural gas network and related plants, and helping to facilitate a well functioning market.

- **Gasunie Deutschland**

This segment covers network operations in Germany and is responsible for managing natural gas transmission, developing the natural gas network and related plants, and helping to facilitate a well functioning market.

- **Participations**

This segment focuses on developing energy transition projects, utilising existing participating interests to the full and facilitating new gas flows to north-western Europe using an LNG connection and long-distance pipelines. This segment also includes a number of joint arrangements for pipelines that connect the Gasunie transport network with markets outside the Netherlands.

The accounting policies for measurement of assets and liabilities and the determination of the results used for the operating segments are the same as the accounting policies used when drawing up these consolidated financial statements. The assets, revenues and results of a segment comprise items directly related to the segments and items that can reasonably be attributed to them. Because the financing of the company mainly takes place at group level, liabilities are not segmented and are therefore not reported on separately. Transactions between companies which belong to the segments are carried out at arm's length. As regards intersegment eliminations, we have removed transactions between the segments in the financial information by operating segment.

Revenues and results for each operating segment

The information about revenues and the result for each operating segment is as follows:

<i>In millions of euros</i>	Revenue		Result	
	2022	2021	2022	2021
Operating segments				
- Gasunie Transport Services	1,628.7	965.6	698.9	260.1
- Gasunie Deutschland	360.8	298.8	-17.2	138.5
- Participations	396.8	167.9	47.2	16.5
Inter-segment adjustments	-128.7	-46.0	-	-
Operating segments total	2,257.6	1,386.3	728.9	415.1
Unallocated financial income and expenses			-8.1	4.8
Result before taxation			720.8	419.9
Income taxes			-165.9	-109.2
Revenue and result after taxation	2,257.6	1,386.3	554.9	310.7

During 2022, the Gasunie Transport Services operating segment provided inter-segment services worth € 59.6 million (2021: € 16.9 million), the Gasunie Deutschland operating segment provided such services to the value of € 0.6 million (2021: € 0.4 million) and the Participations operating segment provided such services to the value of € 68.5 million (2021: € 28.7 million).

Assets by operating segment

The information about assets by operating segment is as follows:

<i>In millions of euros</i>		Assets
	31 Dec. 2022	31 Dec. 2021
Operating segments		
- Gasunie Transport Services	6,573.9	6,591.9
- Gasunie Deutschland	1,560.8	1,644.0
- Participations	1,734.4	1,641.3
Operating segments total	9,869.1	9,877.2
Unallocated assets	1,236.1	602.6
Total assets	11,105.2	10,479.8

Allocated assets include tangible fixed assets, investments in joint ventures and associates, and investments in other participating interests. Unallocated assets comprise deferred tax assets and current assets.

Investments in and depreciation of tangible fixed assets (including right-of-use assets) and other material non-cash items are as follows:

<i>In millions of euros</i>		Gasunie Transport Services	Gasunie Deutschland	Participations	Operating segments total
Investments in tangible fixed assets	2022	209.3	83.4	618.7	911.4
	2021	212.5	95.0	4.3	311.8
Depreciation of tangible fixed assets	2022	-219.7	-46.9	-95.8	-362.4
	2021	-265.8	-44.1	-37.5	-347.4
Material non-cash items	2022	41.2	-115.8	-20.2	-94.9
	2021	0.8	2.6	0.8	4.2

Other material non-cash items consist of, among other things, movements in personnel-related and other provisions, results of disposals and certain costs of the defined benefit pension plan. In 2022, the other material non-cash items were significantly impacted by the impairments, as explained in note 4 'Impairment tests'.

Assets by geographical area

Fixed assets by geographical area are determined primarily on the basis of the area where the activities take place. The company differentiates between two geographical areas: the Netherlands and outside the Netherlands.

The geographical distribution of the assets is as follows:

<i>In millions of euros</i>	Fixed assets	
	31 Dec. 2022	31 Dec. 2021
The Netherlands	8,057.7	7,470.4
Outside the Netherlands	1,811.4	2,406.8
Total fixed assets	9,869.1	9,877.2

Fixed assets included in the table cover tangible fixed assets and the share in the joint ventures, associates and other participating interests. The lower asset value outside the Netherlands is mainly due to the fair value changes in the interest in Nord Stream and the impairment of the tangible fixed assets of BBL Company and Gasunie Deutschland. The higher asset value in the Netherlands is mainly due to the investments in EemsEnergyTerminal.

Information about joint ventures and associates

Operating segment information about joint ventures and associates is as follows:

<i>In millions of euros</i>	Investments in joint ventures and associates		Share in equity of joint ventures and associates	
	2022	2021	31 Dec. 2022	31 Dec. 2021
Operating segments				
- Gasunie Transport Services	-	-	-	-
- Gasunie Deutschland	-	-	98.5	108.0
- Participations	90.3	19.9	306.5	176.5
Operating segments total	90.3	19.9	405.1	284.5

Investments in joint ventures in 2022 mainly refer to our interest in the German LNG Terminal and Porthos.

<i>In millions of euros</i>	Acquisition of joint ventures and associates		Share in result of joint ventures and associates	
	2022	2021	2022	2021
Operating segments				
- Gasunie Transport Services	-	-	-	-
- Gasunie Deutschland	-	-	-2.6	5.7
- Participations	-	-	36.9	23.6
Operating segments total	-	-	34.3	29.3

More details about the movements in joint ventures and associates can be found in note 7 'Investments in joint ventures' and note 8 'Investments in associates'.

4. Impairment tests

At the end of each reporting period, we determine whether there are any events or indications for impairment of fixed assets and we investigate whether there are reasons to reverse previously recognised impairments.

The outcomes of this analysis for the most significant cash-generating units are shown below.

Gas transport network in the Netherlands

Reason for the impairment test

As explained in note 1 'Significant matters and events in 2022', the Russian invasion of Ukraine had a direct impact on GTS' operational activities, as well as on the associated cash flows and financial results. One of these impacts we see is a significant increase in energy costs. We use gas and electricity for gas transmission and in the production of the nitrogen used in gas quality conversion. However, as a consequence of the GTS 2022-2026 methodology decision, in the Netherlands we cannot fully offset the increased energy costs in our future tariffs. The Netherlands Authority for Consumers and Markets (ACM) is authorised to use a regulatory framework to set the tariffs GTS is allowed to charge for activities that fall under its statutory duty. If the high energy prices we saw in 2022 continue to apply in the future and if these may not be largely offset in the future tariffs, this will have consequences for GTS' revenue and thus for the valuation of the gas transport network.

A second, more indirect effect of developments in the energy markets and general economic developments and uncertainties is the high inflation and, in response to this, the rise in market interest rates. The discount rate used under IFRS is based on the relevant market interest rates on the balance sheet date and, accordingly, is different to the way in which ACM determines the capital cost allowance for GTS' permitted revenue. Under IFRS, abrupt increases in market interest rates/spot market interest rates (like we saw in 2022) would possibly have had an effect on the valuation of the gas transport network at the end of 2022.

Prior to the impairment test at year-end 2022, the carrying amount of the gas transport network – which is considered to be a single interrelated cash-generating unit – was approximately € 5.9 billion.

Impairment test method

Management uses an impairment test based on value in use (a 'value-in-use calculation') to determine the recoverable amount of the gas transport network. The value in use is determined using a discounted cash flow (DCF) model. A fair value less costs to sell figure was not available at year-end 2022; there is no indication that the fair value less costs to sell is higher than the value in use.

Key assumptions in determining the recoverable amount and the key assumptions and estimates

The recoverable amount is, in principle, determined on the basis of the regulatory framework as laid down in the 2022-2026 methodology decision for GTS and in other regulations and decisions.

The starting point for the forecast revenue in the period 2023-2026 is the expected permitted revenue based on the 2022-2026 methodology decision for GTS and the cash flows derived from this. For the period after 2026, the value of the network is derived from the standardised asset value expected at that time (terminal value approach). The standardised asset value is the value of the investments which the network operator may charge through the tariffs allowing for a reasonable return.

The company's management determines the starting point for the forecast expenditure and other variables, such as the expected development of operating costs (including energy cost developments), the investment level and the IFRS discount rate. The most important operating and investment cash flows (relevant for the capital cost allowance and its subsequent costing) are based on the business plan for the next three years adopted by the Executive Board and on a recent medium term forecast.

The total fixed assets of GTS are considered as a single cash-generating unit, with the exception of the assets relating to land and the line pack (gas present in the pipeline at all times). These assets are assumed not to be subject to impairment.

The key principles in the value-in-use calculation are explained below.

Efficiency after the 2022-2026 regulatory period

For the 2022-2026 regulatory period, ACM has, based on a benchmark study, set GTS' average weighted static efficiency at 96.1% (previous methodology decision: 88.6%). Over the past years, GTS has demonstrably worked to improve its efficiency, partly through workforce restructuring, long-term cost savings and maintenance optimisation. Management will continue to work on the further optimisation of efficiency in the coming years too.

In GTS' view, the robustness of ACM's benchmark study is limited and it does not provide a basis for the imposed efficiency discount. GTS has lodged an appeal against the methodology used to determine the static efficiency and the resulting static efficiency score with the Dutch Trade and Industry Appeals Tribunal (*College van Beroep voor het bedrijfsleven* [Cbb]). In GTS' opinion, a static efficiency score of 100% should be assigned. In addition to the intrinsic shortcomings of the benchmark model used, in our view the study is, for us, also insufficiently transparent and insufficiently verifiable. The results of the appeal are expected partway through 2023.

For the calculation of value in use at year-end 2022, we worked with the provisional assumption that the average weighted static efficiency for the regulatory period 2022-2026 will be maintained at 96.1%. For the period after 2026, we assume static efficiency of 100%.

Energy costs

In the context of the price risk associated with the energy cost trend, the 2022-2026 methodology decision does not allow GTS to fully offset higher costs in its future tariffs. GTS has lodged an appeal against this with the Trade and Industry Appeals Tribunal (CBB). GTS wants to see full settlement of the total costs of energy in future tariffs. The results of the appeal are expected partway through 2023. In anticipation of the results, and given the unique situation on the energy markets in 2022, ACM intends to apply a one-off correction to the energy costs incurred by GTS in 2022. The correction will be settled in the tariffs for 2024. In the calculation of value in use at year-end 2022, it was assumed that this correction will be continued in future years.

Capital cost allowance - ACM WACC

The methodology decision for the 2022-2026 regulatory period includes a capital cost allowance which is, among other things, dependent on a WACC determined by ACM. The nominal WACC for investments from 2022 onwards is set at 3.0% before tax. The nominal WACC before tax for existing capital from 2023 onwards is also 3.0%. Every year, ACM determines the actual applicable WACC, which is then subsequently costed and settled in GTS' permitted revenues in the following years. When setting up the impairment test, account is taken of the possible effects of subsequent costing on this part of the capital cost allowance.

IFRS discount rate

A nominal pre-tax discount rate of 5.6% was applied when making the value-in-use calculation; this discount rate was 2.9% in 2020. A peak in the relevant market interest rates became visible around the balance sheet date of 31 December 2022. Although market interest rates have fallen slightly since then, the decline after the balance sheet date may not be taken into account when making the value-in-use calculation under IFRS.

Sensitivity analysis

The recoverable amount is based on significant assumptions. Changes may have a considerable effect on these assumptions. The table below provides an indication of the effect that changes to an important assumption will have on the recoverable amount. All other things being equal, the change is assumed to have taken place at the beginning of the regulatory period.

Change in the assumption or estimate	Size	Impact on recoverable amount
Efficiency after the regulatory period	-1%	approx. +/- € 40-50 million
Capital cost allowance for the 2023-2026 regulatory period – ACM WACC	+/- 0,25%	approx. +/- € 45-55 million
IFRS pre-tax discount rate	+/- 0,25%	approx. +/- € 40-50 million
Subsequent calculation of energy costs	-1%	approx. +/- € 8-10 million

Outcome of the impairment test

From the value-in-use calculation, management determined that the recoverable amount of the gas transport network in the Netherlands is virtually the same as its carrying amount. This means that there is no impairment loss or a need to reverse a previously recognised impairment loss.

Gas transport network in Germany**Reason for the impairment test**

The tariffs that Gasunie Deutschland is permitted to charge for regulated gas transport are determined by the German regulator Bundesnetzagentur (BNetzA). At the end of 2022, BNetzA published new resolutions relevant to the determination of Gasunie Deutschland's future revenues in the regulatory period 2023-2027. Given that both positive and negative consequences of this are possible, there was reason to conduct an impairment test of the gas transport network in Germany at the end of 2022.

Prior to the impairment test for value in use at year-end 2022, the carrying amount of the gas transport network was approximately € 1.5 billion. Our interests in the joint ventures NETRA and DEUDAN are also part of the cash-generating unit Gasunie Deutschland. Given that, like Gasunie Deutschland, NETRA and DEUDAN are engaged in TSO activities in Germany, general and regulatory assumptions applied to Gasunie Deutschland are also applied in the valuation of these entities. Prior to the impairment test for value in use at year-end 2022, the carrying amount of these joint ventures together was approximately € 0.1 billion.

Impairment test method

Management uses an impairment test based on value in use (a 'value-in-use calculation') to determine the recoverable amount of the gas transport network. The value in use is determined using a discounted cash flow (DCF) model. A fair value less costs to sell figure was not available at year-end 2022; there is no indication that the fair value less costs to sell is higher than the value in use.

Key assumptions in determining the recoverable amount and the key assumptions and estimates

In principle, the recoverable amount is determined based on the variables included in the German regulations and decrees in effect at the end of 2022.

The starting point for the forecast revenue in the regulatory period 2023-2027 is the expected permitted revenue according to BNetzA's determination methodology and the cash flows derived from this. For the period after 2027, the value of the network is derived from the standardised asset value expected at that time (terminal value approach). The standardised asset value is the value of the investments which the network operator may charge through the tariffs allowing for a reasonable return.

The company's management determines the starting point for the forecast expenditure and other variables, such as the expected development of operating costs, the investment level and the IFRS discount rate. The most important cash flows are based on the business plan for the next three years (updated with the most recent information on the permitted tariffs for 2023) adopted by the Executive Board, on Gasunie Deutschland's investment plan adopted by BNetzA and on a recent medium term forecast. The increase in energy costs has not been designated as a key assumption: based on the current regulatory framework, these costs can be passed on to customers.

The key principles in the value-in-use calculation are explained below.

Permitted return on equity

BNetzA has set the return on equity for the new regulatory period at 5.07% pre-tax for new assets and 3.51% pre-tax for old assets; the permitted pre-tax return was previously 6.91% and 5.12%, respectively. Like many other network operators, Gasunie Deutschland has filed an objection with the court regarding BNetzA's determination of equity. The results of the court case are expected partway through 2023. The value-in-use calculation is based on the percentages determined by BNetzA.

Cost base

In 2022, BNetzA determined the permitted revenues for the 2023-2027 regulatory period. Gasunie Deutschland's cost base is one of the reasons for this. In June 2021, Gasunie Deutschland submitted its cost request to the BNetzA based on the costs incurred in the 2020 'photo year'. The consultation on the cost application was completed in 2022 and we received the final results at the end of April 2022. Gasunie Deutschland can agree with these results; there are no ongoing objection proceedings.

Cost base and individual efficiency parameter (X-ind)

In 2017, BNetzA determined the individual efficiency parameter ('X-ind') of Gasunie Deutschland for the regulatory 2018-2022 period. As prescribed by German laws and regulations, the individual efficiency target is determined based on a benchmark study. This benchmark study was completed early in 2023 and BNetzA has published the results. As in the 2018-2022 regulatory period, Gasunie Deutschland has again been designated as 100% efficient. The value-in-use calculation at year-end 2022 also assumed 100% individual efficiency.

General efficiency parameter (X-gen)

Early in 2022, BNetzA started on the evaluation of a new general efficiency factor ('X-gen') that will apply to all TSOs and DSOs in the 2023-2027 regulatory period. BNetzA started by requesting all the requisite information from the network operators to determine the parameters for the efficiency model. The consultation phase started in September 2022. BNetzA has presented different models for determining the X-gen, each of which has a different outcome for Gasunie Deutschland. The final decision on the X-gen is expected partway through 2023. For the calculation of value in use at year-end 2022 we assumed an X-gen of 0.49%, i.e. the same as the X-gen for the current regulatory period (2018-2022).

IFRS discount rate

A nominal pre-tax discount rate of 5.8% was applied when making the value-in-use calculation; A peak in the relevant market interest rates became visible around the balance sheet date of 31 December 2022. Although market interest rates have fallen slightly since then, the decline after the balance sheet date may not be taken into account when making the value-in-use calculation under IFRS.

Sensitivity analysis

The recoverable amount is based on significant assumptions. Changes may have a considerable effect on these assumptions. The table below provides an indication of the effect that changes to an important assumption will have on the recoverable amount. All other things being equal, the change is assumed to have taken place at the beginning of the regulatory period.

Change in the assumption or estimate	Size	Impact on recoverable amount
X-gen	+/- 0.5%	approx. +/- € 6-8 million
IFRS pre-tax discount rate	+/- 0.25%	approx. +/- € 12-16 million

Outcome of the impairment test

Based on the available information, management has concluded that gas transport network impairments in Germany on 31 December 2022 amount to approximately € 117 million. Of this amount, € 109 million has been allocated to tangible fixed assets and € 8 million to lower valuation of the interests in the joint ventures NETRA and DEUDAN.

BBL interconnector

Reason for the impairment test

The reason for the value-in-use calculation of our 60% interest in the BBL interconnector is a change in long-term assumptions with regard to natural gas demand in the UK and, as a result, the need for transport capacity between the UK and Europe (including through the BBL interconnector). In contrast to our assessment based on the previous value-in-use calculation made in 2019, we no longer consider a stable scenario with moderate growth in natural gas imports from the UK to be likely. We based this partly on scenario studies and on the 10-year network development plan of National Grid, the network operator in the UK. This is largely due to the recent developments in the European energy markets, as explained in note 1 'Significant matters and events in 2022'. Adjusting these expectations affects the level of the cash flows and, by extension, the valuation of our interest in the BBL interconnector.

Prior to the year-end 2022 impairment test, the carrying amount of our interest in the BBL interconnector was approximately € 0.2 billion.

Impairment test method

Gasunie makes an impairment test based on value in use (a 'value-in-use calculation') to establish the recoverable amount of the BBL interconnector. The value in use is determined using a discounted cash flow (DCF) model. As a result of the mandatory exit from BBL Company of a co-owner with a 20% financial interest in the company (Uniper) at the end of 2022, around the balance sheet date the fair value less costs to sell could be derived based on third party offers for Uniper's interest. Based on the relevant IFRS provisions, our interest in the BBL interconnector is valued at the higher value-in-use figure. Below is a more detailed description of the key assumptions in determining the recoverable amount based on value in use.

Key assumptions in determining the recoverable amount and the key assumptions and estimates

When calculating the recoverable amount, management made assumptions, the most important of which concerned the expected revenues and the pre-tax discount rate. The figures for the main cash flows are based on the business plan for the next three years drawn up by the management of BBL Company and approved by the Executive Board Gasunie (as shareholder) and on a recent medium-term forecast. The increase in energy costs has not been designated as a key assumption: based on contractual agreements, these costs can largely be passed on to customers.

The total fixed assets of BBL Company are considered as a single cash-generating unit, with the exception of the assets relating to land. These assets are typically assumed not to be subject to impairment.

The key principles in the value-in-use calculation are explained below.

Future revenue and the cash flows derived from this

When determining expected future revenue, a distinction was made between revenue from existing fixed transport contracts and revenue from auctioning future transport capacity. The assumptions regarding the expected future transport volumes are partly based on transport capacity that has already been reserved (auctioned capacity) and on scenario studies and National Grid's 10-year network development plan. National Grid's studies include several scenarios regarding natural gas imports and exports. In contrast to our assessment based on the previous value-in-use calculation made in 2019, management no longer considers a stable scenario with moderate growth in natural gas imports by the UK and physical natural gas transport up to 2070 to be likely. As at end-year 2022, management expects that the natural gas flows between the Netherlands and the UK will decrease to zero more quickly. Furthermore, the period over which it will remain economically viable to transport natural gas – assuming continuance of the current cost base and tariffs – has been reviewed. The tariffs for capacity sales are determined on the basis of the current tariffs, which are adjusted annually for expected inflation.

H2

The relatively shallow North Sea is suitable as a location for the generation of large volumes of wind energy. This wind power can be used to make hydrogen. In 2022, four countries bordering the North Sea jointly announced that they plan to develop the North Sea as a 'green energy plant', with a focus on the production of green hydrogen. The BBL interconnector can play an important role in bringing this offshore green hydrogen ashore. Further research into the offshore hydrogen network will eventually provide a better understanding of the system requirements and the routes from the offshore hydrogen production sites and landfall points where the hydrogen will be transferred to the national (onshore) hydrogen network. The calculation of value in use at year-end 2022 assumes that the BBL interconnector will be used in the future for the offshore hydrogen network and that this will therefore generate a future cash flow once it is transferred to a hydrogen transmission operator.

Discount rate

A nominal pre-tax discount rate of 8.7% was applied when making the value-in-use calculation; this discount rate was 7.3% in 2019. A peak in the relevant market interest rates became visible around the balance sheet date of 31 December 2022. Although market interest rates have fallen slightly since then, the decline after the balance sheet date may not be taken into account when making the value-in-use calculation under IFRS.

Sensitivity analysis

The recoverable amount is based on significant assumptions. Changes may have a considerable effect on these assumptions. The table below provides an indication of the effect that changes to an important assumption will have on the recoverable amount.

Change in the assumption or estimate	Size	Impact on recoverable amount
IFRS pre-tax discount rate	+/- 0.25%	approx. +/- € 9-12 million
Income over useful life	Annually +/- € 5 million	approx. +/- € 12-15 million
Higher or lower income from transfer to hydrogen entity	+/- € 20 million	approx. +/- 2-4 million

Outcome of the impairment test

From the calculation of the value in use at year-end 2022, it was determined that the recoverable amount of the BBL interconnector for the share held by Gasunie is approximately € 50 million lower than the carrying amount of the assets. This amount has been recognised in profit and loss as an impairment.

EemsEnergyTerminal for LNG

Our assessment has not revealed any indication of an impairment of the EemsEnergyTerminal as at 31 December 2022.

EnergyStock underground gas storage facility

Our assessment has not revealed any indication of an impairment of the EnergyStock gas storage facility as at 31 December 2022.

Other tangible and financial fixed assets

Our assessment has not revealed any indication of impairment of other tangible and financial fixed assets as at 31 December 2022.

5. Tangible fixed assets

Movements in tangible fixed assets in 2022 were as follows:

<i>In millions of euros</i>	Carrying amount as at 1 Jan. 2022	Reclassification	Investments	Disposals	Depreciation	Impairments	Carrying amount as at 31 Dec. 2022
Land and buildings	134.2	-	4.1	-0.2	-7.9	-0.4	129.8
Compressor stations	763.2	-	11.0	-1.2	-50.3	-12.7	710.0
Installations	923.7	-	171.5	-0.5	-65.0	-11.5	1,018.2
Main transmission lines and related plant and equipment	4,923.9	-	115.0	-0.2	-113.9	-132.4	4,792.4
Regional transmission lines and related plant and equipment	917.0	-	34.7	-0.9	-29.3	-	921.5
Underground gas storage	439.8	-	0.6	-	-28.3	-	412.1
Other fixed operating assets	259.3	-7.1	17.4	-0.3	-32.1	-2.1	235.1
Right-of-use assets	101.7	-	459.7	-	-35.6	-	525.8
Fixed assets under construction	614.7	-	97.4	-	-	-	712.1
Total for 2022 financial year	9,077.5	-7.1	911.4	-3.3	-362.4	-159.1	9,457.0

In the Netherlands, investments related mainly to the construction of the new nitrogen plant, switching certain customers from high-calorific to low-calorific gas, the FSRUs and appurtenances at the port of Eemshaven (as explained in note 1 'Significant matters and events in 2022') and the WarmtelinQ heat transport network. In Germany we also invested in assets required for the import of LNG. The investments column also contains transfers from fixed operating assets under construction to the other asset categories for assets that were taken into use in 2022.

The change in the reclassifications column relates to a changed use of a small portion of the line pack/cushion gas and part of the nitrogen inventories. From 2022, we present this portion of the gas inventories under the balance sheet item 'inventories'. Given the insignificant scope of this reclassification, the comparative figures for 2021 have not been adjusted. More information about this reclassification can be found in note 11 'Inventories'.

The conditional investment commitments at year-end 2022 are detailed in note 26 'Off-balance sheet obligations'.

Tangible fixed assets includes an amount of € 525.8 million (year-end 2021: € 101.7 million) for right-of-use assets at year-end 2022. The company has economic but not legal ownership of these right-of-use assets. More detailed information about the associated lease liabilities can be found in note 17 'Lease liabilities'.

Movements in right-of-use assets associated with leases in 2022 are as follows:

<i>In millions of euros</i>	Carrying amount as at 1 jan. 2022	Investments	Disposals	Depreciation	Carrying amount as at 31 Dec. 2022
Land and buildings	89.0	88.4	-	-5.7	171.7
Installations	-	368.2	-	-26.8	341.4
Regional transmission lines and related plant and equipment	6.9	-	-	-0.2	5.5
Other fixed operating assets	5.8	3.1	-	-2.9	7.2
Total for 2022 financial year	101.7	459.7	-	-35.6	525.8

Movements in tangible fixed assets in 2021 were as follows:

<i>In millions of euros</i>	Carrying amount as at 1 Jan. 2021	Acquisitions	Investments	Disposals	Depreciation	Impairments	Carrying amount as at 31 Dec. 2021
Land and buildings	141.8	-	3.6	-1.8	-9.4	-	134.2
Compressor stations	796.2	-	25.2	-0.3	-57.9	-	763.2
Installations	963.1	-	24.0	-0.8	-62.6	-	923.7
Main transmission lines and related plant and equipment	4,917.2	-	127.0	-5.6	-114.7	-	4,923.9
Regional transmission lines and related plant and equipment	922.5	-	25.0	-0.8	-29.7	-	917.0
Underground gas storage	422.1	-	47.8	-1.8	-28.3	-	439.8
Other fixed operating assets	259.9	-	36.3	-0.8	-36.1	-	259.3
Right-of-use assets	98.0	-	12.4	-	-8.7	-	101.7
Fixed assets under construction	604.2	-	10.5	-	-	-	614.7
Total for 2021 financial year	9,125.0	-	311.8	-11.9	-347.4	-	9,077.5

The amounts stated under investments in 2021 mainly relate to the construction of the new nitrogen plant and switching certain customers from high-calorific to low-calorific gas and to commissioning phase 2 of the EUGAL pipeline.

Movements in right-of-use assets associated with leases in 2021 are as follows:

<i>In millions of euros</i>	Carrying amount as at 1 Jan. 2021	Investments	Disposals	Depreciation	Carrying amount as at 31 Dec. 2021
Land and buildings	91.3	3.5	-	-5.8	89.0
Installations	-	-	-	-	-
Regional transmission lines and related plant and equipment	0.1	7.0	-	-0.2	6.9
Other fixed operating assets	6.6	1.9	-	-2.7	5.8
Total for 2021 financial year	98.0	12.4	-	-8.7	101.7

The cost and accumulated depreciation of tangible fixed assets were as follows:

<i>In millions of euros</i>	Cost as at 31 Dec. 2022 *	Accumulated depreciation as at 31 Dec. 2022 **	Cost as at 31 Dec. 2021 *	Accumulated depreciation as at 31 Dec. 2021 **
Land and buildings	261.2	-131.4	262.7	-128.5
Compressor stations	1,859.6	-1,149.6	1,850.6	-1,087.4
Installations	2,690.2	-1,672.0	2,530.6	-1,606.9
Main transmission lines and related plant and equipment	10,015.0	-5,222.6	9,900.8	-4,976.9
Regional transmission lines and related plant and equipment	1,764.1	-842.6	1,734.3	-817.3
Underground gas storage	651.8	-239.7	651.2	-211.4
Other fixed operating assets	747.0	-511.9	737.8	-478.5
Right-of-use assets	586.2	-60.4	126.4	-24.7
Fixed assets under construction	712.1	-	614.7	-
Total	19,287.2	-9,830.2	18,409.1	-9,331.6

* Including the revaluation of tangible fixed assets in the transition to IFRS in 2005 (deemed cost)

** Including accumulated impairments and their reversals.

Depreciation periods

The company uses assumptions to determine the relevant depreciation periods. The company concluded that, at year-end 2022, there was no reason to review the depreciation periods.

The company's assets are largely made up of regulated assets. The regulatory systems in the Netherlands and Germany respectively allow the company to recoup investments in tangible fixed assets. The depreciation periods for such investments are set by the regulatory authorities for the regulated networks in the Netherlands (ACM) and Germany (BNetzA). In the methodology decision for GTS for the 2022-2026 period, ACM still assumes – based partly on their energy transition studies – a long depreciation horizon (up to as long as 55 years for transmission pipelines) for the gas transport network. At year-end 2022, the German gas transport network was in a similar situation in terms of the useful life assumed by the regulatory authority for the gas transport network. The company took the view of the regulatory authorities into account in determining the depreciation periods under IFRS.

Should the regulatory authorities in the Netherlands and Germany decide to amend the regulated depreciation periods in the future, possibly in response to more concrete developments around the phasing out of natural gas transmission, the company will, at that time, again take that development into account in the determination of the depreciation periods under IFRS. This may in certain cases lead to a shortening or extension of the depreciation periods, which would change the depreciation charges under IFRS. However, this will in practice primarily affect the depreciation of mainline and regional transport pipelines, as the other assets generally have a relatively shorter technical life.

Alongside external regulations, other key considerations in determining depreciation periods under IFRS is our own view on the energy transition and environmental and climate targets, as well as on other social and political developments. This goes both for the regulated and for the non-regulated assets. The company shares ACM's and BNetzA's view that the existing gas infrastructure will continue to be needed in the medium to long term.

We are also working on the possibility of using the existing gas infrastructure, in due course, for the transmission and storage of alternative energy carriers, such as hydrogen. Given the recent political decisions in the Netherlands with respect to hydrogen, heat and CCS, this long-term vision is becoming increasingly concrete and is expected to be worked out in more detail over the coming years. The German government is also working on plans in the climate domain, in which hydrogen is also expected to feature heavily. The Russian invasion of Ukraine in 2022 further accelerated these developments. We periodically evaluate the impact of social and political developments on the depreciation periods under IFRS. At the end of 2022, this review did not result in a change in the depreciation periods.

Lastly, in our regular assessments of depreciation periods we check whether they relate to individual assets that will in the medium term no longer be used for the transport or storage of gas. In such specific cases, we may possibly amend the depreciation periods for these individual assets. These installations have been temporarily decommissioned, or could be in the near future; in such cases these assets are depreciated at an accelerated rate until the date of decommissioning. In the approach to the technical decommissioning, if an alternative use is foreseen for hydrogen, heat or CCS, the possibility of recommissioning the installations in the future is also taken into consideration. The installations will therefore not be redeveloped, but sustainably preserved.

With respect to the other regulated and non-regulated assets, including the underground gas storage facilities and the assets required for the import of LNG, the company does not have any indication that the expected useful life would be shorter than the current depreciation period.

The depreciation periods for the most important asset categories are as follows:

Land	no depreciation
Buildings	50 years
Compressor stations	30 years
Installations	30 years
Main transmission lines	until 2070
Regional transmission lines and related plant and equipment	until 2070
Underground gas storage facility	until 2035
Other fixed operating assets	5-20 years
Fixed operating assets under construction	no depreciation

We depreciate right-of-use assets in accordance with the above categories; we depreciate leased land in accordance with the useful life of the asset with which the land lease is connected. We depreciate the leased FSRUs over five years in accordance with the term of the lease contract. Depreciation is not calculated on land, line pack/cushion gas volumes or assets under construction.

6. Investments in joint operations

The company has interests in the following joint operations, either directly or indirectly:

Company name	Registered office		Interest
		31 Dec. 2022	31 Dec. 2021
BBL Company V.O.F.	Groningen	60.0%	60.0%
EUGAL BTG	Kassel, Germany	16.5%	16.5%

BBL Company

BBL Company was founded in 2004 and has been operating a gas pipeline between Balgzand in the Netherlands and Bacton in the United Kingdom since 2006. At year-end 2022, Gasunie had a 60% financial interest in the BBL Company joint arrangement, with the other partners, Fluxys and a trust acting on behalf of Uniper, each holding 20%. To fulfil conditions set under laws and regulations, Uniper had to divest its interest in BBL Company by the end of 2022. Until the transfer is legally finalised, Uniper transferred its ownership to a separate trust at the end of 2022. For more information on the transfer of Uniper's shares in 2023, please see note 37 'Events after the balance sheet date'. Based on the agreements between the partners of BBL Company, significant decisions require a majority of 80%. Gasunie therefore has no control. Moreover, a V.O.F. structure is considered to be a transparent structure in the Netherlands, with the partners having a direct interest in the assets and liabilities of the V.O.F. The legal and economic reality of BBL Company is therefore comparable to that of a joint operation.

EUGAL

In 2017, Gasunie Deutschland acquired a 16.5% interest in the joint arrangement that is developing the EUGAL pipeline project. EUGAL stands for European Gas Pipeline Link (Europäische Gas-Anbindungsleitung - EUGAL). The other interests are held by the German gas transport network operators Gascade, ONTRAS and Fluxys. Based on the contractual arrangement, Gasunie has joint control; key decisions must be made by unanimous consensus. The EUGAL pipeline will run from the town of Greifswald on the Baltic Sea to the southern part of Saxony and from there on to the Czech border, covering a distance of approx. 485 kilometres. Gascade retains a 50.5% financial interest in the project and is responsible for construction and management of the pipeline. Phase 1 of the EUGAL pipeline became operational in January 2020. The second pipeline has been operational since April 2021.

7. Investments in joint ventures

The company has interests in the following joint ventures, either directly or indirectly:

Company name	Registered office		Interest
		31 Dec. 2022	31 Dec. 2021
Biogas Netwerk Twente B.V.	Almelo	50.0%	50.0%
Demonstratie Faciliteit Super Kritische Water Vergassing (SKW) Alkmaar B.V.	Alkmaar	35.0%	35.0%
DEUDAN - Deutsch/Dänische Erdgastransport GmbH	Handewitt, Germany	75.0%	75.0%
DEUDAN - Deutsch/Dänische Erdgastransport GmbH & Co. KG	Handewitt, Germany	33.4%	33.4%
EemsGas Asset Company B.V.(1)	Amsterdam	50.0%	-
Gate terminal C.V.	Rotterdam	50.0%	50.0%
Gate terminal Management B.V.	Rotterdam	50.0%	50.0%
German LNG Terminal GmbH	Hamburg, Germany	100.0%	33.3%
NETRA GmbH Norddeutsche Erdgas Transversale	Emstek/Schneiderkrug, Germany	50.0%	50.0%
NETRA GmbH Norddeutsche Erdgas Transversale & Co. KG	Emstek/Schneiderkrug, Germany	44.1%	44.1%
Porthos System Operator B.V.	Rotterdam	50.0%	50.0%
Porthos Offshore Transport and Storage GP B.V.	Rotterdam	50.0%	50.0%
Porthos CO2 Transport and Storage GP B.V.	Rotterdam	33.3%	33.3%
Porthos Onshore Transport GP B.V.	Rotterdam	50.0%	50.0%
Porthos Offshore Transport and Storage C.V.	Rotterdam	50.0%	50.0%
Porthos CO2 Transport and Storage C.V.	Rotterdam	33.3%	33.3%
Porthos Onshore Transport C.V.	Rotterdam	50.0%	50.0%
VertiCer B.V.(2)	Arnhem	50.0%	-

1 Acquisition in 2022

2 Newly founded in 2022

Biogas Network Twente

Biogas Network Twente is a joint arrangement with Cogas for the construction and management of pipelines and associated facilities, and the construction, maintenance and provision of installations for biogas feed-in into the gas transport network. Gasunie's share in the voting rights is 50%. Based on the contractual arrangement, Gasunie has joint control.

Demonstratiefaciliteit SKW

SCW Systems and Gasunie founded the SKW Alkmaar demonstration facility (Demonstratiefaciliteit SKW) in 2017. It is a joint arrangement for developing installations for biogas feed-in into the gas transport network by means of supercritical water gasification (SKW).

The aim of the joint arrangement is to build a demonstration facility to demonstrate that this new technology can work robustly on an industrial scale over the coming years. Gasunie's financial interest has been 35% since 2021. Based on the contractual arrangements, there is joint control.

DEUDAN

DEUDAN stands for German/Danish Natural Gas Transport (Deutsch/Dänische Erdgastransport - DEUDAN) and operates a gas pipeline in Germany between the Itzehoe region and the German/Danish border in the Flensburg region. The other shareholder is Open Grid Europe. Gasunie Deutschland's financial interest in this participating interest differs from its voting right: while Gasunie Deutschland has a 75% interest in DEUDAN, based on the agreements between the shareholders the two companies have joint control.

EemsGas

EemsGas is a joint arrangement between Gasunie and Perpetual Next. With the EemsGas project, we are exploring possibilities for building a gasification plant in Delfzijl for the gasification of torrefied woody biomass originating from recycled wood waste. A two-stage gasification process is used to sustainably produce green gas from syngas, which can then be distributed, further reducing dependence on fossil feedstock. Gasunie jointly owns the installation together with Perpetual Next; Perpetual Next will be solely responsible for operating the plant if and when it comes into operation. Based on the agreements between the shareholders, the partners have joint control. Gasunie has a 50% financial interest.

Gate terminal

Gate terminal is a joint arrangement with Royal Vopak for the operation of a terminal for liquefied natural gas (LNG) at Rotterdam's Maasvlakte industrial park. Gasunie and Royal Vopak each have a 50% financial interest in both Gate terminal Management B.V. and Gate terminal C.V. Gate terminal B.V. is the actual operator of the LNG terminal and is wholly-owned by Gate terminal C.V. However, based on the agreements between the shareholders, the two companies have joint control.

German LNG Terminal

German LNG Terminal GmbH was set up to develop an LNG terminal in northern Germany (in Brunsbüttel). The shareholder structure of German LNG Terminal was changed in the first half of 2022, at which time Gasunie acquired all shares in the consortium from the former shareholders Royal Vopak and Oiltanking. Gasunie has signed a declaration of intent with Kreditanstalt für Wiederaufbau (KfW, on behalf of the German government) and RWE for the construction of an LNG terminal. Gasunie is the envisioned operator of the terminal and plans to transfer the majority of its shares to KfW and RWE in 2023, with the three parties still having joint control of the entity after the share transfer. Given that, under the provisions set out in the Letter of Intent, Gasunie did not obtain full control of German LNG Terminal, the remaining shareholding still qualifies as a joint venture, and measurement based on the equity method has been maintained. The shareholding to be transferred has been recognised as assets held for sale.

NETRA

NETRA GmbH Norddeutsche Erdgas Transversale & Co KG manages a natural gas pipeline in the north of Germany comprising around 350 kilometres of pipeline and two compressor stations. The other shareholder in NETRA is Open Grid Europe. Gasunie Deutschland has a 44.1% financial interest in NETRA. Open Grid Europe has the remaining financial interest of 55.9%. Gasunie Deutschland's financial interest in this participating interest differs from its voting right. However, based on the agreements between the shareholders, the two companies have joint control.

Porthos

Porthos is a joint arrangement between Gasunie, Energie Beheer Nederland (EBN) and Port of Rotterdam Authority. Porthos focuses on storing CO₂ in empty gas fields on the North Sea bed. The project extends to the development of a carbon capture, storage and transport system, which various industries and businesses can connect to. Gasunie is contributing its expertise particularly in terms of transport and storage. Based on the agreements between the shareholders, the partners have joint control. From a legal standpoint Porthos comprises multiple companies. Gasunie's interest in the individual participating companies varies between 33.3% and 50%.

VertiCer

VertiCer was established at the end of 2022 and merged with Vertogas B.V. (a Gasunie group company) and CertiQ B.V. (a TenneT group company) on 1 January 2023. With the merger, VertiCer will be the central point for the provision of Guarantees of Origin (GOs) and Certificates of Origin (COs) for electricity, sustainable thermal energy, green gas and hydrogen from 2023. With VertiCer, a solid partner that combines the strengths and knowledge of Vertogas and CertiQ has been created for the certification of all energy carriers. The VertiCer certification system provides assurance on the origin, method of generation/production and the quality of sustainable energy. Gasunie and TenneT each hold 50% of the shares in VertiCer and, based on the agreements between the shareholders, the two companies have joint control.

The movements in joint ventures have been aggregated as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	284.0	241.2
Investments	90.0	19.9
Changes in equity	23.7	11.4
Result from joint ventures	42.3	29.3
Impairments	-8.0	-
Dividend received	-27.9	-17.8
Classified as 'assets held for sale'	-32.2	-
Balance as at 31 December	371.9	284.0
Loans to joint ventures	0.4	-
Total investments in joint ventures	372.3	284.0

The investments in 2022 mainly relate to German LNG Terminal and Porthos. The direct movements in equity refer to the revaluation of the interest in Gate terminal as a consequence of the change in fair value of one of Gate terminal's cash flow hedges. Gasunie has recognised this change in equity in other comprehensive income.

In 2022, an impairment test was performed for the interest in DEUDAN and NETRA. For more information on this, see note 4 'Impairment tests'.

Of the joint ventures, Gate terminal has a material effect on the company's equity and result.

Information about the carrying amount, the share in other comprehensive income, the result for the financial year and the dividend received on investments broken down into Gate terminal and other joint ventures is as follows:

<i>In millions of euros</i>		Gate terminal	Other joint ventures	Total joint ventures
Carrying amount as at 31 December	2022	193.2	178.7	371.9
	2021	151.4	132.6	284.0
Share in result after taxation for the financial year	2022	37.6	4.7	42.3
	2021	25.5	3.8	29.3
Gasunie's share in comprehensive income	2022	61.3	-4.8	56.5
	2021	36.9	3.8	40.7
Dividend received in the financial year	2022	21.0	6.9	27.9
	2021	17.3	0.5	17.8

Due to the material effect on Gasunie's equity and result, more detailed information is included below with regard to Gate terminal.

Information about Gate terminal

Gate terminal's consolidated financial information is as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Fixed assets	851.9	883.0
<i>of which deferred tax assets</i>	3.9	20.1
Current assets	93.4	65.8
<i>of which current tax assets</i>	1.4	2.1
<i>of which cash and cash equivalents</i>	72.7	53.9
Non-current liabilities	-480.8	-582.3
<i>of which interest-bearing loans</i>	-338.8	-387.6
<i>of which derivative financial instruments</i>	-15.1	-79.1
Current liabilities	-78.1	-63.7
<i>of which current financing liabilities</i>	-49.7	-47.5
<i>of which current tax liabilities</i>	-9.6	-0.9
Net investment	386.4	302.8
Gasunie's share	50%	50%
Carrying amount	193.2	151.4

<i>In millions of euros</i>	2022	2021
Revenue	191.8	164.5
Total expenses	-64.9	-67.6
<i>of which depreciation</i>	39.4	42.3
Financial expenses	-25.1	-28.5
Taxes	-26.7	-17.5
Result after taxation	75.1	50.9
Other comprehensive income	47.5	22.8
Total comprehensive income	122.6	73.7
Gasunie's share	50%	50%
Gasunie's share in comprehensive income	61.3	36.9

8. Investments in associates

At year-end 2022, investments in associates related solely to the interest in Trading Hub Europe GmbH and Beheer Afspraken Stelsel B.V.

Trading Hub Europe

Trading Hub Europe GmbH (THE) was established on 1 June 2021 and has been operational since 1 October 2021. THE is the market area coordinator for the German high-pressure transport network and, in that capacity, is involved in managing network balancing, data collection and exchange of relevant market data, managing virtual trading points, and more. THE was founded by bayernets GmbH, Fluxys TENP GmbH, GASCADE Gastransport GmbH, Gastransport Nord GmbH, GRTgaz Deutschland GmbH, Nowega GmbH, ONTRAS Gastransport GmbH, Open Grid Europe GmbH, terranets bw GmbH, Thyssengas GmbH and Gasunie Deutschland Transport Services GmbH. Under the joint arrangement, the eleven shareholders each hold a 9.09% stake and each can exert significant influence on the relevant operations of THE. Accordingly, the interest in THE is recognised as an associate applying the equity method.

THE has no material effect on the company's equity and result. There were no outstanding current loans to THE at year-end 2022 (year-end 2021: € 10 million). The value of Gasunie's interest in THE was € 0.6 million at year-end 2022 (€ 0.5 million at year-end 2021).

Beheer Afspraken Stelsel B.V.

At the end of 2021, Gasunie obtained 25% of the shares in the newly established entity Beheer Afsprakenstelsel B.V. (BAS). BAS is responsible for the practical support of the Market Facilitation Forum (MFF) association and also responsible for the implementation and monitoring of the agreements made within MFF. The other shares in BAS are held by TenneT (25%) and the regional TSOs (jointly 50%). At the end of 2022, the value of our share in BAS was less than € 0.1 million (year-end 2021: € zero).

Gasunie's total share in the other comprehensive income of associates in 2022 is less than € 0.1 million (2021: € zero).

9. Other participating interests

The other participating interests are as follows:

Company name	Registered office		Interest
		31 Dec. 2022	31 Dec. 2021
Energie Data Services Nederland (EDSN) B.V.	Arnhem	12.5%	12.5%
Nord Stream AG	Zug, Switzerland	9.0%	9.0%
PRISMA European Capacity Platform GmbH	Leipzig, Germany	12.7%	12.7%
SCW Systems B.V.	Schoorl	4.9%	5.5%

Energie Data Services Nederland (EDSN)

EDSN works in conjunction with the regional transmission system operators, TenneT and GTS on central market facilitation for the energy sector. EDSN develops and manages IT infrastructure for the energy market. EDSN has its registered office in Arnhem, the Netherlands. Based on agreements with shareholders, Gasunie has no significant influence in EDSN.

Nord Stream

Gasunie has a 9.0% financial interest in the Nord Stream pipeline, which has been operational since 2012. Nord Stream AG is headquartered in Switzerland. The majority of shares (51.0%) are held by the Russian state-owned company Gazprom, with the remaining shares owned by the western European energy companies Wintershall Dea (15.5%), the E.ON pension fund administrator (15.5%) and ENGIE (9%).

Nord Stream operates the two gas pipelines that form the Nord Stream connection through the Baltic Sea from Russia to Germany. Gasunie became a shareholder in Nord Stream in 2008. Based on agreements with shareholders, Gasunie has no significant influence in Nord Stream.

PRISMA European Capacity Platform

PRISMA is a European platform for trading transport capacity. Gasunie offers its transport capacity on this and other platforms. PRISMA has its registered office in Leipzig, Germany. Based on agreements with shareholders, Gasunie has no significant influence in PRISMA.

SCW Systems

SCW Systems and Gasunie are the joint shareholder in Demonstratiefaciliteit SKW Alkmaar B.V. It is a joint arrangement for developing installations for biogas feed-in into the gas transport network by means of supercritical water gasification (SKW). At year-end 2022 Gasunie had a 4.9% interest in SCW Systems (year-end 2021: 5.5%). Based on agreements with shareholders, Gasunie has no significant influence in SCW Systems.

Explanation of fair value of other participating interests

On 26 September 2022, both Nord Stream transport pipelines were seriously damaged by a number of explosions, with the result that they could no longer be used to transport gas. At the end of 2022, we considered several scenarios regarding the future of the Nord Stream pipeline and assessed the financial implications of each. Based on our updated risk assessment, including our expectations regarding future dividends, we have decided to set the value of our interest in Nord Stream at year-end 2022 at € zero (year-end 2021: € 508.1 million). This fair value adjustment has been recognised in other comprehensive income.

The fair value of other participating interests at year-end 2022 was € 7 million (€ 515.2 million at year-end 2021). For all participating interests this is a level 3 valuation (year-end 2021: level 3). The decrease in fair value is fully attributable to the write-off of our interest in Nord Stream. The other participating interests paid no dividend in 2022 (dividend from other participating interests in 2021: € 32.5 million).

The assumption for the interests in PRISMA, EDSN and SCW Systems is that, partly on account of their relatively small size, the carrying amount is an estimate of the fair value. A fair value calculation and sensitivity analysis have not been included in the financial statements for these interests.

10. Deferred tax assets

Deferred tax assets arise from temporary differences between the measurement of assets and liabilities for financial reporting purposes and their measurement for tax purposes. There are no capitalised losses carried forward.

The temporary differences concern the tax treatment of the purchase price paid by the Dutch State, the differences in respect of the measurement of tangible fixed assets and other temporary differences. The first difference arose when Gasunie was split into a transport and a trading company in 2005. At the time, the Dutch State made a deemed capital contribution to the company for tax purposes. Gasunie did not capitalise this purchase price for tax purposes under IFRS. This recognition of the purchase price has given Gasunie an additional tax depreciation potential, for which a deferred tax asset has been recognised.

The temporary difference resulting from the measurement of tangible fixed assets is mainly due to the one-time revaluation of tangible fixed assets when Gasunie was split in 2005 and the subsequent transition to IFRS. In addition, the depreciation method for tax purposes deviates from time to time from the depreciation principles under IFRS (including the recognition of impairments and their reversals). Such temporary differences are recognised in the balance sheet. On balance, temporary differences in tangible fixed assets result in a deferred tax liability.

The other differences relate mainly to temporary differences resulting from employee benefits and derivative financial instruments.

The aforementioned deferred tax assets and liabilities relate to the fiscal unity for Dutch corporate income tax and satisfy the conditions for setting off tax debts. We have therefore presented deferred taxation as a net amount.

The movements in deferred tax assets in 2022 are as follows:

<i>In millions of euros</i>	Purchase price paid by the Dutch State	Tangible fixed assets	Other	Total
Balance as at 1 January 2022	1,254.8	-999.1	2.3	258.0
Recognition of temporary differences in profit and loss	-54.2	43.6	-8.2	-18.8
Balance sheet as at 31 December 2022	1,200.6	-955.5	-5.9	239.2

The deferred tax assets at year-end 2022 to be settled within one year after the balance sheet date amount to € 34.3 million (year-end 2021: € 29.8 million). This amount is not shown separately under current assets.

The movements in deferred tax assets in 2021 are as follows:

<i>In millions of euros</i>	Purchase price paid by the Dutch State	Tangible fixed assets	Other	Total
Balance as at 1 January 2021	1268.8	-1003.7	2.3	267.4
Recognition of temporary differences in profit and loss	-52.9	35.6	-	-17.3
Result of change in corporate tax rate in profit and loss	-	-13.9	0.1	-13.8
Result of change in corporate tax rate recognised in equity	38.9	-17.1	-	21.8
Balance as at 31 December 2021	1254.8	-999.1	2.3	258.0

Movements in deferred tax assets in 2021 related to regular movements as well as movements due to the change in corporate income tax rates at the end of 2021.

11. Inventories

Inventories can be broken down as follows:

<i>In millions of euros</i>	2022	2021
Gas inventories	113.3	-
Other inventories	83.3	49.7
Total inventories	196.6	49.7

Part of the reason for the increase in the inventories item is because our group company GTS started maintaining higher physical gas inventories from 2022 to fulfil its statutory duty to provide peak capacity in the Netherlands. Furthermore, GTS is obliged to take measures to secure peak capacity for suppliers of small-scale consumers. Peak capacity concerns the supply of gas in case of extremely cold weather conditions, i.e. when temperatures over a 24-hour period at the Royal Netherlands Meteorological Institute's base in the town of De Bilt drop to below -9°C. When that happens, GTS will supply gas to licence holders (i.e. the suppliers to the small users' market).

GTS put its obligation to provide peak capacity out to tender in 2022; however, given the volatile gas market in 2022, this tender was unsuccessful and so GTS procured the gas required to fulfil this obligation itself. For the storage of this gas, GTS uses Gasunie's Peakshaver installation as well as third-party gas storage facilities. To mitigate the price risk on the gas volumes held, GTS has already sold a substantial part of the gas volumes it holds to meet its obligation to provide peak capacity through forward supply contracts for supply in 2023. Should the gas volumes be required for GTS to fulfil its statutory duty to provide peak capacity, GTS will fulfil the forward supply contracts by purchasing the required volumes on the spot market.

The other inventories concern items kept for regular daily maintenance, for the company's own present and future investments, and for projects carried out for third parties and joint ventures. The increase in other inventories in 2022 is mainly related to the increase in energy transition projects we are carrying out for our joint ventures.

In calculating the value of inventories at year-end 2022, we already took into account a write-down based on the lower recoverable amount. In 2022, an amount of € 2 million (2021: -/- € 0.5 million) has been recognised in other costs as a result of the adjustment of the inventory valuation to the lower recoverable amount. This addition strictly concerns other inventories and not the gas inventories.

12. Trade and other receivables

Trade and other receivables are as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Trade receivables	195.0	105.1
Receivables from joint ventures	30.2	33.7
Other taxes	45.1	31.1
Other receivables and accruals	91.5	58.7
Total trade and other receivables	361.8	228.6

Receivables from joint ventures and associates relate mainly to costs incurred and investments made by the joint ventures in which Gasunie is a partner that are yet to be settled. Other taxes mainly concerns current VAT receivables.

Trade and other receivables are measured less a provision to cover expected credit losses. Movements in the provision for expected credit losses are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	16.9	16.6
Addition, charged to profit and loss	9.0	0.3
Write-offs, charged against provisions	-	-
Release, credited to profit and loss	-	-
Balance as at 31 December	25.9	16.9

Trade and other receivables have a nominal term of less than one year. Note 25 'Financial instruments' provides more information on the securities provided.

The total of trade receivables and other receivables, excluding receivables under other taxes, totalled € 316.7 million at year-end 2022 (year-end 2021: € 197.5 million). The ageing of these receivables as at the balance sheet date is as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Not due and not impaired	277.6	193.2
Due and not impaired:		
<30 days	36.7	2.6
30 - 60 days	0.1	0.7
60 - 90 days	0.9	-
90 - 120 days	0.3	-
>120 days	1.1	1.0
Total	316.7	197.5

The due and not impaired items are, in certain cases, covered by bank guarantees or other securities obtained.

13. Corporate income tax

N.V. Nederlandse Gasunie and its wholly-owned Dutch group companies constitute a fiscal unity for corporate income tax. Gasunie Deutschland GmbH & Co. KG and its wholly-owned German group companies also constitute a fiscal unity for German corporate income tax purposes. We do not present receivables and liabilities relating to corporate income tax on different fiscal unities as a net amount.

The corporate income tax payable/receivable is as follows:

<i>In millions of euros</i>	2022	2021
The Netherlands	-32.7	19.7
Germany	2.6	8.3
Total corporate income tax	-30.1	28.0

Current receivables and liabilities relating to corporate income tax constitute the corporate income tax due for the current and previous financial years less any sums paid on receipt of provisional or final tax returns for the fiscal unities in question.

Movements in the corporate income tax payable/receivable are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	28.0	-7.1
Corporate income tax for the financial year	-184.5	-64.2
Corporate income tax for the previous financial years	4.2	-2.2
Paid taxes	122.2	101.5
Balance as at 31 December	-30.1	28.0

14. Cash and cash equivalents

Cash and cash equivalents are as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Banks	85.9	38.2
Money market funds and bank deposits	350.0	-
Payments in transit	-	0.1
Total cash and cash equivalents	435.9	38.3

Bank balances carry an interest rate based on daily interest and are payable immediately. The call funds and deposits are also interest bearing and have a short term (varying between 1 and 90 days).

At year-end 2022, the balance of cash and cash equivalents increased, mainly due to security deposits received from customers in connection with the higher prices and the uncertainties in the European energy markets. For further details, please see note 1 'Significant matters and events in 2022' and note 24 'Trade and other payables'.

15. Shareholders' equity

Policy regarding capital and financial position

The company's policy regarding the capital and financial position is geared towards:

- guaranteeing the company's continuity;
- financing investments in the transport and transmission network and enabling the energy transition, while taking sustainability goals into account;
- maintaining a capital and financing structure with a view to optimising borrowing costs and keeping good access to financial markets.

The company aims to have a financial profile which will enable it to implement its strategy and, at the same time, will lead to a satisfactory credit rating which matches the company's profile and the shareholder's policy.

We have included further information about the company's financial position, the instruments used, and the size of these instruments in note 16 'Interest-bearing loans' and note 25 'Financial instruments'.

Please also refer to the notes to equity in the company financial statements (note 41 'Issued share capital', note 42 'Revaluation reserve', note 43 'Legal reserve', note 44 'Other reserves' and note 45 'Unappropriated result').

Issued share capital

The authorised share capital amounts to € 756,000 and is divided into 7,560 ordinary shares, each having a nominal value of € 100, of which 1,513 have been issued and paid up in full. No movements took place in the issued and paid-up shares during the financial year (2021: the same).

All shares issued are held by the Dutch State.

Fair value reserve

Please refer to the notes to equity in the company financial statements (note 43 'Legal reserve') for a description of the fair value reserve.

Other reserves

Amounts included under 'other reserves' are classified as accumulated profits.

16. Interest-bearing loans

At year-end 2022, the nominal amount of € 3,015 million (year-end 2021: € 3,009.2 million) in non-current loans comprised € 2,250 million (year-end 2021: € 2,119.1 million) in bond loans and € 765 million (year-end 2021: € 890 million) in private loans. The transaction costs and discount still to be amortised amounted to € 14.5 million (year-end 2021: € 9 million). These are loans drawn at group level, but which also serve as financing of group company investments.

Movements in interest-bearing loans are as follows:

<i>In millions of euros</i>	2022	2021
Principal as at 1 January	3,140.0	3,300.0
Total repayments as at 1 January	-130.8	-197.6
Remaining principal as at 1 January	3,009.2	3,102.4
Cost and discounts on loans to be amortised	-9.0	-9.1
Balance as at 1 January	3,000.2	3,093.3
Movements financial year:		
Repayments	-494.2	-733.2
Loans and bonds issued	500.0	640.0
Amortisation of costs and discounts on loans	1.5	1.3
Addition of costs and discounts	-6.9	-1.3
Total movements financial year	0.3	-93.2
Principal as at 31 December	3,015.0	3,140.0
Total repayment as at 31 December	-	-130.8
Remaining principal as at 31 December	3,015.0	3,009.2
Costs and discounts on loans to be amortised	-14.5	-9.0
Balance as at 31 December	3,000.5	3,000.2
Included under current liabilities	-225.0	-494.2
Total	2,775.5	2,506.0

In July 2022, we issued a 'sustainability-linked bond' (SLB) with a value of € 500 million. With an agreed term of 12 years, this bond will be repaid in one lump-sum payment at the end of the term. The sustainability targets linked to this SLB, which are identical to those of the SLB issued in 2021, are detailed below. The sustainability targets could result in an annual coupon increase of 0.125% if we have not achieved one target by 31 December 2030 and of 0.25% if we have failed to achieve either target.

In October 2021 we issued our first SLB, with a value of € 300 million. The loan was issued in compliance with the SLB Framework. This framework is in line with the 2020 version of the Sustainability-Linked Bond Principles (SLBPs) of the International Capital Markets Association (ICMA). The company has set two targets that have to be achieved by 31 December 2030. The first target is for the company to reduce its methane emission levels by approximately 50% compared to the 2020 level. The second target relates to the CO₂-equivalent emissions that the company can influence, which are to be reduced by 30% by 2030, compared to the 2020 level. The sustainability targets could result in an annual coupon increase of 0.10% from 2030 onwards if the company has not achieved one target by 31 December 2030 and of 0.20% if it has failed to achieve either target.

These potential coupon increases on our sustainability-linked bonds were not recognised in the effective interest at year-end 2022 because there is currently no reason to assume that the company will not hit the targets.

In 2022, two long-term bond loans were repaid in full on the maturity date.

The maturity schedule for interest-bearing loans (nominal value) is as follows:

<i>In millions of euros</i>	First half-year	Second half-year	Total
Repayment in			
2023	-	225.0	225.0
2024	-	175.0	175.0
2025	-	125.0	125.0
2026	650.0	-	650.0
2027	-	-	-
na 2027			1,840.0
Total repayment obligations			3,015.0

Non-current loans, including current repayment obligations are as follows:

In millions of euros

Type of loan	Principal	Term	Effective interest rates	Interest review date	Remaining principal 2022	Remaining principal 2021
Private loan	125.0	2008-2023	4.80%	Fixed rate until maturity	125.0	125.0
Private loan	125.0	2008-2022	4.50%	Fixed rate until maturity	-	125.0
Private loan	125.0	2009-2024	4.27%	Fixed rate until maturity	125.0	125.0
Private loan	125.0	2010-2025	3.58%	Fixed rate until maturity	125.0	125.0
Private loan	50.0	2014-2024	1.33%	Fixed rate until maturity	50.0	50.0
Private loan	90.0	2021-2030	0.26%	Fixed rate until maturity	90.0	90.0
Private loan	150.0	2021-2029	0.13%	Fixed rate until maturity	150.0	150.0
Private loan	100.0	2021-2023	Variabel	22 March, 22 June, 22 September en 22 December every year	100.0	100.0
Total private loans					765.0	890.0
Bond loan	500.0	2012-2022	2.70%	Fixed rate until maturity	-	369.2
Bond loan	650.0	2016-2026	1.04%	Fixed rate until maturity	650.0	650.0
Bond loan	300.0	2018-2028	1.48%	Fixed rate until maturity	300.0	300.0
Bond loan	500.0	2019-2031	0.47%	Fixed rate until maturity	500.0	500.0
Bond loan	300.0	2021-2036	0.76%	Fixed rate until maturity	300.0	300.0
Bond loan	500.0	2022-2034	3.38%	Fixed rate until maturity	500.0	-
Total bond loans					2,250.0	2,119.2
Total nominal amount interest bearing loans					3,015.0	3,009.2

The weighted average effective interest rate on the non-current loans at year-end 2022 was 1.6% (year-end 2021: 1.6%).

The company has not provided any securities to credit providers with regard to the interest-bearing loans. Neither were there any significant financial covenants or ratios with which the company had to comply.

The company's loans with the European Investment Bank (EIB) with a remaining value of € 665 million at year-end 2022 are subject to a number of change-of-control conditions regarding the Dutch State holding shares in N.V. Nederlandse Gasunie and regarding N.V. Nederlandse Gasunie holding shares in GTS B.V. The company deems it unlikely that these change-of-control events will take place within the foreseeable future.

For more information on the financial risks associated with the interest-bearing loans and how the company manages the financial risk with the aim of limiting these risks, please see note 25 'Financial instruments'

17. Lease liabilities

The company has entered into lease contracts covering such matters as land and buildings, regional transmission pipelines, the FSRUs and the company vehicles. These right-of-use assets are for the company's own use; there are no sub-leases involved. More detailed information about the associated right-of-use assets can be found in note 5 'Tangible fixed assets'.

Movements in lease liabilities are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	104.7	100.0
New leases	418.4	9.3
Modifications	8.2	3.1
Lease payments	-35.9	-9.6
Accrued interest	4.7	1.5
Foreign exchange result	-19.0	0.4
Total	481.1	104.7
Included under current liabilities	-70.1	-7.8
Balance as at 31 December	411.0	96.9

In certain cases, lease terms are based on estimates. This is specifically the case for leases payable on leased land. While these properties are generally leased for an indefinite period, the company has the option to terminate the lease at short notice. We measured the most likely lease period by looking at the useful life of the asset, such as a pipeline or a plant, for which the land is leased.

The weighted average incremental borrowing rate in 2022 was 2.20% (2021: 1.48%). Lease contracts with a term of less than one year or with a contract value of less than € 5,000 are not included in the balance sheet. They represented less than € 0.1 million per year at year-end 2022 (2021: the same).

Modifications are interim adjustments of variables in the existing lease contracts that result in a change in the measurement of the agreements, such as expected or agreed lease terms and the amount of lease payments. The new lease liabilities mainly relate to the lease of sites and two FSRUs at the port of Eemshaven in connection with the LNG terminal constructed there, as detailed in note 1 'Significant matters and events in 2022'.

The remaining term of the lease liabilities is as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Maturity < 1 year	70.1	7.8
Maturity ≥ 1 year and ≤ 5 years	265.0	22.2
Maturity > 5 year	146.0	74.7
Total lease liability	481.1	104.7

The current part of the lease liabilities is presented separately under current liabilities.

18. Contract liabilities

Contract liabilities relate to the company's revenue from contracts with customers. The payment schedule for certain contracts is not synchronous with the way in which the company is required to allocate revenues to the financial years. This happens in the case of contracts in which customers have made a financial contribution to an investment in specific transport capacity. In principle, these contributions are attributed to the contract with the customer and not to the asset to which the contribution relates. We have included a contract liability for such customer contributions, taking account of the financing element in these contracts.

At year-end 2022, the contract liabilities totalled € 70.8 million (year-end 2021: € 49.8 million). The following table shows the movements in these contract liabilities.

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	49.8	50.6
Recorded as net revenue	-14.5	-4.7
Accrued interest	1.8	1.8
Additions	33.7	2.1
Total	70.8	49.8
Included under current liabilities	-10.1	-3.6
Balance as at 31 December	60.7	46.2

The increase in contract liabilities mainly relates to the sales contracts that our new group company EemsEnergyTerminal B.V. concluded with its customers in 2022.

The remaining term of the contract liabilities is as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Maturity < 1 year	10.1	3.6
Maturity ≥ 1 year and ≤ 5 years	30.9	15.3
Maturity > 5 years	29.8	30.9
Total contract liabilities	70.8	49.8

We have presented the current part of the contract liabilities separately under current liabilities.

19. Deferred tax liabilities

Deferred tax liabilities arise from temporary differences between the measurement of assets and liabilities for financial reporting purposes and the measurement for tax purposes. In particular, deferred tax liabilities mainly refer to temporary differences in the measurement of tangible fixed assets in Germany. In addition, there are a few other differences that lead to deferred tax liabilities and assets.

The deferred tax liabilities and assets relate to the fiscal unity for German corporate income tax and satisfy the conditions for setting off tax debts. We have therefore presented deferred taxation as a net amount.

The movements in deferred tax liabilities in 2022 were as follows:

<i>In millions of euros</i>	Tangible fixed assets	Financial fixed assets	Provision employee benefits	Provision for abandonment costs and redevelopment	Other deferred tax liabilities	Total
Balance as at 1 January 2022	174.8	11.4	-20.0	21.8	5.9	193.9
Recognition of temporary differences in profit and loss	-26.2	-1.5	0.2	1.2	-6.8	-33.1
Recognition of temporary differences in equity	-	-	9.4	-	-	9.4
Balance as at 31 December 2022	148.6	9.9	-10.4	23.0	-0.9	170.2

The amount of deferred tax liabilities to be settled more than one year after the balance sheet date was € 170.2 million at year-end 2022 (year-end 2021: € 193.9 million).

The movements in deferred tax liabilities in 2021 were as follows:

<i>In millions of euros</i>	Tangible fixed assets	Financial fixed assets	Provision employee benefits	Provision for abandonment costs and redevelopment	Other deferred tax liabilities	Total
Balance as at 1 January 2021	170.0	11.3	-23.0	20.8	-	179.1
Recognition of temporary differences in profit and loss	4.8	0.1	-0.2	1.0	5.9	11.6
Recognition of temporary differences in equity	-	-	3.2	-	-	3.2
Balance as at 31 December 2021	174.8	11.4	-20.0	21.8	5.9	193.9

20. Employee benefits

The liabilities recognised in the balance sheet relating to deferred employee benefits can be broken down as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Pension obligations Gasunie Deutschland	77.2	107.5
Long-service awards	8.7	10.3
Post-employment fringe benefits for non-active and retired employees	0.3	0.4
Total employee benefits	86.2	118.2

Provisions for pension obligations, Gasunie Deutschland

The pension plan for employees of Gasunie Deutschland who joined the company before 2012 is a defined benefit pension plan, based on a final salary pension system. The entitlements of these employees have not been funded. This pension plan is treated as a defined benefit pension plan.

For the most part, this is a non-current provision. The drop in the pension obligation in 2022 can be mainly explained by the increase in the discount rate at year-end 2022.

The pension obligation as at the end of the financial year is set out in the historical summary below:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021	31 Dec. 2020	31 Dec. 2019	31 Dec. 2018
Present value of pension entitlements	77.2	107.5	116.8	108.5	91.8
Pension obligation	77.2	107.5	116.8	108.5	91.8
Experience adjustments	1.1	-1.0	-2.2	0.1	1.3

The weighted average duration of the pension obligations was approximately 17 years at year-end 2022 (year-end 2021: approximately 20 years). The assumptions underlying the calculation of the pension obligations are as follows:

	31 Dec. 2022	31 Dec. 2021
Discount rate	3.7%	1.2%
Expected future salary increases	3.2%	2.7%
Expected future pension increases	2.2%	1.7%

Movements in the present value of pension obligations are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	107.5	116.8
Increase in pension entitlements	2.2	2.6
Interest on obligation	1.3	0.9
Actuarial result and adjustments in actuarial tables	-31.7	-10.9
Pension benefits paid	-2.1	-1.9
Balance as at 31 December	77.2	107.5

The actuarial results are as follows:

<i>In millions of euros</i>	2022	2021
Changes in actuarial financial assumptions	-32.8	-9.9
Experience adjustments	1.1	-1.0
Total actuarial result on pension entitlements	-31.7	-10.9

The actuarial results for 2022 were affected mainly by an increase in the discount rate.

Actuarial results taken directly to other comprehensive income totalled € 31.7 million in 2022 (2021: € 10.9 million). At year-end 2022, the accumulated actuarial result, net of deferred taxation, showed a loss of € 4.5 million (2021: a loss of € 36.3 million). The actuarial results are accounted for in other comprehensive income.

The sensitivity of the calculation of the provision for pension obligations is as follows:

- If the discount rate changes by 0.1% point in otherwise unchanged circumstances, this is expected to lead to a change in the present value of pension entitlements and a change in other comprehensive income of € 1.2 million (2021: € 2.1 million).
- If the expected future salary increase changes by 0.1% point in otherwise unchanged circumstances, this is expected to lead to a change in the present value of pension entitlements and a change in other comprehensive income of € 0.2 million (2021: € 0.4 million).
- If the expected future pension increase changes by 0.1% point in otherwise unchanged circumstances, this is expected to lead to a change in the present value of pension entitlements and a change in other comprehensive income of € 0.9 million (2021: € 1.6 million).

The total pension expenses for the defined benefit pension plan as presented in the statement of profit and loss comprise:

<i>In millions of euros</i>	2022	2021
Increase in pension entitlements	2.2	2.6
Interest on obligation	1.3	0.9
Total pension expenses	3.5	3.5

Provision for long-service awards

This provision relates to certain allowances that the company pays to its post-active and retired employees. The movements in this provision are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	10.3	10.3
Provisions made during the year	-	0.1
Provisions used during the year	-0.1	-0.1
Provisions reversed during the year	-1.5	-
Balance as at 31 December	8.7	10.3

For the most part, this is a non-current provision.

Provision for costs of post-employment fringe benefits for non-active and retired employees

This provision relates to certain allowances that the company pays to its post-active and retired employees. The movements in this provision are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	0.4	0.4
Provisions made during the year	-0.1	0.1
Provisions used during the year	-	-0.1
Provisions reversed during the year	-	-
Balance as at 31 December	0.3	0.4

For the most part, this is a non-current provision.

21. Other provisions

The other provisions are as follows:

<i>In millions of euros</i>	2022	2021
Provision for abandonment costs and redevelopment	70.9	28.8
Provision for demobilisation and other obligations relating to site clearing and new construction	26.1	-
Total other provisions	97.0	28.8

Provision for abandonment costs and redevelopment

The provision for abandonment costs and redevelopment (asset rehabilitation, replacement or removal) was formed in 2010 following the company's decision to decommission or remove specific GTS assets. Legislation, regulations and permits, including those governing the environment and spatial planning, require pipelines to be redeveloped in certain cases. This provision relates to the redevelopment of decommissioned pipelines. The redevelopment programme also includes pipelines that have already been disconnected and former third-party pipelines for which the company is currently responsible. The redevelopment programme was updated in 2022. An additional number of pipelines that have been decommissioned have been designated as relevant for redevelopment. An addition to the existing provision has been made to account for the new scope of the redevelopment programme. At year-end 2022, there was still a term of 12 years left to run on the redevelopment programme.

At year-end 2022, the company considered it unlikely that all transmission pipelines and appurtenances will have to be completely removed. In its judgement, the company has taken into consideration that natural gas transmission will continue to be important over the coming years. Moreover, the company sees sufficient opportunities for various alternative uses, including the transmission of alternative energy carriers, such as hydrogen. We expect that the existing natural gas transmission network will be repurposed in stages for the transmission of alternative energy carriers in both the near and more distant future. Aside from that, the revenues from alternative use (in the longer term) less the costs of conservation are anticipated to offset the costs of removal, including societal costs. Based on the above considerations, a provision for abandonment costs for the gas transport network as a whole in the longer term has not been recognised.

In measuring the provision for abandonment costs and redevelopment, the company takes into account that its judgements and estimates may be affected by developments in the area of the energy transition and tightened environmental and climate targets. Partly given the political decisions with respect to hydrogen, heat and CO₂, the long-term vision is becoming increasingly concrete and is expected to be worked out further over the coming years. On the balance sheet date, the company brings the provision for abandonment costs and redevelopment into line with the most recent developments. The aforementioned developments may also in future years lead to an adjustment to the scope of the provision for redevelopment, such as if certain network components turn out not to be fit for an alternative use that was previously thought feasible. Aside from that, the provision can be adjusted if experience figures prompt a change to the redevelopment method or if the costs of historic redevelopment activities are reason to assume higher or lower costs for future redevelopment activities.

Provision for demobilisation and other obligations relating to site clearing and new construction

This provision was formed in 2022 on the basis of the contractual obligation to demobilise the FSRUs. This relates to the construction of EemsEnergyTerminal and the activities to reduce dependence on Russian gas and guarantee security of supply, as explained in note 1 'Significant matters and events in 2022'. The amount of the provision is determined based on the contractual agreements with the owners of the FSRUs. In addition, there are obligations relating to site clearing and new construction, which relate to the lease of certain sites from third parties. The scope of the obligation is determined on the basis of contractual agreements with these third parties.

The movements in other provisions are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	28.8	30.2
Provisions made during the year	85.3	5.0
Provisions used during the year	-8.6	-
Accrued interest	1.3	-
Provisions reversed during the year	-9.9	-6.6
Balance as at 31 December	97.0	28.8

The current part of the provision for abandonment costs and redevelopment is expected to total € 11.5 million at year-end 2022 (year-end 2021: € 5.7 million). This amount is not shown separately under the current liabilities. In 2022, we applied a discount rate of between 3.5% and 3.8% (2021: 0.0%). The increase in the discount rate came about mainly as a result

of higher market rates of interest compared to 2021.

22. Derivative financial instruments

The fair value of the derivative financial instruments is as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Forward currency contracts measured at fair value	-0.5	-
Gas price swaps measured at fair value	-15.4	-
Total derivative financial instruments	-15.9	-

The derivative financial instruments are measured at fair value. Although we hold these derivative financial instruments for the purpose of risk hedging, as explained in note 25 'Financial instruments', for practical reasons, and given the relatively short term of the derivative financial instruments, we have not used the option of cash flow hedge or fair value hedge accounting. This means that changes in the value of these derivative financial instruments are recognised directly in profit and loss.

The remaining term of the derivative financial instruments is as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Maturity < 1 year	-1.8	-
Maturity ≥ 1 year and ≤ 5 years	-14.1	-
Maturity > 5 years	-	-
Total derivative financial instruments	-15.9	-

We have not presented the current part of the derivative financial instruments separately under current liabilities.

For further details of the derivative financial instruments, please see note 25 'Financial instruments' and note 31 'Financial income'.

23. Current financing liabilities

Current financing liabilities are as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Repayment obligation non-current loans	225.0	494.2
Short-term loans	-	250.0
Total current financing liabilities	225.0	744.2

For more information about non-current interest-bearing loans, please see note 16 'Interest-bearing loans'.

At year-end 2022, as explained in note 1 'Significant matters and events in 2022', the company had not taken out any current interest-bearing loans (year-end 2021: € 250 million). In 2021, this concerned deposits taken and commercial paper issued with terms of less than one year (in practice ranging between 1 and 90 days).

24. Trade and other payables

Trade and other payables can be broken down as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Trade payables	75.3	57.1
Other taxes and social security contributions	9.9	7.8
Other liabilities and accruals	761.2	240.0
Total trade and other payables	846.4	304.9

Other taxes and social security contributions primarily consist of VAT payable, social security contributions and wage tax payable.

The other liabilities and accruals consist mainly of accrued interest on loans, receivable invoices, security deposits received, and debts to joint ventures. Security deposits received are securities customers have given to the company to cover the credit risk. We calculate a market interest charge for the security deposits. At year-end 2022, deposits received amounted to € 307.8 million (year-end 2021: € 44.7 million). The increased security deposits are related to the uncertainties in the energy markets, as explained in note 1 'Significant matters and events in 2022'. Debts to joint ventures amounted to € 26.4 million at year-end 2022 (2021: € 26.3 million) and relate entirely to the cash pools the company manages with respect to several joint ventures.

Trade and other payables, apart from the security deposits received, bear no interest and have a term of less than one year.

25. Financial instruments

General

The main financial risks to which the company is exposed are market risk (consisting of interest rate risk, currency risk, and price risk), credit risk and liquidity risk. The company uses financial risk management to limit these risks through operational and financial measures. Specific hedging instruments can be used for this purpose, depending on the nature and size of the risks.

The company may use derivative financial instruments to manage interest rate, currency, and price risks arising from ordinary operational activities. We only use derivative financial instruments to hedge risks and not for trading or any other purpose.

Interest rate risk

The interest rate risk to which the company is exposed relates to the risk that future outgoing interest cash flows will increase due to changes to the market interest rate for interest-bearing loans with floating interest rates and for deposits taken and commercial paper issued with terms of less than one year. The interest rate risk of these instruments, to the extent they are held by the company itself or its wholly-owned group companies, was not hedged at year-end 2022 (year-end 2021: the same). The company is also exposed to an interest rate risk in the period between the decision to issue or refinance non-current loans with a fixed rate and the uptake of these loans.

On average, between 5% and 10% of the company's non-current debts (including the current repayment obligation on non-current loans) are current financing arrangements (e.g. ECP or deposit loans). However, this situation may differ from day to day, including on the balance sheet date, and depends on the exact liquidity situation and the need for liquidity. Although these current loans are concluded with a fixed interest rate for the term, the company does run an interest rate risk on the periodic refinancing.

Lastly, an amount of € 100 million in non-current loans with a variable rate of interest was outstanding at year-end 2022 (year-end 2021: € 100 million).

A 1% point change in the interest rate will alter the interest expenses by approximately € 2.5 to € 4 million. We do not hedge the interest rate risk on loans with a variable interest rate given the limited size and term of these loans.

Currency risk

Currency risks arise if contracts or transactions are entered into in a currency that is not the functional currency. The currency risk the company is exposed to consists of the risk that future cash flows will fluctuate over time due to changes in exchange rates.

The currency risk is limited in the context of regulated business operations in the Netherlands and Germany because virtually all transactions take place in euros. For a number of non-regulated business activities, the transactions also take place in currencies other than the euro, mainly in US dollars. The company has limited the currency risk for a number of these transactions by making use of specific risk hedging instruments, such as forward exchange contracts. Currency risks are hedged if there is sufficient certainty about the amount and timing of the foreign currency cash flows.

At year-end 2022, the company mainly ran currency risk on the lease and the additional non-lease costs of two FSRUs (in US dollars) and the lease of sites in the UK (in pounds sterling). The fair value of the other participating interests was \$ 371.1 million at year-end 2022 (year-end 2021: \$ zero) and £ 4.7 million (year-end 2021: £ 4.8 million). At year-end 2022, the equivalent of a total of \$ 344.5 million in future transactions denominated in US dollars was hedged (year-end 2021: € zero) by means of forward exchange contracts. Note 22 'Derivative financial instruments' provides more details on these derivative financial instruments. The currency risk on the liabilities in pounds sterling is not hedged by currency forward contracts. We do mitigate a part of the currency risk by keeping this foreign currency in a pound sterling bank account. At year-end 2022, the pound sterling balance was £ 4.2 million (year-end 2021: £ 4.3 million).

At the end of 2022, no other foreign currency positions of significant size were held nor were other currency risk hedging instruments used.

Price risk

The company uses gas and electricity for its day-to-day operations, including for gas transport, balancing actions in the gas transport network, and internal and external production of nitrogen for quality conversion, for which the company has entered into gas and power supply contracts with energy providers. The contracts the company has entered into are supply contracts that are common in the market today, with variable energy prices based on current spot market prices at the moment of contracting/supply. These contracts are not subject to a minimum purchase obligation. The energy supply contracts generally have a relatively short term (3-5 years). The company is exposed to a price risk if the variable charges for gas and electricity increase and regulations do not allow Gasunie to offset these price increases in its future regulated tariffs or pass these on to customers in the non-regulated domain through its commercial contracts.

For the 2022 financial year, we may partially offset the price risk in the Netherlands, and fully in Germany, in future regulated tariffs. To mitigate the price risk in the company's day-to-day operations, and thus pursue stability in the regulatory tariffs, the company uses a risk hedging policy and associated energy procurement strategy. The basic principle of this policy is that the company does not trade in energy supply contracts and does not take speculative positions. The company has committed to purchasing the contracted volumes itself and using them for its day-to-day operations.

The energy supply contracts come with the contractual option to partly fix prices for a certain future supply period. Under the current contracts, this can be done a maximum of two years in advance. In these 'forward purchases', the company takes into account the anticipated periodic energy requirements to meet the own-use exemption under IFRS 9.2.4. The required level of price risk hedging differs from one group company to the next, determined partly by the predictability of the volume and timing of the energy usage. GTS aims to hedge at least 65% of the anticipated energy usage, whereby the degree of hedging is partly based on current and forward prices. For Gasunie Deutschland, prices are fixed only to a very limited degree or not at all under its current procurement contracts and within the current regulatory framework. For other important group companies, such as EemsEnergyTerminal, EnergyStock and BBL, the degree to which prices are fixed varies because their energy usage and timing is harder to predict in practice and because the price risk is also partly borne by customers of these group companies. Energy usage that has not been contracted under forward supply contracts is purchased on the spot market as and when the need for energy arises and, where agreed, passed on to customers.

At year-end 2022, the nominal value of the forward supply contracts for the company's energy usage totalled approximately € 205.2 million (year-end 2021: € 76.1 million). The forward supply of energy under these contracts consists entirely of electricity and gas to be supplied in the 2023 financial year. Under IFRS 9.2.4, liabilities from forward supply contracts are not recognised in the balance sheet.

With regard to the gas inventories held for GTS to fulfil its obligation to provide peak capacity, given the underlying regulated settlement system we do not run a price risk. To reduce the price risk for the market, GTS has already sold a substantial part of the gas volumes it holds to meet its peak capacity obligation through forward supply contracts for supply in 2023. Should the gas volumes be required for GTS to fulfil its statutory duty to provide peak capacity, GTS will fulfil the forward supply contracts by purchasing the required volumes on the spot market.

Lastly, Gasunie has entered into investment obligations in a joint venture, the amount of which may vary depending on gas price developments. To limit the cash flow risk on these expected capital expenditures, we use a gas price swap, this way effectively fixing the future variable investment obligation – in terms of our share in the joint venture – over the term of the investment obligation (until 31 December 2027).

At year-end 2022, the volume of the variable investment obligation was 268,825 MWh (year-end 2021: zero MWh). The price risk on this volume was fully hedged at year-end 2022 (year-end 2021: not applicable). The value of the gas price swap was -/- € 15.3 million at year-end 2022 (2021: not applicable).

Credit risk

Credit risk relates to the loss that would arise if counterparties were to entirely or partially default and fail to meet their contractual obligations. At the balance sheet date, the company was not exposed to any material credit risk relating to capacity sales with regard to any individual customer or counterparty (year-end 2021: the same). There is, however, in general an increased credit risk for parties active in the European energy markets, as explained in note 1 'Significant matters and events in 2022'.

In making use of derivative and other financial instruments the company applies strict limits on counterparties to limit the related credit risk. This limits the level of risk the company is exposed to from its counterparties. The company has drawn up criteria for selecting counterparties in financial transactions. These criteria limit the risk associated with possible credit concentrations and market risks. No collateral has been received/provided with regard to the derivative financial instruments held at year-end 2022.

To limit the credit risk on trade and other receivables, if appropriate, the company asks for guarantees from its customers and other parties with whom transactions take place.

The company has received the following guarantees from third parties:

<i>In millions of euros</i>	31 Dec. 2022		31 Dec. 2021	
	Number	Balance	Number	Balance
Security Deposit	211	307.8	122	44.7
Bank Guarantee	65	166.6	61	107.6
Parent Company Guarantees	37	582.3	33	401.2
Letters of Awareness	-	-	6	110.9
Surety Agreements	8	39.3	8	24.2
Total guarantees received	321	1,096.0	230	688.6

Securities received are primarily guarantees issued as part of gas transport arrangements, as well as guarantees provided by contractors and suppliers involved in major investment projects. The security deposits are held in cash and are interest-bearing. We calculate a market interest charge for the security deposits. The increased balance of security deposits received is connected with the uncertainties in the energy markets.

The individual terms of the guarantees received are generally short (one to three years), with the terms of a few guarantees exceeding five years. The guarantees are not freely assignable.

Liquidity risk

The liquidity risk is the risk that the company has insufficient cash to meet its immediately payable current liabilities. The company quantifies its liquidity risk by using a long-range forecast of capital expenses and investments and a liquidity forecast with a horizon of at least one year for operational expenses.

The company's financing policy is partly to reduce its liquidity risk at as low a cost as possible. The options for reducing this risk depend on the solvency of the company. Gasunie is a solvent company and can therefore attract credit facilities relatively easily. According to Standard & Poor's, Gasunie's long-term creditworthiness is AA- with a stable outlook; the short-term rating is A-1+. According to Moody's Investors Service, the long-term credit rating is A1 with a stable outlook, and the short-term rating is P-1.

At year-end 2022, the company had an uncommitted current account facility of € 45 million (year-end 2021: € 45 million), a committed credit facility of € 600 million (year-end 2021: € 600 million), a Euro Commercial Paper (ECP) programme of € 750 million (year-end 2021: € 750 million) and a European Medium Term Note (EMTN) programme of € 7.5 billion (year-end 2021: € 7.5 billion) to hedge its liquidity risk. The committed credit facility was extended by one year in March 2022 and now has a term until April 2027. No funds were drawn on the committed credit facility over the past year. As part of its normal operational activities, the company has regularly raised short-term loans on the money market in the form of deposit loans and debt securities under the ECP. Under the EMTN programme, € 2,250.0 million was issued in loans as at year-end 2022 (year-end 2021: € 2,119.2 million). The EMTN programme was renewed in June 2022 and will run through to 17 June 2023.

Summary of future cash flows

The maturity profile of future cash flows relating to non-current and current financial liabilities outstanding as at the balance sheet date is as follows:

<i>In millions of euros</i>	Total	Due immediately	< 1 year	1-5 years	> 5 years
2022					
Non-current liabilities					
- interest-bearing loans	2,790.0	-	-	950.0	1,840.0
- lease liabilities	411.0	-	-	265.0	146.0
- derivative financial instruments	14.1	-		14.1	-
Current liabilities					
- current financing liabilities	225.0	-	225.0	-	-
- lease liabilities	70.1	-	70.1	-	-
- trade payables	75.3	64.6	10.7	-	-
- tax liabilities	9.9	-	9.9	-	-
- other liabilities and accruals	761.2	17.8	743.5	-	-
- derivative financial instruments	1.8		1.8		
Interest payable on liabilities	312.0	-	45.5	128.2	138.3
Total for the 2022 financial year	4,670.3	82.3	1,106.4	1,357.3	2,124.3

The maturity profile of future cash flows relating to non-current and current financial liabilities outstanding in 2021 is as follows:

<i>In millions of euros</i>	Total	Due immediately	< 1 year	1-5 years	> 5 years
2021					
Non-current liabilities					
- interest-bearing loans	2,515.0	-	-	1,175.0	1,340.0
- lease liabilities	96.9	-	-	22.2	74.7
Current liabilities					
- current financing liabilities	744.2	-	744.2	-	-
- lease liabilities	7.8	-	7.8	-	-
- trade payables	57.1	30.1	27.0	-	-
- tax liabilities	7.8	-	7.8	-	-
- other liabilities and accruals	240.0	15.1	224.9	-	-
Interest payable on liabilities	157.2	-	39.3	80.6	37.3
Total for the 2021 financial year	3,826.0	45.2	1,051.0	1,277.8	1,452.0

Fair value

Various financial instruments measured at fair value or for which the fair value can deviate from the carrying amount on the basis of amortised cost are included in these financial statements. This concerns:

- Other participating interests
- Derivative financial instruments
- Interest-bearing loans
- Other primary financial instruments

The way in which fair value is determined is described under 'Determining fair value' in the accounting policies for the measurement of assets and liabilities and the determination of the results. In 2022 no transfers took place between the various fair value measurement levels (2021: the same).

Other participating interests

At year-end 2022, the value of other participating interests measured at fair value in the balance sheet was € 7 million (year-end 2021: € 515.2 million). This concerns a level-3 fair value measurement (year-end 2021: level-3). For more information please see note 9 'Other participating interests'.

Derivative financial instruments

The derivative financial instruments are forward exchange contracts and a gas price swap. The fair value of the forward exchange contracts is determined based on the present value of projected future cash flows. For this purpose, we made use of forward exchange rates with a comparable term and a zero-coupon discount rate that matches the currency and the term of the transactions, taking into account Gasunie's credit risk and that of the relevant counterparties. This is a level-2 fair value measurement. At year-end 2022, the contract liabilities totalled € -/- 0.5 million (year-end 2021: less than € 0.1 million).

The fair value of the gas price swap is determined based on the present value of quoted commodity prices for gas price swaps. For this purpose, we made use of the closing prices for gas forward products with a comparable term and a zero-coupon discount rate that matches the currency and the term of the transactions, taking into account Gasunie's credit risk and that of the relevant counterparties. This is a level-2 fair value measurement. At year-end 2022, the fair value of the gas price swap was -/- € 15.4 million (year-end 2021: not applicable).

Interest-bearing loans

The interest-bearing loans are bond loans with a listing on the Amsterdam stock exchange, and private loans.

The fair value of listed bonds is the same as the year-end exit price. This concerns a level-1 fair value measurement (year-end 2021: level-1). The fair value of the private loans has been determined by calculating the present value of the expected future cash flows at a discount rate equal to the applicable risk-free market interest for the remaining term, plus credit and liquidity surcharges. We also take the company's risk profile and those of the counterparties into account. This is a level-2 fair value measurement (year-end 2021: level-2).

The carrying amount and the fair value of the interest-bearing loans as at year-end 2022 were:

<i>In millions of euros</i>	31 Dec. 2022			31 Dec. 2021		
	Carrying amount	Fair value	Difference	Carrying amount	Fair value	Difference
Bonds	2,235.5	1,899.1	-336.4	2,110.2	2,161.3	51.1
Private loans	765.0	723.8	-41.2	890.0	960.3	70.3
Total interest-bearing loans	3,000.5	2,622.9	-377.5	3,000.2	3,121.6	121.4

Other primary financial instruments

Other primary financial instruments comprise trade and other receivables, cash and cash equivalents, current financing liabilities (excluding current repayment obligations on non-current loans), trade and other payables.

Given the short term of these instruments, their carrying amount approximates their fair value.

26. Off-balance sheet obligations

Investment obligations

At year-end 2022, the company had entered into conditional investment commitments to the amount of € 279.8 million (year-end 2021: € 168.0 million). The liabilities mainly relate to the investments in the LNG terminal at the port of Eemshaven, the WarmtelinQ heat transport network and the completion of the nitrogen plant in the Netherlands. This also concerns the planned investments in Germany with regard to assets required for the import of LNG. Regular replacement investments in the Netherlands and Germany are also included in the investment amount.

Guarantees issued

The company has issued – either directly or indirectly – the following guarantees to third parties:

<i>In millions of euros</i>	31 Dec. 2022		31 Dec. 2021	
	Number	Value	Number	Value
Bank Guarantee	4	0.4	4	0.4
Parent Company Guarantees	12	293.7	11	57.6
Other	1	0.8	1	0.8
Total guarantees issued	17	294.9	16	58.8

The securities provided comprise securities and guarantees provided to customers of the company and the joint ventures and to certain creditors or other stakeholders. The increase in the guarantees issued in 2022 mainly relates to guarantees issued regarding the newly established LNG terminal at the port of Eemshaven. The guarantees are not freely assignable. The term of the securities provided is generally between 5 and 10 years; a limited number of securities do not have an agreed end date.

Non-current obligations

Non-current obligations are as follows:

<i>In millions of euros</i>		Contract value
Term	31 Dec. 2022	31 Dec. 2021
0 – 1 year	66.7	42.1
1 – 5 years	135.8	93.7
> 5 years	61.8	57.2
Total other commitments	264.3	193.0

Non-current obligations mainly refer to the procurement of nitrogen production capacity and IT and other services. The non-current obligations do not include amounts relating to the future supply of energy under forward supply contracts entered into by the company. For further details of these contracts, please see the 'price risk' section of note 25 'Financial instruments'.

Liabilities arising from physical imbalances

Although we strive to minimise operational imbalances, steering differences do arise in practice, meaning that the actual physical gas flow may differ to some extent from the volumes nominated (and confirmed) by our customers. Due in part to practical feasibility, these differences are not financially settled on a daily basis but are included in a cumulative steering differences account (an Operational Balancing Account, or OBA). GTS and BBL Company have agreed with adjacent networks, storage facilities and production locations to the establishment and operation of OBAs. For Gasunie Deutschland, imbalances are managed by Trading Hub Europe and not by Gasunie Deutschland itself.

The operational imbalance is closely and continuously monitored and continuously settled in kind with the relevant counterparty/counterparties through the physical intake or supply of natural gas. OBAs are only used for operational, not commercial, purposes.

The use of the OBA is based on the going concern assumption and a continuous settlement in kind. The imbalances will only be settled financially if a party to the agreement ceases to exist and settlement in gas is therefore no longer possible. The OBAs are perpetual in nature. Given the considerations stated above, the balance of gas to be received or to be supplied can be regarded as 'perpetual' and has no value on the balance sheet date. For this reason, the imbalances are included in the off-balance sheet receivables and liabilities.

At year-end 2022, the cumulative operational imbalance volume was 252 GWh, meaning that there was a supply obligation with regard to adjacent networks, storage facilities and/or production sites. Based on the TTF spot price on the balance sheet date, the value of this imbalance amounts to -/- € 19.0 million (year-end 2021: approx. -/- € 2.0 million).

In addition to imbalances based on the OBAs, imbalances with customers can also occur based on the 'System Balance Signal' (SBS), the sum of the Portfolio Imbalance Signals of all shippers active in our transport network. Here, too, we apply a going concern assumption and a continuous settlement in kind. The imbalances will only be settled financially if the shipper's licence is withdrawn and settlement in gas is therefore no longer possible. At year-end 2022, the shippers had a negative cumulative imbalance volume of 17 GWh; based on the TTF spot price on the balance sheet date, the value of this imbalance amounts to approximately € 1.3 million (year-end 2021: approx. € 0.6 million).

Joint and several liability of the fiscal unity

N.V. Nederlandse Gasunie and its Dutch wholly-owned group companies form a fiscal unity for the collection of corporate income tax and VAT. Pursuant to the Dutch Collection of State Taxes Act, the company is jointly and severally liable for the corporate income tax and VAT liabilities of all the companies in the fiscal unity. There is a similar liability regime in Germany for the German fiscal unity.

Joint and several liability of private companies

The company has a number of indirect joint arrangements in the form of private companies (without legal personalities). In addition, the company is an indirect managing partner in a number of limited partnerships. The group company above the relevant company without legal personality and its managing partners are jointly and severally liable for the obligations these private companies enter into.

27. Net revenue

Net revenue rose by 62.9% compared to the previous financial year (2021: increase of 1.0%), as detailed in note 1 'Significant matters and events in 2022'.

Information about operating activities

The company categorises its revenues according to the way in which economic factors influence the nature, amount, timing and uncertainty of the cash flows. A distinction can be made between two categories in the case of Gasunie. The first revenue stream is revenue from regulated transmission and related services, as generated by the Gasunie Transport Services and Gasunie Deutschland business units. The Dutch and German regulatory authorities set the permitted income for this revenue stream for the long term.

The second revenue stream is generated through non-regulated services and/or those exempt from regulation. The income for these services is determined by the market on the basis of supply and demand and it is generally subject to greater volatility in revenue compared to the regulated services. Revenue from the non-regulated services and/or those exempt from regulation is almost completely generated by the Participations business unit.

Revenue for each operating activity is as follows:

<i>In millions of euros</i>	Revenue	
	2022	2021
Regulated services	1,882.3	1,223.3
Non-regulated and/or exempt services	375.2	163.0
Total revenue	2,257.6	1,386.3

Information on products and services

Revenue can be divided into revenue from gas transport and related services and from other activities. Gas transport and associated services covers revenue from regulated gas transport and from non-regulated or exempt gas transport. Other activities include revenue from gas storage, LNG import and regasification, and other services to third parties.

The breakdown is as follows:

<i>In millions of euros</i>	Revenue	
	2022	2021
Gas transport and related services	2,076.2	1,288.9
Other services	181.3	97.4
Total revenue	2,257.6	1,386.3

Geographical information

Revenue per geographical area is determined on the basis of the area where the activities take place (in or outside the Netherlands). The geographical distribution of the revenue is as follows:

<i>In millions of euros</i>	Revenue	
	2022	2021
The Netherlands	1,703.3	1,021.6
Outside the Netherlands	554.3	364.7
Total revenue	2,257.6	1,386.3

Major customers

The company generated more than 10% (but less than 15%) of its external revenues from gas transmission and associated services from a single customer in 2022 (2021: the same). This customer had no payment arrears at year-end 2022 (2021: the same). For a more detailed explanation of the credit risk, see note 25 'Financial instruments'.

28. Personnel expenses

The personnel expenses are as follows:

<i>In millions of euros</i>		
	2022	2021
Salary expenses	167.0	151.2
Social security expenses	19.6	16.9
Pension expenses	35.3	30.2
Total personnel expenses	221.9	198.3

The increase in personnel expenses came primarily as a result of an increase in the number of employees. New employees were hired mainly for our energy transition-related activities.

The cost of the defined contribution plans recognised in profit and loss is € 31.8 million (2021: € 26.5 million). For the cost of the defined benefit pension plan and the part of the costs taken directly to other comprehensive income, please see note 20 'Employee benefits'.

Remuneration for members of the company's Executive Board and Supervisory Board

Remuneration for members of the company's Executive Board in 2022 was as follows:

<i>In euros</i>	Salary	Variable remuneration	Fixed & variable remuneration	Deferred remuneration	Social security expenses	Other benefits	Total
2022							
Executive Board							
Mr J.J. Fennema, chair	340,736	54,518	395,254	83,388	10,257	26,178	515,077
Ms J. Hermes	299,848	47,976	347,824	73,616	10,257	1,062	432,759
Mr U. Vermeulen	272,577	43,612	316,189	67,098	10,257	28,807	422,351
Mr B.J. Hoevers	272,577	43,612	316,189	67,098	10,257	10,307	403,851
Total for 2022 financial year	1,185,738	189,718	1,375,456	291,200	41,028	66,354	1,774,038

The variable remuneration is based on the meeting of agreed targets during the financial year, as explained under 'Remuneration policy for the Executive Board' in the annual report.

The pension plan for members of the Executive Board is the same as that for other Gasunie employees in the Netherlands.

The reimbursements under the 'Other benefits' item are payments from the flexible allowance and a one-off payment made in the 2022 financial year under the terms of the collective agreement.

Remuneration for members of the company's Executive Board in 2021 was as follows:

<i>In euros</i>	Salary	Variable remuneration	Fixed & variable remuneration	Deferred remuneration	Social security expenses	Other benefits	Total
2021							
Executive Board							
Mr J.J. Fennema, chair	329,562	59,321	388,883	77,377	8,472	24,362	499,094
Ms J. Hermes	263,639	47,455	311,094	62,280	8,472	70	381,916
Mr U. Vermeulen	263,639	47,455	311,094	62,280	8,472	26,904	408,750
Mr B.J. Hoevers	263,639	47,455	311,094	62,280	8,472	14,475	396,321
Total for 2021 financial year	1,120,479	201,686	1,322,165	264,217	33,888	65,811	1,686,081

Remuneration for members of the company's Supervisory Board in 2022 was as follows:

<i>In euros</i>	SB	AC	RAC	HIA premium	Total
2022					
Supervisory Board					
Mr P.J. Duisenberg, chair	34,764	-	2,332	-	37,096
Mr D.J. van den Berg	25,504	-	2,332	1,879	29,715
Ms M.M. Jonk *	5,794	-	583	-	6,377
Mr J. Meier	23,176	5,800	-	1,956	30,932
Ms A.L.M. Mutsaers	23,176	-	2,332	-	25,508
Mr W.J.A.H. Schoeber *	5,794	1,450	-	489	7,733
Mr A.S. Visser	23,176	5,800	-	-	28,976
Ms C. Wielinga	23,176	5,800	-	-	28,976
Total for 2022 financial year	164,560	18,850	7,579	4,324	195,313

* Stepped down on 29 March 2022.

Remuneration for members of the company's Supervisory Board in 2021 was as follows:

<i>In euros</i>	SB	AC	RAC	HIA premium	Total
2021					
Supervisory Board					
Mr P.J. Duisenberg, chair	33,624	-	2,252	-	35,876
Mr D.J. van den Berg	24,664	-	2,252	1,885	28,801
Ms M.M. Jonk	22,416	-	2,252	-	24,668
Mr J. Meier *	7,472	1,870	-	654	9,996
Ms A.L.M. Mutsaers **	1,868	-	188	-	2,056
Mr W.J.A.H. Schoeber	22,416	5,608	-	1,962	29,986
Mr A.S. Visser	22,416	5,608	-	-	28,024
Ms C. Wielinga	22,416	5,608	-	-	28,024
Total for 2021 financial year	157,292	18,694	6,944	4,501	187,431

* Member of the Supervisory Board and Audit Committee from 1 September 2021

** Member of the Supervisory Board and Remuneration, Selection and Appointment Committee from 1 December 2021

Remuneration for members of the Supervisory Board comprises a basic payment and an additional payment for those who participate in the Audit Committee (AC) and/or the Remuneration, Selection and Appointment Committee (RAC). Remuneration also includes premiums to be paid under the Dutch Health Insurance Act.

29. Depreciation costs

The depreciation costs are as follows:

<i>In millions of euros</i>	2022	2021
Depreciation expenses	326.8	338.7
Depreciation expenses right-of-use assets	35.6	8.7
Result from disposals	3.3	0.5
Total depreciation costs	365.7	347.9

The increase in depreciation costs of the right-of-use assets can mainly be explained by the depreciation of the FSRUs at the port of Eemshaven commissioned in 2022. These facilities are recognised as right-of-use assets under tangible fixed assets, as explained in note 5 'Tangible fixed assets'.

The result from disposals is the balance of the net realisable value of the assets sold or transferred minus the carrying amount of these assets when they were delivered.

30. Other costs

The other costs are as follows:

<i>In millions of euros</i>	2022	2021
Costs of subcontracted work and other external costs	213.2	182.7
Cost of network management	545.9	259.4
Other costs	94.8	44.5
Total other costs	853.9	486.6

The cost of network operations mainly comprises the procurement of nitrogen production capacity and electricity for the production of nitrogen and the cost of electricity and gas for gas transmission and gas storage operations. The increase in costs compared to 2021 is due mainly to significantly higher energy prices and a slight increase in the use of compression capacity.

Other costs comprise mainly insurance costs, other material and personnel costs, and non-recurring costs, including the addition to the provision for abandonment costs and redevelopment.

31. Financial income

Financial income can be broken down as follows:

<i>In millions of euros</i>	2022	2021
Interest and financial expenses on instruments measured at amortised costs	3.1	1.6
Foreign exchange results	21.3	0.7
Total financial income	24.4	2.3

Interest income and similar income include the interest on tax assessments, interest (including negative interest) on deposits taken and commercial paper issued with a term of less than one year, as well as interest income on security deposits received (security provided by customers, to which a negative interest rate applies).

Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated into the functional currency at the exchange rate applicable on that date. The aggregate unrealised foreign exchange gains/losses on monetary assets and liabilities at the balance sheet date are recognised in profit and loss, as are the realised foreign exchange results on the lease instalments paid in 2022. The foreign exchange results in 2022 were mainly due to the lease of the FSRUs at the port of Eemshaven, as explained in note 17 'Lease liabilities'. The lease for these FSRUs is denominated in US dollars.

For further details of the derivative financial instruments, please see note 22 'Derivative financial instruments' and note 32 'Financial expenses'.

32. Financial expenses

Financial expenses can be broken down as follows:

<i>In millions of euros</i>	2022	2021
Interest on loans measured at amortised cost	50.4	63.0
Interest on leases	4.7	1.5
Interest on contract liabilities	1.8	1.8
Foreign exchange results	-	0.4
Accrued interest on provisions	1.3	-
Other financial expenses on instruments measured at amortised cost	2.0	2.3
Fair value movement for instruments measured at fair value	15.9	-
Total interest and financial expenses	76.1	69.0
Capitalised as part of tangible fixed assets	-9.2	-9.7
Total financial expenses	66.9	59.3

Of the interest expenses, a total amount of € 9.2 million was capitalised in 2022 (2021: € 9.7 million). This capitalisation was based on the weighted average interest rate of N.V. Nederlandse Gasunie's non-current loan portfolio. The other finance expenses mainly comprise amortised transaction costs and discount on non-current loans as well as other financing costs.

The expenses relating to the instruments valued at fair value concern the movement of the gas price swap valued at fair value (-/- € 15.4 million) and Euro/Dollar forward exchange contracts (-/- € 0.5 million). No hedge accounting has been applied to these contracts. For further details of the movement on the derivative financial instruments, please see note 22 'Derivative financial instruments' and note 31 'Financial income'.

33. Income taxes

The tax expense is as follows:

<i>In millions of euros</i>	2022	2021
Corporate income tax for the financial year	184.5	64.2
Corporate income tax for the previous financial years	-4.2	2.2
Movement in deferred taxation	-14.4	42.8
Total tax expense	165.9	109.2

The effective tax rate is as follows:

<i>In percentages</i>	2022	2021
Applicable tax rate in the Netherlands	25.8%	25.0%
Effect of tax rates in other countries	-0.1%	0.8%
Prior-year adjustments	-0.6%	0.1%
Effect of corporate income tax rate change on deferred taxation	0.1%	3.3%
Effect of innovation box	-0.9%	-0.4%
Other differences	-1.4%	-2.8%
Effective rate	23.0%	26.0%

Other differences principally relate to non-taxable results as a consequence of the application of the participation exemption in the Netherlands and Germany. In 2022, the effect of the tax rate change on deferred taxation related to the change in the German corporate income tax rate (2021: change in the Dutch corporate income tax rate).

34. Workforce

The average number of employees in full-time equivalents was 1,707 in 2022, of whom 250 worked outside the Netherlands (2021: 1,581 full-time equivalents, with 246 stationed outside the Netherlands). At year-end 2022, the number of employees in full-time equivalents was 1,805, of whom 253 worked outside the Netherlands (year-end 2021: 1,616, with 246 stationed outside the Netherlands).

The number of employees grew throughout the year due to an increase in Gasunie's activities in the area of the energy transition.

35. Related parties

Intra-group transactions

Services between Gasunie and its group companies and between group companies are provided at arm's length. This also applies to transactions with joint ventures, joint operations, and associates and other participating interests. For a full list of related entities, please see note 56 'List of group companies and participating interests'. For more information about intercompany services, see note 3 'Financial information by operating segment', note 7 'Investments in joint ventures' and note 8 'Investments in associates'.

Transactions with members of the Executive Board and Supervisory Board

The members of the Executive Board qualify as a related party, because they can exercise control or significant influence over the company's financial or operational policy. No other transactions took place with the Executive Board other than the transactions by virtue of their remuneration and possible expense claims. The same applies to members of the Supervisory Board. For a description of the remuneration of the members of the Executive Board and Supervisory Board, please see note 28 'Personnel expenses' to the consolidated financial statements.

Other transactions with related parties

GTS provides gas transport services to its customers, including GasTerra B.V. In addition, with regard to GTS' statutory duty to provide peak capacity, in 2022 GTS carried out gas procurement and sales transactions with counterparties like GasTerra, for one. The sole shareholder of the company, the Dutch State, also owns 50% of GasTerra. This allows the Dutch State, in its capacity as shareholder, to exercise significant influence on the policy of the two companies.

The services provided by GTS to GasTerra are performed in line with the provisions of the Dutch Gas Act. Under this legislation, GTS must not discriminate in its treatment of all market parties and must conduct business as requested. The tariffs charged to GasTerra are determined by the Dutch regulatory authority, ACM. ACM works independently of GTS, GasTerra and the Dutch State.

36. External auditor's fees

The following fees charged by PricewaterhouseCoopers Accountants N.V. (PwC Accountants N.V.) for auditing the consolidated and company financial statements are charged to the company, its subsidiaries and other companies it consolidates, in accordance with Article 2:382a, paragraph 1 and 2 of the Dutch Civil Code.

<i>In millions of euros</i>	Total PwC		Of which PwC Accountants N.V.	
	2022	2021	2022	2021
Audit of the financial statements	1.0	0.7	0.8	0.6
Other audit engagements	0.3	0.3	0.3	0.3
Tax-related advisory services	-	-	-	-
Other non-audit services	-	-	-	-
Total external auditor's fee	1.3	1.0	1.1	0.9

37. Events after the balance sheet date

To fulfil conditions set under EU state aid law, Uniper had to divest its 20% interest in BBL Company by the end of 2022. Until the transfer of assets is legally finalised, Uniper transferred its interest to a separate trust at the end of 2022. Based on the contractual arrangement, Gasunie and co-owner Fluxys each have the option of exercising their pre-emptive right in the event that a co-owner is required or wishes to dispose of its interest. Gasunie exercised its pre-emptive right at the start of 2023. On completion of the transfer of ownership, Gasunie will hold a 75% interest in BBL Company (year-end 2022: 60%).

The impact on the consolidated result, the consolidated cash flows and the consolidated financial position from the 2023 financial year is not expected to be significant.

No other significant events occurred after the balance sheet date that have to be recognised or explained in the financial statements.

Company financial statements

Company statement of financial position as at 31 December 2022

(before appropriation of result)

<i>In millions of euros</i>	<i>Notes</i>	31 Dec. 2022	31 Dec. 2021
Assets			
Fixed assets			
- tangible fixed assets	38	84.8	84.8
- financial fixed assets	39	9,582.1	9,915.8
Total fixed assets		9,666.9	10,000.6
Current assets			
- inventories		78.3	44.7
- trade and other payables		51.4	55.0
- receivables from group companies	40	297.0	230.4
- receivables from joint ventures		27.6	16.1
- cash and cash equivalents		411.5	32.3
Total current assets		865.8	378.5
Assets held for sale	39	32.2	-
Total assets		10,564.9	10,379.1

<i>In millions of euros</i>	<i>Notes</i>	31 Dec. 2022	31 Dec. 2021
Liabilities			
Equity			
- issued share capital	41	0.2	0.2
- revaluation reserve	42	1,524.2	1,571.9
- legal reserve	43	-	335.4
- other reserves	44	4,225.1	4,211.0
- unappropriated result	45	554.9	310.7
Total equity		6,304.4	6,429.2
Provisions	46	87.4	98.1
Non-current liabilities			
- Interest bearing loans		2,775.5	2,506.0
- lease liabilities		81.3	80.0
- derivative financial instruments		15.9	0
Total non-current liabilities		2,960.1	2,684.1
Current liabilities			
- current financing liabilities		225.0	744.2
- lease liabilities		6.7	6.3
- trade and other payables	47	484.3	189.3
- liabilities to group companies	48	584.4	326.0
Total current liabilities		1,300.4	1,265.8
Total liabilities		10,564.9	10,379.1

Company statement of profit and loss for 2022

<i>In millions of euros</i>	<i>Notes</i>	2022	2021
Continuing operations			
Net revenue	49	840.1	545.7
Costs of subcontracted work and other external costs	50	-607.3	-372.4
Personnel expenses	51	-191.1	-168.7
Depreciation costs	38	-7.5	-7.6
Other costs	52	-85.0	-40.5
Total expenses		-890.9	-589.2
Operating result		-50.8	-43.5
Share in result of participating interests	39	602.6	331.2
Financial income and expenses	53	5.3	33.0
Result before taxation		557.1	320.7
Income taxes	54	-2.2	-10.0
Result after taxation		554.9	310.7

Notes to the company financial statements

Notes to the company financial statements

General

These company financial statements and the consolidated financial statements jointly form the company's financial statements in accordance with the articles of association. The financial information of the company is included in the consolidated financial statements.

The company financial statements comprise the company statement of financial position and the company statement of profit and loss; the notes to the company financial statements form an integral part of the company financial statements.

Basis for preparation

The company financial statements have been prepared in accordance with Part 9 of Book 2 of the Dutch Civil Code. To determine the accounting policies for the measurement of assets and liabilities and the determination of the results of its company financial statements, the company makes use of the option offered in Article 2:362, paragraph 8 of the Dutch Civil Code. This means that the accounting policies for the measurement of assets and liabilities and the determination of the results of the company financial statements are the same as for the consolidated financial statements prepared on the basis of EU-IFRS.

If no other policies are mentioned, we refer the reader to the policies described in the consolidated financial statements. To interpret these company financial statements correctly, the company financial statements ought to be read in conjunction with the consolidated financial statements.

We have included information about the use of financial instruments and associated risks in the notes to the consolidated financial statements. The same applies to the notes to events after the balance sheet date, the notes to transactions with related parties, the notes to off-balance sheet obligations and the notes to the remuneration of members of the Executive Board and the Supervisory Board.

Participating interests in group companies

Group companies are all entities over which the company has direct or indirect control. Participating interests in group companies are recognised in the company financial statements at their net asset value, with goodwill being separately disclosed under intangible fixed assets, if any, by applying the accounting policies for the measurement of assets and liabilities and the determination of the results as set out in the notes to the consolidated financial statements. If and to the extent that the company is unable to transfer results to itself due to restrictions, we will add the results (or the relevant part of the results) to a legal reserve.

Share in result of participating interests

The share in the result of companies participated in comprises the company's share in the results of these participating interests. Results from transactions in which assets and liabilities are transferred between the company and its participating interests and between individual participating interests are eliminated where they cannot be regarded as realised.

Equity

We present the financial instruments that are designated as equity instruments under 'Equity'. We deduct profits distributed to the holders of these instruments from equity.

Income taxes

N.V. Nederlandse Gasunie and its wholly-owned Dutch group companies constitute a fiscal unity for corporate income tax. No corporate income tax is allocated to these group companies, with the exception of the group companies Gasunie Transport Services B.V., Gasunie Assets B.V. and Maasvlakte Storage B.V. Gasunie's tax expense included in the company statement of profit and loss therefore relates to all the companies in the fiscal unity, with the exception of the portion of the tax expense allocated to the companies specified above.

Additional notes to the company financial statements

38. Tangible fixed assets

Movements in tangible fixed assets in 2022 were as follows:

<i>In millions of euros</i>	Carrying amount as at 1 Jan. 2022	Investments	Disposals	Depreciation	Carrying amount as at 31 Dec. 2022
Other fixed operating assets	0.8	-	-0.5	-0.3	-
Right-of-use assets	83.9	8.1	-	-7.2	84.8
Fixed assets under construction	0.1	-0.1	-	-	-
Total for 2022 financial year	84.8	8.0	-0.5	-7.5	84.8

At year-end 2022, tangible fixed assets included an amount of € 84.8 million (year-end 2021: € 83.9 million) of leases. The company has economic but not legal ownership of these right-of-use assets. Right-of-use assets concern mainly land and buildings and the company vehicles.

Movements in tangible fixed assets in 2021 were as follows:

<i>In millions of euros</i>	Carrying amount as at 1 Jan. 2021	Investments	Disposals	Depreciation	Carrying amount as at 31 Dec. 2021
Other fixed operating assets	1.1	0.1	-	-0.4	0.8
Right-of-use assets	79.3	11.8	-	-7.2	83.9
Fixed assets under construction	-	0.1	-	-	0.1
Total for 2021 financial year	80.4	12.0	-	-7.6	84.8

The cost and accumulated depreciation (including impairments) are as follows:

<i>In millions of euros</i>	Costs as at 31 Dec. 2022	Accumulated depreciation as at 31 Dec. 2022	Costs as at 31 Dec. 2021	Accumulated depreciation as at 31 Dec. 2021 *
Other fixed operating assets	-	-	5.2	-4.3
Right-of-use assets	112.1	-27.3	104.0	-20.1
Total	112.1	-27.3	109.2	-24.4

* including accumulated impairments.

39. Financial fixed assets

Movements in tangible fixed assets were as follows:

<i>In millions of euros</i>	2022	2021
Group companies and participating interests		
Balance as at 1 January	5,820.1	5,698.6
Movements		
- Movements in equity	-462.1	39.8
- Issues of share premium	590.2	211.3
- Repayments of share premium	-0.8	-353.5
- Dividend received	-219.4	-107.3
- Share in result in group companies and participating interests	602.2	331.2
Balance as at 31 December	6,330.2	5,820.1
Loans to group companies and participating interests		
Balance as at 1 January	4,095.8	4,195.4
Movements		
- Non-current loans granted	121.4	241.7
- Interest accrual	2.1	2.3
- Repayment of non-current loans	-935.2	-343.6
Balance as at 31 December	3,284.1	4,095.8
Total financial fixed assets as at 31 December	9,614.3	9,915.9
Assets held for sale	32.2	-
Total financial fixed assets as at 31 December	9,582.1	9,916

Group companies and participating interests

The share premium payments recognised in 2022 mainly relate to the conversion of non-current loans granted to Gastransport Noord-West Europa Holding and to Gasunie BBL that were converted into share premium during 2022.

Direct movements in the group companies' equity refer to the fair value changes of the interest in Nord Stream (as included in note 1 'Significant matters and events in 2022', note 9 'Other participating interests' and note 43 'Legal reserve'), the actuarial result for the Gasunie Deutschland pension plan (as included in note 20 'Employee benefits' and note 44 'Other reserves') and to the revaluation of the interest in Gate terminal as a result of the change in value of a cash flow hedge (as included in note 44 'Other reserves').

The list of participating interests, their registered offices and Gasunie's participation percentage are included in note 56 'List of group companies and participating interests'.

Loans to group companies and participating interests

The interest rate on the non-current loans was, unless specified otherwise, the weighted average interest rate of N.V. Nederlandse Gasunie's non-current loan portfolio plus 12.5 basis points (2021: the same).

The fair value of the non-current loans to group companies and participating interests was € 2,936.5 million at year-end 2022 (year-end 2021: € 4,627.9 million).

No other special conditions have been agreed between Gasunie and the group companies concerning the non-current loans granted. Given that there is no reason to do so on the basis of historical data and current outlook, we have not made any adjustment to the measurement for expected credit losses.

Loan to group company GTS

The non-current loan granted to GTS totalled € 3,140.6 million at year-end 2022 (year-end 2021: € 3,451.3 million). This concerns the de facto balance of borrowings drawn under a loan facility capped at € 6 billion, made available as of 1 January 2014. The loan terminates on 31 December 2029 and has an extension option. It has been agreed with GTS that the facility can be drawn or redeemed without restrictions during the term of the loan. No repayment schedule has been agreed.

GTS is the transmission system operator of the national gas grid as defined in the Dutch Gas Act. The Dutch Minister of Economic Affairs and Climate Policy has set rules with regard to proper financial management by a transmission system operator (Besluit Financieel Beheer Netbeheerders ('BFBN')). Annually, we assess – taking account of the provisions of the BFBN – whether the credit facility must be redeemed or drawn in order to meet the BFBN requirements. In this periodic assessment, the company not only takes into account the current financial position, but also the expectations for the coming years regarding the expected volume and timing of the investment expenditure, the expected dividend payments and the expected operating expenses for the gas transport network. Due to the size and volatility of these variables, it is not currently possible to make a reliable estimate regarding potential future repayments. For this reason, we have presented the loan issued under non-current receivables as at the balance sheet date.

Loans to other group companies

In 2022, the non-current loans granted to Gastransport Noord-West Europa Holding and to Gasunie BBL were converted into share premium (year-end 2021: loan of € 420.7 million and € 80.1 million, respectively).

In 2022, Gasunie made a loan facility of € 1.5 million available to Vertogas. The facility expires on 31 December 2029. At year-end 2022, € 0.4 million had been drawn down from this facility (year-end 2021: € zero).

Loans to other participating interests

The loans granted to other participating interests amounted to € 19.2 million at year-end 2022 (year-end 2021: € 21.3 million). The interest rate on these loans varies depending on the participating interest's risk profile.

40. Receivables from group companies

Intra-group positions arise from services provided by N.V. Nederlandse Gasunie to group companies and vice versa, from dividend payments within the group and from cash pool transactions carried out by the head of the group on behalf of the group companies as part of normal continuing operations.

No repayment schedule has been agreed for the receivables from group companies; the receivables have the characteristics of a current account facility.

In certain cases, the group company pays arm's length interest on the balance of the intra-group receivables, based on a variable interest rate plus a surcharge appropriate to both Gasunie's risk profile and that of the group company in question.

We have not made a provision for expected credit losses because, on the basis of historical data and the current outlook for the group companies in question, there is no reason to do so.

41. Issued share capital

The authorised share capital amounts to € 756,000 and is divided into 7,560 ordinary shares, each having a nominal value of € 100. At year-end 2022, 1,513 of these shares were in issue and had been paid up in full. No movements took place in the issued and paid-up shares during the financial year (2021: the same).

At year-end 2022, all shares in issue were held by the Dutch State (year-end 2021: the same).

42. Revaluation reserve

The revaluation reserve relates to the revaluation of the tangible fixed assets. This revaluation was connected to the division of Gasunie and the subsequent introduction of IFRS in 2005 and was calculated in line with the situation as at 1 January 2004. We have recognised deferred taxation relating to the revaluation in the liability for deferred taxation, which is part of the deferred tax assets for the Dutch fiscal unity. The revaluation reserve is realised in proportion to the depreciation of the tangible fixed assets to which the revaluation reserve relates.

Movements in the revaluation reserve are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	1,571.9	1,642.3
Realised share of unrealised revaluation	-47.7	-53.3
Effect of tax rate change on deferred taxation	-	-17.1
Balance as at 31 December	1,524.2	1,571.9

43. Legal reserve

The legal reserve is the legal reserve for participating interests, which concerns the 9.0% interest in Nord Stream. This interest is measured at fair value. Since Gasunie has no control over this interest and therefore cannot enforce profit distributions, a legal reserve has been recognised for that part of the fair value measurement that exceeds the original acquisition price.

Movements in the legal reserve are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	335.4	336.5
Movement in other participating interests measured at fair value	-335.4	-1.1
Balance as at 31 December	-	335.4

More information about the valuation of the interest in Nord Stream can be found in note 1 'Significant matters and events in 2022' and note 9 'Other participating interests'.

44. Other reserves

Movements in the other reserve are as follows:

<i>In million of euros</i>	2022	2021
Balance as at 1 January	4,211.0	3,762.2
Appropriation of result for previous financial year	93.2	337.4
Change in cash flow hedge joint ventures	23.7	11.4
Movement in other equity interests measured at fair value	-172.7	-
Sum of actuarial gains and losses on employee benefits,	31.7	10.9
of which corporate income tax	-9.4	-3.2
Realised share in the unrealised revaluation	47.7	53.3
Change in deferred taxes	-	38.9
Balance as at 31 December	4,225.1	4,211.0

For a description of the movements, please refer to note 7 'Investments in joint ventures', note 10 'Deferred tax assets', note 20 'Employee benefits', note 42 'Revaluation reserve', note 43 'Legal reserves' and note 45 'Unappropriated result'.

The group company GTS is the network operator of the national gas grid as defined in the Netherlands in the Dutch Gas Act. The Dutch Minister of Economic Affairs and Climate Policy has issued rules with regard to proper financial management by a network operator by way of the BFBN. These rules consist of a number of financial ratios, including a minimum for equity, which can lead to restrictions with regard to the level of GTS' distributable reserves. When the occasion arises, such circumstances could also affect the level of N.V. Nederlandse Gasunie's distributable reserves. At year-end 2022, no such restriction applied and no reserve provided for by the articles of association or legal reserve was recognised (year-end 2021: the same).

45. Unappropriated result

Movements in the unappropriated result are as follows:

<i>In millions of euros</i>	2022	2021
Balance as at 1 January	310.7	599.7
Dividend paid	-217.5	-262.3
Allocated to other reserves	-93.2	-337.4
Result for the year	554.9	310.7
Balance as at 31 December	554.9	310.7

Appropriation of result for the 2021 financial year

The 2021 financial statements were adopted by the General Meeting of Shareholders on 29 March 2022. The General Meeting of Shareholders has appropriated the result in accordance with the Executive Board's proposal.

The result for 2021 amounted to a profit of € 310.7 million, of which € 217.5 million was distributed as dividend in 2022. The remainder of € 93.2 million was added to the other reserves.

Result appropriation proposal for the 2022 financial year

The Executive Board proposes that, of the profit for 2022, an amount of € 200 million be paid as dividend to the shareholder and that € 354.9 million be added to the other reserves. The dividend per share is € 132.2 thousand.

The shareholder supports our energy-transition activities. To enable us to finance our green investment portfolio, and given the exceptional nature of this year, thanks to which we will, in coming years, be returning a large portion of the profit to the market, our shareholder has permitted us to add a larger profit share to our general reserves in 2022 than was previously allowed. In previous years, 30% of the net profit was held back and 70% was distributed.

This proposal for appropriation of the result has not been recognised in the balance sheet as at 31 December 2022 or in the notes.

46. Provisions

Provisions can be broken down as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Provision for deferred tax liabilities	77.4	86.7
Provision for long-service awards	8.1	9.6
Provision for post-employment fringe benefits for non-active and retired employees	0.3	0.4
Provision for restructuring	1.6	1.4
Total provisions	87.4	98.1

For more detailed information about the other provisions, please see note 10 'Deferred tax liabilities', note 20 'Employee benefits' and note 21 'Other provisions' in the notes to the consolidated financial statements.

47. Trade and other payables

Trade and other payables can be broken down as follows:

<i>In millions of euros</i>	31 Dec. 2022	31 Dec. 2021
Trade payables	59.2	28.2
Tax liabilities	8.3	7.3
Other liabilities and accruals	416.8	153.8
Total trade and other payables	484.3	189.3

Tax liabilities relate to the wage tax payable and social security contributions.

The other liabilities and accruals consist mainly of interest payable, receivable invoices and security deposits received with a value of € 243.8 million (2021: € 36.9 million). Security deposits received are securities that customers of N.V. Nederlandse Gasunie have given the company or its group companies to cover the credit risk. We calculate a market interest charge for the security deposits.

Due to the current nature of the trade and other payables, the fair value approximates the carrying amount of these liabilities.

48. Liabilities to group companies

Intra-group positions arise from services provided by N.V. Nederlandse Gasunie to group companies and vice versa, from dividend payments within the group and from cash pool transactions carried out by the head of the group on behalf of the group companies as part of normal continuing operations.

No repayment schedule has been agreed for the liabilities to group companies; the liabilities have the characteristics of a current account facility.

In certain cases, Gasunie pays arm's length interest on the balance of the intra-group payables, based on a variable interest rate plus a surcharge appropriate to both Gasunie's risk profile and that of the group company in question.

49. Net revenue

N.V. Nederlandse Gasunie procures goods and services externally for its group companies and/or other participating interests. Furthermore, N.V. Nederlandse Gasunie is the legal employer of employees who work for Gasunie and its group companies. N.V. Nederlandse Gasunie's net revenue largely comprises sums charged to its group companies and/or other participating interests for the activities of its own personnel and/or the supply of externally procured goods and services. N.V. Nederlandse Gasunie acts as a principal with respect to its group companies.

50. Costs of subcontracted work and other external costs

Costs of subcontracted work and other external costs can be broken down as follows:

<i>In millions of euros</i>	2022	2021
Costs of subcontracted work and other external costs	213.2	149.1
Cost of network management	394.1	223.3
Total costs of subcontracted work and other external costs	607.3	372.4

The costs of subcontracted work and other external costs mainly comprise goods and services which N.V. Nederlandse Gasunie procures for providing services to its group companies, including GTS as the national transmission system operator for gas transport in the Netherlands. The cost of network operations mainly comprises the procurement of nitrogen production capacity and electricity and gas needed for gas transport. The increase in costs compared to 2021 is due mainly to higher energy prices.

51. Personnel expenses

Personnel expenses are as follows:

<i>In millions of euros</i>	2022	2021
Salary expenses	143.7	128.9
Social security expenses	15.9	13.3
Pension expenses	31.5	26.5
Total personnel expenses	191.1	168.7

The average number of employees in full-time equivalents totalled 1,465 in 2022 (2021: average of 1,337 full-time equivalents), 2 of whom (2021: 2) are stationed outside the Netherlands.

We have included the specification of the remuneration for members of the Executive Board and Supervisory Board in the notes to the consolidated financial statements under note 28 'Personnel expenses'.

52. Other costs

Other costs can be broken down as follows:

<i>In millions of euros</i>	2022	2021
Other costs	85.0	40.5
Total other costs	85.0	40.5

Other costs mainly comprise goods and services which N.V. Nederlandse Gasunie procures for providing services to its group companies, including GTS as the national transmission system operator for gas transport in the Netherlands. Other costs consist mainly of insurance costs and other material and personnel expenses.

53. Financial income and expenses

Financial income and expenses can be broken down as follows:

<i>In millions of euros</i>	2022	2021
Interest income and similar income	78.2	100.2
Total financial income	78.2	100.2
Interest expenses and similar expenses	-53.7	-64.9
Other financial expenses	-2.8	-2.3
Fair value movement for instruments measured at fair value	-16.4	-
Total financial expenses	-72.9	-67.2
Total financial income and expenses	5.3	33.0

Interest expenses and similar expenses primarily relate to the interest charged on non-current loans. The decrease in interest expenses can mainly be explained by the repayment of two loans in 2022 with relatively high interest rates compared to the refinancing rate in 2022.

Interest income and similar income mainly covers interest charged on loans to group companies and, in certain cases, interest on tax assessments. As a result of the lower interest expenses of N.V. Nederlandse Gasunie, interest expenses charged to group companies were also down. Interest income is based on the weighted average interest rate of N.V. Nederlandse Gasunie's non-current loan portfolio plus 12.5 basis points (2021: the same).

54. Income taxes

N.V. Gasunie heads the fiscal unity in the Netherlands for the purposes of corporate income tax and VAT. The tax expense in the statement of profit and loss can be broken down as follows:

<i>In millions of euros</i>	2022	2021
Corporate income tax for the financial year	156.0	33.7
Corporate income tax for the previous financial years	-4.2	2.2
Corporate income tax for the fiscal unity	151.8	35.9
Movement in deferred taxation	18.4	31.2
Tax expense fiscal unity	170.2	67.1
Allocated to Gasunie Transport Services B.V.	-166.2	-57.1
Allocated to Gasunie Assets B.V.	-1.7	-
Allocated to Maasvlakte Storage B.V.	-0.1	-
Total tax expense N.V. Nederlandse Gasunie	2.2	10.0

N.V. Nederlandse Gasunie and its wholly-owned Dutch group companies constitute a fiscal unity for Dutch corporate income tax purposes. No corporate income tax is allocated to these group companies, with the exception of to the group companies Gasunie Transport Services B.V., Gasunie Assets B.V. and Maasvlakte Storage B.V.

55. Other items

For information on other items in the company statement of financial position and statement of profit and loss, please see the notes to the consolidated financial statements.

56. List of group companies and participating interests

The list of group companies and other participating interests is as follows:

Company	Registered office	Interests as at
		31 Dec. 2022 31 Dec. 2021
<i>Subsidiaries</i>		
EemsEnergy Terminal B.V. *	Groningen	100% -
Gasunie BBL B.V.	Groningen	100% 100%
Gridwise Engineering & Services B.V.	Groningen	100% 100%
Gasunie New Energy B.V.	Groningen	100% 100%
Gasunie Waterstof Holding B.V.	Groningen	100% 100%
Hynetwork Services B.V.	Groningen	100% 100%
HyStock B.V.	Groningen	100% 100%
Gasunie Certification Holding B.V. *	Groningen	100% -
Gasunie LNG Holding B.V.	Groningen	100% 100%

Company	Registered office	Interests as at	
		31 Dec. 2022	31 Dec. 2021
Gasunie Transport Services B.V.	Groningen	100%	100%
Gasunie Energy Information Services B.V.	Groningen	100%	100%
EnergyStock B.V.	Groningen	100%	100%
Gastransport Noord-West Europa Holding B.V.	Groningen	100%	100%
Gastransport Noord-West Europa B.V.	Groningen	100%	100%
Gastransport Noord-West Europa Services 1 B.V.	Groningen	100%	100%
Gastransport Noord-West Europa Services 2 B.V.	Groningen	100%	100%
Gastransport Noord-West Europa Services 3 B.V.	Groningen	100%	100%
Gastransport Noord-West Europa Services 4 B.V.	Groningen	100%	100%
Gasunie Deutschland GmbH & Co. KG	Hannover, Germany	100%	100%
Gasunie Deutschland Verwaltungs GmbH	Hannover, Germany	100%	100%
Gasunie Deutschland Transport Services Holding GmbH	Hannover, Germany	100%	100%
Gasunie Deutschland Transport Services GmbH	Hannover, Germany	100%	100%
Gasunie Infrastruktur AG	Zug, Switzerland	100%	100%
Gasunie Warmte Holding B.V.	Groningen	100%	100%
LdM Beheer B.V.	Rotterdam	100%	100%
LdM C.V.	Rotterdam	100%	100%
LdM 1 B.V.	Rotterdam	100%	100%
LdM 2 B.V.	Rotterdam	100%	100%
LdM 3 B.V.	Rotterdam	100%	100%
LdM 4 B.V.	Rotterdam	100%	100%
LdM 5 B.V.	Rotterdam	100%	100%
LdM 6 B.V.	Rotterdam	100%	100%
LdM 7 B.V.	Rotterdam	100%	100%
WarmtelinQ Transport Services B.V.	Groningen	100%	100%
Vertogas B.V. ***	Groningen	-	100%
Gasunie CC(U)S Holding B.V.	Groningen	100%	100%
Gasunie Rotterdam CC(U)S B.V.	Groningen	100%	100%
GroRoCo LP B.V.	Groningen	100%	100%
GroRoCo Land LP B.V.	Groningen	100%	100%
GroRoCo Zee LP B.V.	Groningen	100%	100%
Maasvlakte Storage B.V.	Groningen	100%	100%
Gasunie Assets B.V.	Groningen	100%	100%
<i>Joint operations</i>			
BBL Company V.o.f.	Groningen	60.0%	60.0%
European Gas Pipeline Link (EUGAL) BTG	Kessel, Germany	16.5%	16.5%
<i>Joint ventures</i>			
Biogas Netwerk Twente B.V.	Almelo	50.0%	50.0%
Demonstratie Faciliteit Super Kritische Water Vergassing (SKW) Alkmaar B.V.	Alkmaar	35.0%	35.0%

Company	Registered office	Interests as at	
		31 Dec. 2022	31 Dec. 2021
EemsGas Asset Company B.V. **	Amsterdam	50.0%	-
DEUDAN - Deutsch/Dänische Erdgastransport GmbH	Handewitt, Germany	75.0%	75.0%
DEUDAN - Deutsch/Dänische Erdgastransport GmbH & Co. KG	Handewitt, Germany	33.4%	33.4%
Gate terminal C.V.	Rotterdam	50.0%	50.0%
Gate terminal Management B.V.	Rotterdam	50.0%	50.0%
German LNG Terminal GmbH	Hamburg, Germany	100.0%	33.3%
NETRA GmbH Norddeutsche Erdgas Transversale	Emstek/Schneiderkrug, Germany	50.0%	50.0%
NETRA GmbH Norddeutsche Erdgas Transversale & Co. KG	Emstek/Schneiderkrug, Germany	44.1%	44.1%
Porthos System Operator B.V.	Rotterdam	50.0%	50.0%
Porthos Offshore Transport and Storage GP B.V.	Rotterdam	50.0%	50.0%
Porthos CO2 Transport and Storage GP B.V.	Rotterdam	33.3%	33.3%
Porthos Onshore Transport GP B.V.	Rotterdam	50.0%	50.0%
Porthos Offshore Transport en Storage C.V.	Rotterdam	50.0%	50.0%
Porthos CO2 Transport en Storage C.V.	Rotterdam	33.3%	33.3%
Porthos Onshore Transport C.V.	Rotterdam	50.0%	50.0%
VertiCer B.V. *	Arnhem	50.0%	-
<i>Associates</i>			
Beheer Afsprakenstelsel B.V.	Amersfoort	25.0%	25.0%
Trading Hub Europe GmbH	Berlijn, Germany	20.0%	20.0%
<i>Other participating interests</i>			
Energie Data Services Nederland (EDSN) B.V.	Arnhem	12.5%	12.5%
PRISMA European Capacity Platform GmbH	Leipzig, Germany	12.7%	12.7%
Nord Stream AG	Zug, Switzerland	9.0%	9.0%
SCW Systems B.V.	Schoorl	4.9%	5.5%

* Founded in 2022

** Acquisition in 2022

*** At year-end 2022 the shares of Vertogas B.V. were held by the new joint venture VertiCer B.V. On 1 January 2023 Vertogas B.V. was merged with VertiCer B.V. VertiCer B.V. is the amalgamated (acquiring) legal entity and Vertogas B.V. is the amalgamating legal entity ceasing to exist. For more information please see note 7 'Investments in joint ventures'.

Signature

Signature

The Executive Board,
Mr J.J. Fennema*, chair
Ms J. Hermes*
Mr B.J. Hoevers
Mr U. Vermeulen

Supervisory Board,
Mr P.J. Duisenberg, chair
Mr D.J. van den Berg
Mr J. Meier
Ms A.L.M. Mutsaers
Mr A.S. Visser
Ms C. Wielinga

Groningen, 7 March 2023

*Director under the articles of association

Annual report 2022

Other information



Other information

Provisions of the articles of association governing profit appropriation

In line with Article 39, paragraph 2 of the articles of association, the profit in the financial year is at the free disposal of the General Meeting of Shareholders.

The company may make distributions to shareholders and other persons entitled to receive part of the distributable profit only insofar as its equity exceeds the total issued share capital plus the reserves that must be maintained by law.

Independent auditor's report

The independent auditor's report with respect to the consolidated and company financial statements 2022 is included in the annual report in Dutch. Refer to [Controleverklaring van de onafhankelijke accountant](#).

Assurance report of the independent auditor

The assurance report of the independent auditor with respect to the 2022 Sustainability Information is included in the annual report in Dutch. Refer to [Assurancerapport van de onafhankelijke accountant](#).

Annual report 2022

Additional information

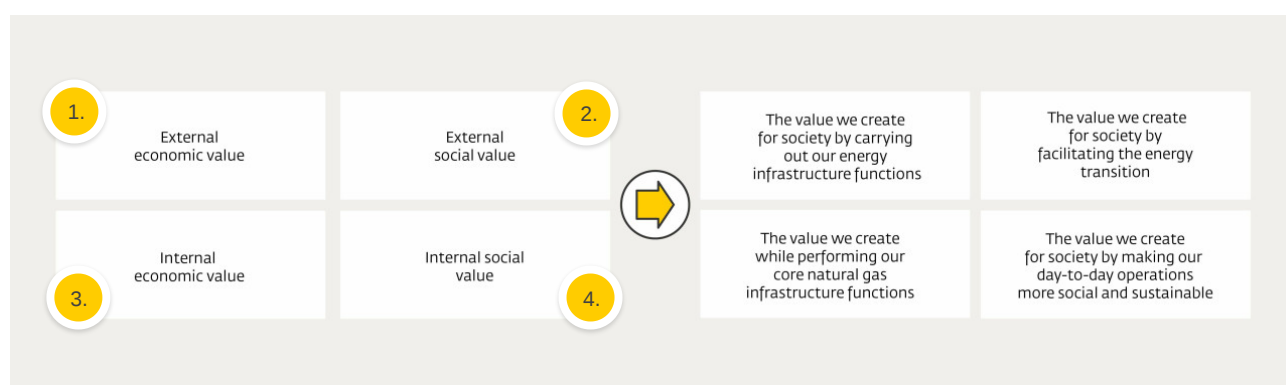


18 Additional information

About this report

Value creation

Four types of value creation* help us bring to light the impact we as a company have on our stakeholders. They provide our Executive Board and Supervisory Board with guidance when taking strategic decisions and when assessing these decisions later.



1. External economic value creation

External economic value creation focuses on the financial value that can be derived through the business operations of organisations that are part of the same value chain.

3. Internal economic value creation

Internal economic value is created when the company adds financial value to its own business operations through its business acumen, cost efficiency and risk appetite.

2. External social value creation

External social value creation concerns the social aspects of doing business, on ethical business practices, environmental aspects and employment.

4. Internal social value creation

Internal social value creation focuses mainly on internal aspects of the business such as employee satisfaction, workplace safety, company culture, leadership style and training programmes.

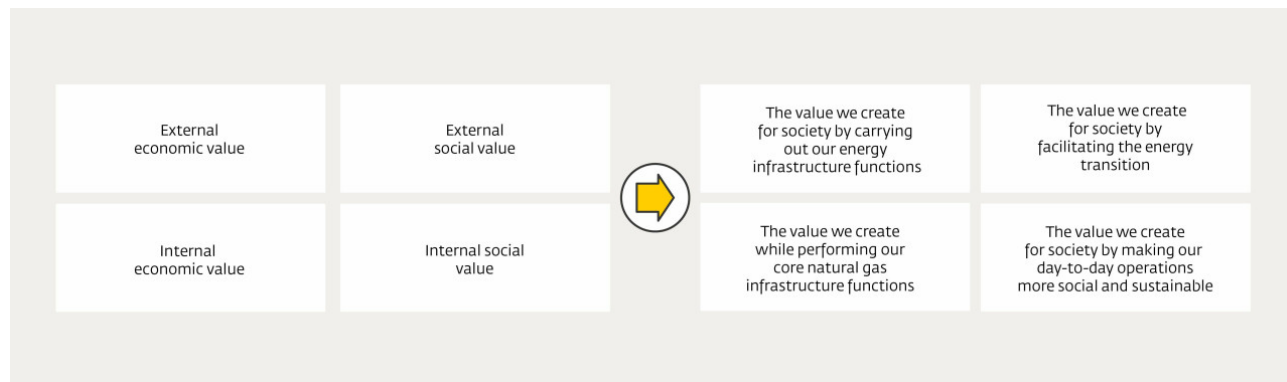
* Model based on that of Prof Mijntje Lückérath-Rovers

Positive and negative impacts

We affect our stakeholders through the different types of value we create. This impact can be both positive (net value added to society) and negative (net value reduction in society). The table below shows the impact that Gasunie, on its own and together with other parties in the value chains in which we operate, have on the economy, people and the environment. For more information we refer the reader to our value creation model.

	Financial capital	Manufactured capital	Intellectual capital	Human capital	Social capital	Natural capital
Positive impact	Payments to suppliers					
	Dividends paid	Value creation business end users			Value of infrastructure beyond the immediate user	
	Payments to employees	Welfare value creation households	Change in value of intangible assets	Worker development	Contribution to diversity and inclusion	
	Taxes	Value creation of tangible assets	Technological development	Welfare effects of having work	Reputation of the organization	Climate change mitigation
Negative impact	Payments from shippers	Expenditure on digital security		Direct environmental effects	Contribution to discrimination	Other environmental impacts
		Value loss end users due to interruptions		Work-related dropouts and accidents	Contribution to inequality in society	Depletion of fossil resources
		Value procurement of goods		Value of work	Human rights violations in the value chain	Scarce use of materials
				Indirect environmental effects		Contribution to air pollution
						Contribution to climate change
	Financial capital	Manufactured capital	Intellectual capital	Human capital	Social capital	Natural capital

As a company, we derive our social licence to operate through creating value. Where companies previously mainly concentrated on detailing how they created economic value like profit and dividend, society is increasingly demanding to be given insight into the creation of value that cannot be measured in financial terms, or at least not directly. Accordingly, in this annual report we distinguish four types of value creation*:



* Model derived from that of Prof. Mijntje Lückerath-Rovers

By taking this approach to presenting our results, we are able to provide insight into the role and impact we, as a company, have on our stakeholders and, so doing, create a better picture of the interaction between society and our company.

Reporting policy

The financial, operational and social information included in this annual report has been prepared on the basis of the:

- [International Financial Reporting Standards \(IFRS\)](#)
- [Revised Dutch Corporate Governance Code 2016](#)
- [GRI standards reporting guidelines](#) (2021)
- [EU Directive on Disclosure of Non-Financial Information and Information on Diversity](#)
- [EU Taxonomy Regulation](#) and delegated acts
- Relevant provisions of the Dutch Civil Code.

Transparency

We aim to be transparent about our objectives and how we intend to achieve them. Accordingly, in our annual report we elaborate on our activities and results, explaining not only what went well, but also what did not go so well and which dilemmas and uncertainties we faced in the process of creating internal and external economic and social value.

We review our annual report in light of the criteria of the [Dutch Transparency Benchmark](#) (TB) and we aspire to remain among the front runners (Top 20 ranking). The criteria in the TB were inspired by such sources as the Sustainable Development Goals, the EU Directive on non-financial information (EU NFI Directive), the OECD Guidelines for Multinational Enterprises, the Dutch Corporate Governance Code, the Natural Capital Protocol, and the Climate-related Financial Disclosures.

In November 2022, the European Union adopted the Corporate Sustainability Reporting Directive (CSRD). Under this directive, from the 2024 financial year we are required to report on the impact of our activities on people and the environment. Over the coming year we will prepare for the implementation of the CSRD so that for fiscal year 2024 we can report in accordance with the CSRD guidelines.

Scope

In this report we report on the results of Gasunie and its subsidiaries over the 2022 financial year, which ended on 31 December 2022. Note 56 'List of group companies and participating interests' contains a list of all the group companies included in the consolidation. We also include details on acquisitions and divestments in the 2022 annual report. For more information with regard to consolidation, we refer the reader to the 'Consolidation principles' section of the financial statements.

Gasunie subsidiary GTS is included in the consolidated results, but also publishes its own annual report.

Due to differences in laws and regulations, the Netherlands and Germany do not always record information on matters like safety, health, the environment and employment conditions in the same way. Whenever possible, information from the Netherlands and Germany has been combined; where this is not possible, this is presented separately. We do not include non-consolidated participating interests when compiling the information regarding these topics.

Verification and publication

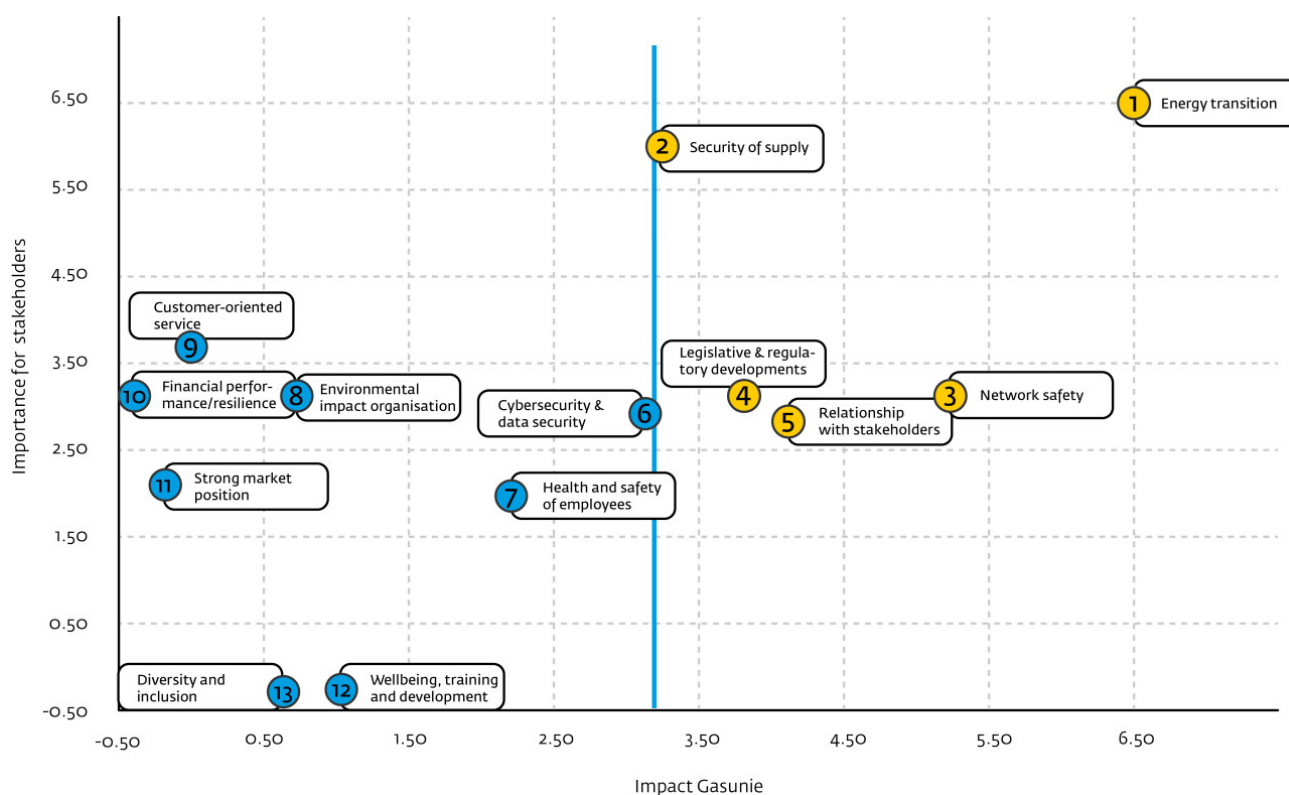
The annual report is prepared by the Executive Board and the financial statements it contains are audited by an external auditor. After taking note of the external auditor's opinion and the advice from the Audit Committee, the Supervisory Board advises the General Meeting of Shareholders to adopt the annual report and financial statements without amendment.

The external auditor also assesses the sustainability information included in the annual report. The assurance report from the independent auditor is provided in the 'Other information' section of the annual report. We have this sustainability information assessed because it is important to us that the user of this report be provided with at least 'limited assurance' regarding this information. We are working on ultimately being able to obtain 'reasonable assurance' on our sustainability information, as is already the case for our financial information.

What matters to our stakeholders

Many people and organisations have an interest in Gasunie's activities, including grid users, suppliers, consortium partners, financiers, government bodies, Gasunie employees and local communities. Every other reporting year (in the odd years), we ask these stakeholders to make a ranking of the material topics, that's to say the topics which, in their view, Gasunie should report on in its annual report.

In the most recent survey, we asked stakeholders to rank 13 topics by relevance of these topics to themselves and to Gasunie. From the results of the survey we arrived at the following materiality matrix.



The results of the materiality analysis have been evaluated and approved by the Executive Board and the Supervisory Board.

For a detailed description of the materiality analysis performed, please see the [relevant section](#) in our 2021 annual report.

The new 2021 GRI guidelines that will apply to reports published after 1 January 2023 define material topics as topics where the organisation can have the greatest economic, environmental, and social impact, which for Gasunie leads to the following prioritisation of material topics:

1. Energy transition
2. Safety of the network
3. Relationship with stakeholders and local communities
4. Developments in laws and regulations
5. Security of supply

We have not used the above numbering of topics in this annual report, so as to keep the numbering of topics in this annual report the same as in the 2021 annual report.

In the Connectivity Table, we show the correlations between the material topics and the risks we are facing, our stakeholder groups, our KPIs and our results, our social impact and our sustainability goals.

Communication with stakeholders

Gasunie has a large number of stakeholders with different interests. Our stakeholders range from customers, suppliers and strategic partners to governments, employees and local residents. As a company, we are in constant dialogue with these internal and external stakeholders. We keep them as up to date as possible on our positive and negative value creation, the risks and the opportunities that we see, and the impact of all of this on our stakeholder groups.

Customers

To maintain our standing among Europe's best energy infrastructure companies in the future, we offer services that meet the needs of our customers and are in line with developments in the energy market. We do so by informing our customers well and by responding to situations that we identify through touchpoints with customers and other stakeholders.

In the Netherlands, GTS engages in dialogue through market consultation and information meetings, conversations with representatives of customer groups (representative organisations) and our shipper customer desk. In Germany, GUD is not the only gas transmission network operator, and therefore often teams up with other gas TSOs for market consultations and information provision. The GUD website provides a list of all points of contact that are relevant to shippers.

Complaints to GTS and GUD

In 2022, GTS received no complaints from shippers. At GUD, discussions with shippers about controversial issues such as capacity provision in 2022 were, at all times, conducted in a constructive, solution-focused manner.

Local residents

As part of its Vision 2030 programme, Gasunie is constructing ever more new energy infrastructure. Given that having sufficient support from the local community is key to us being able to carry out these projects quickly and efficiently, we put a lot of energy into an open and constructive dialogue with this stakeholder group. In the year under review, this applied specifically to our [HyStock](#) and [WarmtelinQ](#) projects.

WarmtelinQ and the Province of Zuid-Holland have organised various activities to get people involved in the decision-making process for the Rijswijk–Leiden expansion. As part of this [participation process](#), there have been stakeholder meetings with local residents, meetings on specific topics with local energy corporations and nature, environment and countryside organisations, an online survey, a public and council webinar, various regional meetings, and participation in a [documentary series](#) by Dutch regional broadcaster Omroep West.

Media

Due to our active role in the energy transition, journalists' interest in Gasunie has increased considerably in recent years. The war in Ukraine and the associated disruptions in the supply and price of natural gas have more than doubled the number of media inquiries we receive. We expanded our communications department again in 2022.

Government bodies, regulatory authorities, industry associations

Government stakeholders with whom we maintain contact include:

- European Commission
- European Parliament
- Dutch Ministry of Finance (our shareholder)
- Ministry of Economic Affairs and Climate Policy (Netherlands) and Federal Ministry for Economic Affairs and Climate Action (Germany)
- Regulatory authorities Authority for Consumers & Markets (Netherlands) and Bundesnetzagentur (Germany)
- Provincial authorities

In addition, Gasunie has identified twelve strategic stakeholders, with whom we hold regular consultations at management level. For our contacts with government bodies and regulatory authorities, both at European and national level, bilateral communication on a regular basis is the most common.

We also participate in consultation platforms organised by government bodies and industry associations. The meetings of these platforms are sometimes organised on a regular basis throughout the year; however, it is also possible that a platform will only operate for a certain period (for example, for the duration of a policy process of the Ministry of Economic Affairs and Climate Policy). Examples of platforms and organisations are:

European

- Clean Hydrogen Alliance
- European Hydrogen Backbone (we were one of the initiators)
- ENTSO-G Gas for Climate

National

- Netbeheer Nederland
- Energie Nederland
- Nederlandse Vereniging voor Duurzame Energie (Netherlands association for sustainable energy)
- VNO-NCW, KVGn, NEC, Greenpeace, and others

For many matters, stakeholder communication plays a role at both European and national level given that many laws and policies relate to EU laws, regulations and directives on which the Dutch national law is based. A few examples are:

- Market regulation on hydrogen and natural gas
- Scaling up the production of renewable energy (or in a broader sense, of renewable, low-carbon gas value chains)
- Sustainable financing
- CO₂ transport (Ministry of Economic Affairs and Climate Policy)
- Heat transport (Ministry of Economic Affairs and Climate Policy)
- Security of supply (Ministry of Finance)

We also engage in ad hoc stakeholder management activities to address problems directly. This includes forming coalitions with other individual market players and infrastructure companies when we have specific issues to address.

And lastly, we engage in stakeholder communication by:

- providing our responses to government consultations
- organising events.
- our social channels and newsletters.

Procurement

Procurement plays an important role in achieving part of the objectives of the [Gasunie Green Deals](#). We meet regularly with other organisations in the following platforms and forums:

- [Inkoop Platform Noord-Nederland](#) (IPNN)
- Electronics Watch
- PIANOO/[Beter Aanbesteden](#)/Kennisoverleg Aanbestedende Diensten
- Bouwend Nederland
- [Groene Netten](#)
- [NEVI](#)
- [Vereniging Nederlandstalige SAP Gebruikers](#) (VNSG)

Parliamentary inquiry

In 2022, Gasunie cooperated extensively with the parliamentary committee of inquiry on natural gas extraction in Groningen. This committee was set up to examine the decision-making regarding natural gas extraction, earthquakes, claims handling, and structure reinforcement in the Province of Groningen. On 25 April, the committee made a working visit to Gasunie's headquarters and to our nitrogen plant in Zuidbroek. On 3 October, during the public hearings, Gasunie Executive Board member Bart Jan Hoevers was examined by the parliamentary committee of inquiry. In February 2023, the parliamentary committee of inquiry presented its report.

Sanctions against Russia

Gasunie abides fully by European and Dutch sanctions imposed against Russia. Given the major social and economic consequences for society, Gasunie adheres to the Dutch government's policy on gas imports from Russia. Operational contacts with Russian companies have been reduced to the minimum level required to facilitate security of supply in the Netherlands, Germany and the rest of Europe through our infrastructure. Gasunie has frozen all non-operational relations and contact with Russian companies such as Gazprom. We closed our office in Moscow.

Report of the Works Council

At the start of 2022, we envisioned a different route than that we have travelled in the past year. The route has been altered drastically by the terrible war in Ukraine and the failure of the Nord Stream pipeline connection. 'Security of supply' has abruptly moved up to the top of the agenda. As a company, we have done our best to act effectively in this matter.

However, besides directing our attention to the import of LNG and the drastic changes in gas flows, we also had to keep our focus on our sustainability ambitions. The result is tension in the Reliability-Affordability-Sustainability triangle, while the regular process needed to continue as well. The Works Council handled numerous requests for advice and requests for consent, elections were held, the new Works Council members were onboarded, and meetings with employees were held. For each request for advice or consent, we weigh up the interests and assess the extent to which the matter concerning which our advice or consent is being requested contributes to our strategic pillars, ambitions and objectives. We saw that the workload in 2022 was considerable and expect to have to handle even more in 2023.

Requests for advice and consent

This year, the Works Council handled a variety of requests for advice and consent. Fortunately, we had experts with experience we could turn to. Furthermore, with meetings held remotely in whole or in part (hybrid working) – one of the few positive outcomes of the Covid-19 period – we were able to make the best use of moments of contact.

As the Works Council, we note that it is becoming increasingly important to be brought in on 'envisioned decisions and changes' early on given that the weather can suddenly change along the way and decisions need to be made in the short term. If the Works Council is updated in good time, we can act efficiently and effectively.

The talks we were able to arrange with employees – fortunately again often on location – gave us more insights and a wider understanding. These insights help us, as the Works Council, to get a complete picture of the impact of the requests for advice and consent under discussion on both the company and its employees. This also enables us to better advise the members of the Executive Board.

The most notable of the requests for advice/consent were:

- the merger between Vertogas and CertiQ: VertiCer, which came out of this merger, is now *the* place in the Netherlands to go to get Guarantees of Origin for all sustainable energy carriers: electricity, heat, green gas and green hydrogen
- the design and start-up of EemsEnergyTerminal and German LNG facilities, both of which contribute in particular to strategic pillar 1: Security of supply
- 'SamenSterk' and other requests for advice within (what is now called) the Operation Assets department, all aimed at making the company more agile and ready to handle new energy carriers and the associated transition
- making the commuting allowance future-proof and aligning it with the travel time under the social plan
- formally setting up the Hydrogen Business Development department so that all developments in the hydrogen domain can be carried out in a more structured manner.

Works Council and our Supervisory Board

Last year we started the search for a new member for the Supervisory Board to succeed Dirk Jan van den Berg. When drawing up the profile the focus was specifically on 'Strategic orientation' and 'Collaboration and influencing' the qualities a candidate must possess if they are to contribute to the role we aspire to in the implementation of the energy transition on the Dutch and European playing field. The candidate preferably also has experience working at an organisation in a state of flux. The first interviews will be held in early 2023.

This year, the Works Council, Supervisory Board and Executive Board jointly discussed a number of matters of topical importance within the company. This allowed us to get to know each other better and to share our insights and roles.

Works Council election in 2022

The new Works Council was appointed on 1 April, increasing on that date from 15 to 17 members. We are pleased that several members have offered themselves for re-election. As a result, continuity was not compromised and we were able to quickly handle the first requests for advice/consent. The handover was well arranged and complete. We would like to take this opportunity to extend our thanks to all departing members for their commitment and effort over the last few years.

At Gasunie Germany the election for the German Works Council (the 'Betriebsrat') also took place this reporting year. To get to know each other better, a delegation visited and we found that we face the same challenges. The visit ended with a tour of the Central Command Post and we agreed that we would regularly touch base with each other.

A last word

Gasunie endeavours to be a company with which it is pleasant to do business and where people like to work, and we as the Works Council endorse that wholeheartedly. We must not only focus on new developments but also keep an eye on activities already ongoing. We must continue to look for the best for the company and its ever important employees. Because without them we would be nowhere.

Our carbon emissions in detail

The table below shows the calculation of the CO₂ equivalents for 2022 for the largest sources of emissions, broken down by country (the Netherlands and Germany). The conversion factor for the electricity consumption is based on the CO₂ emissions factors list. We have derived the conversion factor for the network losses from the IPCC Fifth Assessment Report 'Climate Change 2014' (Direct Global Warming Potential, Methane, time horizon 100 years = 28).

From consumption to CO ₂ equivalents	Unit	Consumption		Conversion	Total kilotonnes		Greened through
					CO ₂ e		GOs (CO ₂ e)
Scope 1							
Methane emissions	tonnes of methane	3331	1491	28 kg CO ₂ /kg CH ₄	93.3	41.8	-
Gas consumption in buildings and installations	million kWh	445	886		85	157.3	-
Transport (own)	fuel	-	-		2.4	0.1	-
Other		-	-		1	-	-
Subtotal					181.7	199.2	-
Scope 2							
Electricity consumption GTS (NL)	million kWh	590	-	0,45 kg CO ₂ /kWh	266.4	-	266.4
Electricity consumption Participating interest (NL)	million kWh	159	-	0,45 kg CO ₂ /kWh	72.2	-	72.2
Heat consumption GTS	TJ	184	-		8.8	-	-
Electricity consumption GUD	million kWh	-	10	0 kg CO ₂ /kWh	-	-	-
Electricity usage in lease cars	million kWh	0.4	-	0 kg CO ₂ /kWh	0	-	0
Subtotal					347.4	-	338.6
Scope 3							
Procurement of N ₂	million kWh	125	-	0,45 kg CO ₂ /kWh	56.9	-	-
Transport (third parties)	fuel				0.8	0.1	-
Subtotal					57.8	0.1	-
Total scope 1+2+3					586.9	199.3	338.6
Total scopes market-based	kilotonnes CO ₂ e						448.0

* Since Gasunie uses the operational control method for GHG, emissions resulting from the sabotage of the Nord Stream pipelines were not included in GHG Scope 3.

** Due to the absence of an exact conversion factor, Gasunie calculated CO₂e emissions relating to the procurement of nitrogen from nitrogen producer Air Products Pernis using the same conversion factor as used for the calculation of nitrogen production in Ommen. We have been using the conversion factor for nitrogen production in Ommen as the basic principle ever since we started reporting, and, in line with the 'Best practice on industrial gases from July 2015', the conversion factor we use for Air Products Pernis stays within the range. It concerns 54.7 kilotonnes CO₂e emissions of the 56.9 kilotonnes CO₂e emissions.

Our other environmental impacts

Our NO_x emissions

Our NO_x emissions over the past five years were as follows.

No _x emissions	Netherlands	Germany
2022	132	138
2021	83	69
2020	71	79
2019	59	42
2018	95	29

Our overall NO_x emissions in 2022 increased compared to 2021. This was mainly the result of the compressor stations in the Germany being in operation more often in 2022 compared to 2021 due to an increase in the volume of gas transported and changing gas flows. In the Netherlands, less use was made of the compressor stations due to a decrease in the transmitted volumes of natural gas. In addition, where we had the choice, we used our natural gas driven compressors less often than our electric compressors, which do not emit NO_x. End users consumed less natural gas in 2022 than in 2021, which resulted in lower NO_x emissions from the boilers in the gas receiving stations. Our EemsEnergyTerminal, on the other hand, emitted high amounts of NO_x because it was not yet technically possible to connect the facility to the onshore electricity grid. This resulted in a significant increase in NO_x emissions in the Netherlands. Connecting the facility to the onshore grid is scheduled to be done early in 2023.

Environmental irregularities

We keep records of environmental irregularities in order to learn from them and, where possible, take effective action to limit environmental damage in the future. The number of environmental irregularities reported for Gasunie in the Netherlands and Germany was:

Environmental incidents	2022	2021	2020
Non-compliance with environmental laws and regulations	2	3	0
Irregularity with respect to the environmental management system	0	1	0
Environmental incidents	49	38	27
Third-party nuisance complaints	90	125	108
Total	141	167	135

A large portion of the environmental irregularities are reports from third parties about smelling gas or about minor leaks. There were fewer complaints from third parties in 2022 compared to previous years. The number of reports from third parties in which, on inspection by Gasunie, no irregularity was found was lower in 2022 compared to 2021 (32 versus 45 respectively). In 2022, a drop in the noise-related complaints and reports of minor natural gas leaks was especially noticeable.

The incidents of non-compliance with environmental laws and regulations concerned the following:

- A container of natural-gas condensate at the Spijk compressor station was not stored in accordance with the requirements.
- An above-ground storage tank at the Sloten metering and regulating station in Amsterdam was found to be in violation of several requirements under regulation PGS 31, which covers occupational safety, environmental protection and fire prevention in storage facilities.

As in 2021, Gasunie received no significant environmental fines in 2022.

EU Taxonomy

The European Union aims to be climate-neutral by 2050. In 2018, the EU Action Plan for Financing Sustainable Growth was adopted for this purpose. This action plan contains three main objectives:

- reallocation of capital to more sustainable financing;
- risk management that takes ESG criteria into account throughout the process;
- reporting and external accountability on sustainable financing.

One of the steps to achieve these objectives is to set up an EU classification system for sustainability activities, the EU Taxonomy Regulation. The current taxonomy has six environmental objectives:

- climate change mitigation
- climate change adaptation
- sustainable use and protection of water and marine resources
- transition to a circular economy
- pollution prevention and control protection and restoration of biodiversity and ecosystems.

Undertakings that are subject to the EU Non-Financial Reporting Directive (Directive 2014/95/EU) are required to, starting from reporting year 2021, disclose in their annual report the proportion of 'taxonomy eligible' and 'taxonomy non-eligible' economic activities that can contribute to the environmental objectives of climate change mitigation and adaptation in their total revenue, capital expenditure (CAPEX) and operational expenditure (OPEX).

Taxonomy eligible activities	Revenue 2022		CAPEX 2022		OPEX 2022	
	In millions of euros	% of the total	In millions of euros	% of the total	In millions of euros	% of the total
Climate change mitigation						
4.12 Storage of hydrogen	-	0.0%	0.3	0.0%	2.9	0.3%
4.14 Transmission and distribution networks for renewable and low-carbon gases	3.0	0.1%	19.2	1.9%	15.5	1.5%
4.15 District heating/cooling distribution	-	0.0%	66.4	6.6%	4.8	0.5%
5.11 Transport of CO2	-	0.0%	42.4	4.2%	9.4	0.9%
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	-	0.0%	-	0.0%	1.1	0.1%
8.2 Data-driven solutions for GHG emissions reductions	2.1	0.1%	0.5	0.1%	0.2	0.0%
9.1 Close to market research, development and innovation	-	0.0%	-	0.0%	9.0	0.9%
Total taxonomy eligible activities	5.1	0.2%	128.8	12.9%	42.8	4.3%
Total taxonomy non-eligible activities	2,252.5	99.8%	872.6	87.1%	961.1	95.7%
Total	2,257.6	100.0%	1,001.4	100.0%	1,003.9	100.0%

For a description of the taxonomy eligible activities listed above, we refer the reader to Annexes I and II of the Commission Delegated Regulation. All of our eligible activities under the taxonomy are allocated to activities associated with the climate change mitigation objective. There is therefore no question of allocating multiple climate objectives to one and the same activity.

Furthermore, the funding obtained through the issue of our sustainability-linked bond in 2022 was not immediately used to finance the economic activities mentioned above. The proceeds from the sustainability-linked bond are part of the financing of Gasunie as a group. This way, qualifying economic activities are not accounted for more than once as part of our sustainability KPIs.

Our taxonomy-eligible projects progressed further in 2022 and, as a result, amounts relating to taxonomy-eligible economic activities increased compared to 2021. In particular, our CAPEX and OPEX for our investments in heat (activity 4.15) and our investments in CO₂ storage, transport and reuse (activity 5.11) have increased. Additionally, our investments in hydrogen (activity 4.12 and 4.14), our investments in green gas (activity 4.14) and the studies that have been carried out with regard to the energy transition (activity 9.1) are eligible under the taxonomy. For the sake of comparison, we have included our investments for the year 2021 in the table below.

Taxonomy eligible activities	Revenue 2021		CAPEX 2021		OPEX 2021	
	In millions of euros	% of the total	In millions of euros	% of the total	In millions of euros	% of the total
Climate change mitigation						
4.12 Storage of hydrogen	-	0.0%	0.2	0.1%	3.5	0.6%
4.14 Transmission and distribution networks for renewable and low-carbon gases	2.5	0.1%	16.9	4.8%	14.1	2.3%
4.15 District heating/cooling distribution	-	0.0%	18.4	5.2%	5.2	0.8%
5.11 Transport of CO ₂	-	0.0%	1.0	0.3%	7.6	1.2%
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	-	0.0%	-	0.0%	0.6	0.1%
8.2 Data-driven solutions for GHG emissions reductions	2.0	0.1%	0.5	0.1%	0.9	0.1%
9.1 Close to market research, development and innovation	-	0.0%	-	0.0%	7.6	1.2%
Total taxonomy eligible activities	4.5	0.3%	36.9	10.5%	39.3	6.3%
Total taxonomy non-eligible activities	1,381.8	99.7%	313.3	89.5%	584.0	93.7%
Total	1,386.3	100.0%	350.2	100.0%	623.3	100.0%

Starting from reporting year 2022, we are including more in-depth information on this topic. As of this reporting year, Gasunie must report which portion of its activities are 'taxonomy aligned'. For an economic activity carried out by Gasunie to be considered 'taxonomy eligible' under the EU Taxonomy Regulation, it must make a substantial contribution to one of the six environmental objectives stated above. For the activity to qualify as 'taxonomy aligned', it must also demonstrably do no significant harm to any of the other five environmental objectives and must meet minimum safeguards regarding human rights, labour standards, etc. The table below shows the extent to which our economic activities contribute to the environmental objectives. We explain how we conducted our analysis under 'Basis for preparation' below.

Taxonomy aligned activities	Revenue 2022		CAPEX 2022		OPEX 2022	
	In millions of euros	% of the total	In millions of euros	% of the total	In millions of euros	% of the total
Climate change mitigation						
4.12 Storage of hydrogen	-	0.0%	-	0.0%	-	0.0%
4.14 Transmission and distribution networks for renewable and low-carbon gases	-	0.0%	19.0	1.9%	0.5	0.0%
4.15 District heating/cooling distribution	-	0.0%	66.4	6.6%	4.8	0.5%
5.11 Transport of CO2	-	0.0%	42.2	4.2%	1.2	0.1%
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	-	0.0%	-	0.0%	-	0.0%
8.2 Data-driven solutions for GHG emissions reductions	2.1	0.1%	0.5	0.1%	0.1	0.0%
9.1 Close to market research, development and innovation	-	0.0%	-	0.0%	5.6	0.6%
Total taxonomy aligned activities	2.1	0.1%	128.2	12.8%	12.1	1.2%
Total taxonomy non-aligned activities	2,255.5	99.9%	873.2	87.2%	991.8	98.8%
Total	2,257.6	100.0%	1,001.4	100.0%	1,003.9	100.0%

The projects that meet the criteria set out in the EU Taxonomy Regulation broadly align with the definition of taxonomy eligible projects. However, for some expenditures/expenses we cannot efficiently demonstrate that we comply with the requirements under the regulation. This mainly concerns smaller projects/sub-projects involving low-emission means of transport (activity 6.5) and the studies carried out in 2022 (activity 9.1).

No investments that are still in the project phase are included as part of the activities that comply with the EU Taxonomy, though we do aim to meet the criteria when it comes to these investments. In this regard, we will be carrying out the requisite studies at a later stage to show that these activities do no significant harm to any of the other environmental objectives. The investments that will meet the criteria only in the longer term are not included in the table above. For 2022 this concerns an amount of € 0.6 million CAPEX and € 24.2 million OPEX.

Basis for preparation

The above KPIs have been drawn up in accordance with the reporting requirements as specified in Article 8 of the Commission Delegated Regulation supplementing Regulation (EU) 2020/852. These reporting requirements are further explained in Annexes I and II of said delegated regulation. The basis for the KPIs in the table above is the consolidated financial statements of N.V. Nederlandse Gasunie.

Revenue KPI

We calculated the share of taxonomy eligible economic activities in our total revenue by dividing the revenue from taxonomy eligible activities (numerator) by the total net revenue (denominator) as specified in the consolidated statement of profit and loss for 2022. The accounting policies used with regard to net revenue are also explained in more detail in the consolidated financial statements. In summary, the total revenue consists of the following amounts:

<i>In millions of euros</i>	2022	2021
Regulated services	1,882.3	1,223.3
Non-regulated and/or exempt services	375.2	163.0
Total revenue	2,257.6	1,386.3

CAPEX KPI

We calculated the share of taxonomy eligible economic activities in our CAPEX by dividing the CAPEX of taxonomy eligible economic activities (numerator) by the total CAPEX (denominator). The numerator includes investments in tangible fixed assets and investments in joint ventures carrying out taxonomy eligible economic activities. We explain these financial statements items in note 5 and note 7 to the 2022 consolidated financial statements.

In the financial statements, we deduct contributions from third parties (including grants) from the investment amounts in accordance with the valuation principles for tangible fixed assets. For 2022, the third-party contributions relating to taxonomy eligible economic activities amount to € 77.8 million (2021: € 18.4 million) and zero to the taxonomy non-eligible activities (2021: € 0.1 million). In the table above, the CAPEX has been adjusted for contributions from third parties. In summary, the total CAPEX consists of the following amounts:

<i>In millions of euros</i>	2022	2021
Investments in tangible fixed assets	911.4	311.8
Investments in joint ventures	90.0	19.9
Corrected for third-party contributions (including grants)	-	18.5
Total CAPEX	1,001.4	350.2

OPEX KPI

We calculated the share of taxonomy eligible economic activities in our OPEX by dividing the OPEX of taxonomy eligible activities (numerator) by the total OPEX (denominator). According to the EU taxonomy, the OPEX consists of all the direct and indirect costs 'necessary to ensure the continued and effective functioning of [the] assets'. As an energy infrastructure company, we have adopted the principle that the total costs excluding depreciation costs are required for this. The total expenses consist of personnel expenses and other costs less capitalised expenses as specified in the consolidated statement of profit and loss for 2022. For 2022, the third-party contributions relating to taxonomy eligible economic activities amount to € 14.8 million (2021: zero). In the table above, the OPEX has been adjusted for contributions from third parties. In summary, the total OPEX consists of the following amounts:

<i>In millions of euros</i>	2022	2021
Capitalised expenses	-71.9	-61.6
Personnel expenses	221.9	198.3
Other costs	853.9	486.6
Total OPEX	1,003.9	623.3

Criteria for selection of economic activities that comply with the criteria of the EU Taxonomy Regulation

We carried out an analysis of the KPI, CAPEX KPI and OPEX KPI revenue above to determine which economic activities meet the criteria of the EU Taxonomy. This analysis included checking whether the specific economic activity meets the EU technical assessment criteria as stated in the EU Non-Financial Reporting Directive (Directive 2014/95/EU). In this analysis, among other information we use the project and implementation plans of, for example, our investments in CO₂ storage, reuse and transport (activity 5.11).

In addition to checking the economic activity against the technical assessment criteria, we check whether it does not significantly harm any of the other environmental objectives. We assess the activity against the environmental objectives 'climate change adaptation', 'sustainable use and protection of water and marine resources', 'transition to a circular economy', 'pollution prevention and control', and 'protection and restoration of biodiversity and ecosystems', and we check whether an economic activity does any significant harm to any of the other environmental objectives. We have also set up a number of safeguards to ensure that we carry out the activities sustainably and at all times in alignment with the criteria under the EU Taxonomy.

At Gasunie we pay a lot of attention to our people and the environment. In our methodology, we identify the risks and determine whether these are material to the performance of our work. The depth of this risk analysis depends on the nature and scope of the works to be carried out. Based on these risks, we determine that no material risks exist for the 'climate change adaptation' objective.

As regards the 'protection of water and maritime resources' and 'protection and restoration of biodiversity and ecosystems' objectives, we have environmental impact reports (EIRs) drawn up for our larger projects. EIRs provide information on the impact of the planned activities on the physical environment. Carrying out the environmental impact studies provides assurance that the works we plan to carry out will do no significant harm to any of the environmental objectives. We apply this methodology to our activities in the area of (activity 4.15), our investments in CO₂ storage, transport and reuse (activity 5.11) and our investments in hydrogen (activity 4.14).

The 'transition to a circular economy' objective is relevant in the area of studies that have been carried out with regard to the energy transition (activity 9.1), among other activities. The plans we are developing for our investments in hydrogen (activity 4.14) include the reuse of existing natural gas pipelines. We are, in this way, aiming for a transition to a circular economy.

Finally, for our investments in heat (activity 4.15) and the studies that are carried out with regard to the energy transition (activity 9.1) in particular, we assess to what extent they meet the objective of 'pollution prevention and control' (specifically prevention and control of emissions). We determine whether the equipment and installations used in our processes have an appropriate energy label.

In addition to the above criteria, economic activities must also meet the minimum safeguards set out in the EU Taxonomy Regulation. This means that the activities must meet the criteria for responsible business conduct outlined in the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human rights. Four core topics have been identified for compliance with these minimum safeguards: human rights, corruption, taxation and fair competition.

The EU Taxonomy requires that procedures be set up in accordance with the above guidelines and principles. There is a six-step human rights due diligence process to identify, prevent and mitigate any potential and actual adverse human rights impacts.

Gasunie has safeguards in place based on these guidelines and principles. The OECD Guidelines and UN Guiding Principles have been implemented, for example, in our [Supplier Code of Conduct](#). We also have a [workplace code of conduct](#) setting out how we are expected to behave towards each other. In 2022, we drew up an implementation plan to further implement and formalise the six steps of human rights due diligence in our company over the coming period. In addition, various processes have been set up around the four core topics. There are currently no indications that the company does not have the minimum safeguards in place or enforce these.

EU Taxonomy table - Revenue

Economic activities	Absolute turnover mEUR	Proportion of turnover %	Substantial contribution criteria		DNSH criteria					Minimum safeguards	Taxonomy aligned proportion of turnover 2022 %
			Climate change mitigation	Climate change adaptation	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	
			%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	
A. TAXONOMY-ELIGIBLE ACTIVITIES											
A.1. Environmental sustainable activities (Taxonomy-aligned)											
8.2 Data-driven solutions for GHG emissions reductions	2,1	0,1%	100%	0%		Y		Y		Y	0,1%
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)	2,1	0,1%									0,1%
A. 2. Taxonomy eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)											
4.14 Transmission and distribution networks for renewable and low-carbon gases	3,0	0,1%									
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)	3,0	0,1%									
Total turnover of Taxonomy-eligible activities (A.1. + A.2.)	5,1	0,2%									0,1%
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES											
Turnover of Taxonomy-non-eligible activities (B)	2.252,5	99,8%									
Total (A + B)	2.257,6	100,0%									

EU Taxonomy table - CAPEX

Economic activities	Absolute CAPEX mEUR	Proportion of CAPEX %	Substantial contribution criteria		DNSH criteria							Minimum safeguards Y/N	Taxonomy aligned proportion of CAPEX 2022 %
			Climate change mitigation %	Climate change adaption %	Climate change mitigation Y/N	Climate change adaption Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and ecosystems Y/N			
A. TAXONOMY-ELIGIBLE ACTIVITIES													
A.1. Environmental sustainable activities (Taxonomy-aligned)													
4.14 Transmission and distribution networks for renewable and low-carbon gases	19,0	1,9%	100%	0%		Y	Y		Y	Y	Y		1,9%
4.15 District heating/cooling distribution	66,4	6,6%	100%	0%		Y	Y		Y	Y	Y		6,6%
5.11 Transport of CO2	42,4	4,2%	100%	0%		Y	Y			Y	Y		4,2%
8.2 Data-driven solutions for GHG emissions reductions	0,5	0,1%	100%	0%		Y		Y			Y		0,1%
Total CAPEX of environmentally sustainable activities (Taxonomy-aligned) (A.1)	128,2	12,8%											12,8%
A. 2. Taxonomy eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)													
4.12 Storage of hydrogen	0,3	0,0%											
4.14 Transmission and distribution networks for renewable and low-carbon gases	0,3	0,0%											
Total CAPEX Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)	0,6	0,1%											
Total CAPEX of Taxonomy-eligible activities (A.1. + A.2.)	128,8	12,9%											12,8%
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES													
CAPEX of Taxonomy-non-eligible activities (B)	872,6	87,1%											
Total (A + B)	1.001,4	100,0%											

EU Taxonomy table - OPEX

Economic activities	Absolute OPEX mEUR	Proportion of OPEX %	Substantial contribution criteria		DNSH criteria							Minimum safeguards Y/N	Taxonomy aligned proportion of turnover 2022 %
			Climate change mitigation %	Climate change adaptation %	Climate change mitigation Y/N	Climate change adaptation Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and ecosystems Y/N			
A. TAXONOMY-ELIGIBLE ACTIVITIES													
A.1. Environmental sustainable activities (Taxonomy-aligned)													
4.14 Transmission and distribution networks for renewable and low-carbon gases	0,5	0,0%	100%	0%		Y	Y		Y	Y	Y		0,0%
4.15 District heating/cooling distribution	4,8	0,5%	100%	0%		Y	Y		Y	Y	Y		0,5%
5.11 Transport of CO2	1,2	0,1%	100%	0%		Y	Y			Y	Y		0,1%
8.2 Data-driven solutions for GHG emissions reductions	0,1	0,0%	100%	0%		Y		Y			Y		0,0%
9.1 Close to market research, development and innovation	5,6	0,6%	100%	0%		Y	Y	Y	Y	Y	Y		0,6%
Total OPEX of environmentally sustainable activities (Taxonomy-aligned) (A.1)	12,1	1,2%											1,2%
A. 2. Taxonomy eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)													
4.12 Storage of hydrogen	2,9	0,3%											
4.14 Transmission and distribution networks for renewable and low-carbon gases	15,0	1,5%											
4.15 District heating/cooling distribution	0,1	0,0%											
5.11 Transport of CO2	8,1	0,8%											
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	1,1	0,1%											
8.2 Data-driven solutions for GHG emissions reductions	0,1	0,0%											
9.1 Close to market research, development and innovation	3,4	0,3%											
Total OPEX Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)	30,7	3,1%											
Total OPEX of Taxonomy-eligible activities (A.1. + A.2.)	42,8	4,3%											1,2%
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES													
OPEX of Taxonomy-non-eligible activities (B)	961,1	95,7%											
Total (A + B)	1.003,9	100,0%											

Regulatory settlements

The regulatory methodologies applied in the Netherlands and Germany could possibly result in settlements in years to come. Current IFRS accounting rules do not allow regulatory settlements to be recognised on the balance sheet as a receivable or debt. Consequently, under IFRS, we do not recognise regulatory settlements in the year in which they arise, but in the year in which the settlements take place in the tariffs. This causes timing differences between IFRS and the regulatory revenue model, which can result in periodic impairment. Moreover, this gives a distorted picture of the financial result in any given year. In view of the large size of the regulatory settlements, we also present an underlying result in the key figures this year.

Overview of regulatory settlements	2022	2021
In millions of euros		
Gasunie Transport Services		
To be settled on January 1	138	61
Regulatory settlements paid this year to compensate for previous years	-36	-26
Settlements to be received in future for revenues/ENF achieved (versus permitted revenues/ENF) for this year	-614	103
Investment allowances	-	-
To be settled on December 31	-512	138
Gasunie Deutschland		
To be settled on January 1	-23	7
Regulatory settlements received this year to compensate for previous years	-1	-27
Settlements to be paid in future for revenues/ENF achieved (versus permitted revenues/ENF) for this year	25	-1
Investment allowances	-	-
To be settled on December 31	2	-20

The tariffs for 2022 included a set-off of € 37 million from previous years, consisting of a positive settlement of € 36 million for Gasunie Transport Services and a positive settlement of € 1 million for Gasunie Deutschland. Both the revenue realised and energy costs incurred in 2022 deviate from the standard set by the regulators in the Netherlands and Germany. For Gasunie Transport Services, this deviation will result in a future repayment of € 614 million and for Gasunie Deutschland this will lead to a future receivable of € 25 million. These amounts will be set off in the tariffs in subsequent years.

As at year-end 2022 a regulatory settlement for a sum of € 510 million needs to be made. This sum consists of an estimated € 512 million to be received for Gasunie Transport Services and an estimated amount of € 2 million repayable by Gasunie Deutschland. The final amounts will ultimately be set by the regulatory authorities. In the table below, this amount is broken down according to the periods in which the amounts will be settled in the tariffs and recognised in the financial statements on the basis of IFRS policies.

Amounts to be settled by maturity at year-end 2022	Total	2023	2024-2027	2028 >
In millions of euros				
Gasunie Transport Services	-512	103	-615	0
Gasunie Deutschland	2	-7	9	-
Total to be settled	-510	96	-605	-

GRI content index

GRI disclosure number	Disclosure name	Reference 2022	GRI Sector standard
GRI 2: General Disclosures 2021			
1. The organization and its reporting practices			
2-1	Organizational details	Strategy - Who we are - How we are organised, Financial statements 2022	
2-2	Entities included in the organization's sustainability reporting	Additional information: About this report - Scope	
2-3	Reporting period, frequency and contact point	Additional information: About this report, Contact	
2-4	Restatements of information	Restatement of information is not applicable.	
2-5	External assurance	Additional information: About this report - Verification and publication, Governance, Report from the Supervisory Board, Other information - Assurance report of the independent auditor	
2. Activities and workers			
2-6	Activities, value chain, and other business relationships	Strategy - Who we are - How we are organised	
2-7	Employees	Internal social value creation - Attractive employer	
2-8	Workers who are not employees	Internal social value creation - Attractive employer	
3. Governance			
2-9	Governance structure and composition	Governance	
2-10	Nomination and selection of the highest governance body	website: www.gasunie.nl/en/organisation/board	
2-11	Chair of the highest governance body	Governance, Composition of the Supervisory Board, website: www.gasunie.nl/en/organisation/board	
2-12	Role of the highest governance body in overseeing the management of impacts	website: www.gasunie.nl/en/organisation/board	
2-13	Delegation of responsibility for managing impacts	Governance, Composition of the Supervisory Board, website: www.gasunie.nl/en/organisation/board	
2-14	Role of the highest governance body in sustainability reporting	Additional information: About this report - What matters to our stakeholders	
2-15	Conflicts of interest	Governance - Report from the Supervisory Board, Financial statements 2022, website: www.gasunie.nl/en/organisation/board	

GRI disclosure number	Disclosure name	Reference 2022	GRI Sector standard
2-16	Communication of critical concerns	Governance - Additional information - Compliance management	
2-17	Collective knowledge of the highest governance body	website: www.gasunie.nl/en/organisation/board	
2-18	Evaluation of the performance of the highest governance body	Governance - Our work, website: www.gasunie.nl/en/organisation/board	
2-19	Remuneration policies	Governance - Renueratiebeleid raad van bestuur, jaarrekening 2022	
2-20	Process to determine remuneration	Governance - Remuneration policy for the Executive Board, website: www.gasunie.nl/en/organisation/board	
2-21	Annual total compensation ratio	Governance - Remuneration policy for the Executive Board	
4. Strategy, policies and practices			
2-22	Statement on sustainable development strategy	Foreword by the Executive Board, Governance - Report from the supervisory board	
2-23	Policy commitments	Governance - Available documents, website: www.gasunie.nl/en/organisation/board	
2-24	Embedding policy commitments	Governance - Available documents, website: www.gasunie.nl/en/organisation/board	
2-25	Processes to remediate negative impacts	Strategy - Our impact, Additional information: About this report	
2-26	Mechanisms for seeking advice and raising concerns	Governance - Compliance management	
2-27	Compliance with laws and regulations	Governance - Compliance management	
2-28	Membership associations	External economic value creation, External social value creation	
5. Stakeholder Engagement			
2-29	Approach to stakeholder engagement	Additional information: About this report - What matters to our stakeholders	
2-30	Collective bargaining agreements	Internal economic value creation - Salaries	
GRI 3: Material Topics 2021			
3-1	Process to determine material topics	Additional information: About this report - What matters to our stakeholders	
3-2	List of material topics	Additional information: About this report - What matters to our stakeholders	
Material topic: Energy transition			

GRI disclosure number	Disclosure name	Reference 2022	GRI Sector standard
3-3	Management of material topics	Valuecreation at Gasunie - Our contribution to creating a carbon-neutral world, Strategy - Accelerating the energy transition, External social value creation - Investments in sustainable energy infrastructure, Internal social value creation - Green Deal 9: Emission reduction	
201-2	Financial implications and other risks and opportunities due to climate change	Internal social value creation - Green Deal 9: Emission reduction, Financial statements 2022	11.2
305-1	Direct (Scope 1) GHG emissions	Internal social value creation - Green Deal 9: Emission reduction, Additional information - Our other environmental impacts	11.1
305-2	Energy indirect (Scope 2) GHG emissions	Internal social value creation - Green Deal 9: Emission reduction, Additional information - Our other environmental impacts	11.1
305-3	Other indirect (Scope 3) GHG emissions	Internal social value creation - Green Deal 9: Emission reduction, Additional information - Our other environmental impacts	11.1
305-4	GHG intensity	Information regarding GHG intensity is not available at this moment.	11.1
305-5	Reduction of GHG emissions	Internal social value creation - Green Deal 9: Emission reduction	11.2
Gasunie indicator	Reduction of our own carbon emissions	Internal social value creation - Green Deal 9: Emission reduction	
Gasunie indicator	Issued Guarantees of Origin	External economic value creation - VertiCer: strong partner for Guarantees of Origin	
Material topic: Safety of the network			
3-3	Management of material topics	Internal social value creation - Operational safety	
306-3	Significant spills	Internal social value creation - Operational safety	11.8
Gasunie indicator	Uncontrolled events	Internal social value creation - Operational safety	
Gasunie indicator	Pipeline inspections	External economic value creation - Security of gas supply	
Gasunie indicator	Total Reportable Frequency Index (TRFI)	Internal social value creation - Operational safety	
Material topic: Relationship with stakeholders and local communities			
3-3	Management of material topics	Additional information: Communication with stakeholders	11.15 / 11.16
413-1	Operations with local community engagement, impact assessments, and development programs	Additional information: Communication with stakeholders	11.15
413-2	Operations with significant actual and potential negative impacts on local communities	Additional information: Communication with stakeholders	11.15
Material topic: Developments in laws and regulations			
3-3	Management of material topics	Internal economic value creation - Regulation	

GRI disclosure number	Disclosure name	Reference 2022	GRI Sector standard
Material topic: Security of supply			
3-3	Management of material topics	External economic value creation - Security of gas supply	
Gasunie indicator	Transmission disruptions	External economic value creation - Security of gas supply	
Gasunie indicator	Transported volume	Strategy - The value we created	
Gasunie indicator	Gas traded on TTF	Strategy - The value we created	
Other GRI 2021 topics that are not material to Gasunie			
11.3	Air emissions	Internal social value creation - What we are doing to reduce emissions, Additional information: Our other environmental impacts	
11.4	Biodiversity	Internal social value creation - Gasunie green deals	
11.5	Waste	Internal social value creation - Gasunie green deals	
11.6	Water and effluents	Our materiality analysis has shown that this is not a material topic for Gasunie.	
11.7	Closure and rehabilitation	Our materiality analysis has shown that this is not a material topic for Gasunie.	
11.9	Occupational health and safety	Internal social value creation - Attractive employer	
11.10	Employment practices	Internal social value creation - Attractive employer	
11.11	Non-discrimination and equal opportunity	Internal social value creation - Attractive employer, Internal social value creation - Gasunie Green deals	
11.12	Forced labor and modern slavery	Our materiality analysis has shown that this is not a material topic for Gasunie.	
11.13	Freedom of association and collective bargaining	Internal economic value creation - Salaries	
11.14	Economic impacts	External social value creation - Investments in sustainable energy infrastructure, Internal social value creation - Green Deals, Financial statements 2022	
11.17	Rights of indigenous peoples	Our materiality analysis has shown that this is not a material topic for Gasunie.	
11.18	Conflict and security	Our materiality analysis has shown that this is not a material topic for Gasunie.	
11.19	Anti-competitive behavior	Governance - Compliance management	
11.20	Anti-corruption	Governance - Compliance management	
11.21	Payments to governments	The Dutch state is our sole shareholder (this is not a material topic for Gasunie).	
11.22	Public policy	Our materiality analysis has shown that this is not a material topic for Gasunie.	
305-6	Emissions of ozone-depleting substances (ODS)	Our materiality analysis has shown that this is not a material topic for Gasunie.	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Our materiality analysis has shown that this is not a material topic for Gasunie.	

Connectivity table

Material topic	Indicator	Target 2022	Realisation 2022	Long term goal	Value creation type	Contribution to SDGs
1 Energy transition	Certified green gas	n/a	2,1 mln MWh	International growth	external social	7, 9, 13, 17, 8, 11, 12
	EU Taxonomy green CAPEX	n/a	12.9%	n/a	internal economic	7, 9, 13, 17, 8, 11, 12
	EU Taxonomy green OPEX	n/a	4.3%	n/a	internal economic	7, 9, 13, 17, 8, 11, 12
	EU Taxonomy green revenue	n/a	0.2%	n/a	internal economic	7, 9, 13, 17, 8, 11, 12
2 Security of supply	Number of transport interruptions	< = 6	4	< = 6	external economic	7, 9
3 Network security	Uncontrolled events	< = 2	1	< = 2	internal social	9
	Kilometres inspected pipeline	n/a	312	n/a		
4 Legislative and regulatory developments	n/a	n/a	n/a	n/a	external social external economic internal social internal economic	7, 9, 13, 17
5 Relationship with stakeholders	n/a	n/a	n/a	n/a	external social external economic internal social internal economic	17
6 Cybersecurity, data security and privacy	n/a	n/a	n/a	n/a	internal economic	7, 9
7 Employee health and safety	Absence due to sickness	< 4,1%	4,0%	< 4,1%	internal economic	8
	Sickness absence frequency	n/a	1.14	n/a	internal economic	8
	Work-related absence (NL)	n/a	29	n/a	internal economic	8
	Reported to the Netherlands Centre for Occupational Diseases (NL)	n/a	0	n/a	internal economic	8
	Number of notifications of wrongdoing	n/a	29	n/a	internal social	5, 8

	Material topic	Indicator	Target 2022	Realisation 2022	Long term goal	Value creation type	Contribution to SDGs
8	Environmental impact of own organisation, products and services	Reduction of our own CO ₂ emissions	n/a	390 kton CO ₂ eq	<=219 kton CO ₂ eq/year based on constant transport volume (2020=1085 TWh)	internal social	7, 9, 12, 13, 17
		Reduction of our own CO ₂ emissions	n/a	135 kton CO ₂ eq	<=70 kton CO ₂ eq/year	internal social	7, 9, 12, 13, 17
9	Customer-oriented and transparent service and communication	n/a	n/a	n/a	n/a	internal economic	17
10	Financial performance and resilience	n/a	n/a	n/a	n/a	internal economic	7, 8, 9, 13, 17
11	Strong market position	Transported volume	n/a	1108 TWh	n/a	external economic	7, 9
12	Wellbeing, training and development	TRFI	< = 2,5	3.8	< = 2,5	internal social	8
		Number of reportable injuries	n/a	22	n/a	internal social	8
		Number of reportable injuries with absence	n/a	12	n/a	internal social	8
		Number of reportable injuries without absence	n/a	10	n/a	internal social	8
13	Diversity and inclusion	n/a	n/a	n/a	n/a	internal social	8

Reports of misconduct: this indicator covers all types of reports of misconduct to a confidential counsellor.

Definitions

bcm

Billion cubic meters.

Billion m³

Billion cubic metres

Blue hydrogen

Hydrogen produced from fossil energy (natural gas) in combination with CO₂ capture and storage.

BMWK

Bundesministerium für Wirtschaft und Klimaschutz (German Federal ministry for Economic Affairs and Climate Action).

Business development

Developing new products/services and/or entering new markets.

CCS

Carbon Capture and Storage.

CH₄

Methane; the most important component of natural gas.

CO₂

Carbon dioxide; released when fuel fully burns.

CO₂ equivalent emission

CO₂ and CH emissions can be converted by means of the Global Warming Potential (GWP) into a measure for the enhanced greenhouse effect, called CO₂ equivalent emission. The GWP for CO₂ is set at 1 and the GWP for CH₄ at 28.

Controllable cost

Normalised total of staff costs and other operating expenses minus costs allocated to investments and uncontrollable energy costs.

EBIT

Earnings before deduction of interest and taxes.

EBITDA

Earnings before deduction of interest, taxes, depreciation and amortisation.

Effective temperature

The 'effective temperature' refers to the actual temperature, supplemented by an adjustment for wind speed.

ESG

Environmental, Social, Governance (ESG) means that factors such as energy consumption, climate, resource availability, health, safety and good corporate governance are taken into account in the selection and management of holdings in companies.

Expression of interest

Formally stating an interest, such as in taking part in a grant scheme.

EZK

Ministerie van Economische Zaken en Klimaat (Dutch ministry of Economic Affairs and Climate Policy).

Flaring

The controlled releasing of gas by burning it.

FSRU

Floating storage and regasification unit.

GERG

European Gas Research Group, trade association of European gas companies, focused on research and development.

GHG Scope 1, 2 and 3

The Greenhouse Gas Protocol, the prevailing standard for reporting on CO₂ emissions, breaks down emissions according to their source. It is divided into scope 1 (direct emissions as a result of our own activities), scope 2 (indirect emissions from the procured energy) and scope 3 (all other indirect emissions as a consequence of our business operations).

GoO

A Guarantee of Origin (GoO) is a piece of evidence that proves the origin of sustainably produced energy.

Green gas

Green gas is biogas upgraded to the quality of natural gas.

Green hydrogen

Hydrogen produced in a climate-neutral way from renewable energy sources such as wind and solar power.

Greenhouse gas

Gas that contributes to the creation of an insulating layer around the earth, causing it to warm up. The most important greenhouse gases are: water vapour, carbon dioxide, methane, nitrous oxide and chlorinated hydrocarbons.

GTS

Gasunie Transport Services

GUD

Gasunie Deutschland

GW

A gigawatt (GW) is a unit of electric power.

GWP

Global Warming Potential (GWP). The Intergovernmental Panel on Climate Change regularly updates the GWP based on the latest scientific insights.

H₂

Hydrogen.

Hydrocarbons

A group of chemical substances comprising carbon and hydrogen.

Incidents (resulting/not resulting in absence)

Incidents resulting in injuries to one or more employees of Gasunie and/or third parties as a consequence of carrying out work. Absence refers to work (or replacement work) not being resumed within one working day (24 hours).

Input tax

Input tax is 'VAT on our costs', i.e. VAT that our suppliers have billed us for.

Invested capital

Total of tangible fixed assets, investments in joint ventures, investments in associates, and other equity interests adjusted for work in progress assets for which payment has yet to be received.

ISO

International Standardisation Organisation; an organisation that sets international standards.

LDAR

Leak detection and repair programme.

Licence to operate

The mandate that a company is given (by the government and/or society) to perform its tasks.

LNG

Liquefied Natural Gas.

LOHC

Liquid organic hydrogen carriers.

MW

A megawatt (MW) is a unit of electric power.

Net debt including guarantees/tangible fixed assets

Net debt including guarantees/tangible fixed assets

NOPLAT

The normalised Net Operating Profit Less Adjusted Taxes is the total of normalised EBIT and the share in the result of associates net of taxes.

Normalised ROE

Normalised Return On Equity is calculated by dividing the normalised result after taxation by the normalised equity.

Normalised ROIC

Normalised Return On Invested Capital is calculated by dividing the normalised NOPLAT by the invested capital. This ratio provides information on the extent to which Gasunie generates cash flows compared to the cash flow it has invested in the business.

NO_x

Collective term for nitrogen oxide gases. These gases are released in all burning processes and contribute to atmospheric pollution.

Pseudo-G-gas

Pseudo-G-gas is low-calorific gas made from high-calorific gas. This gas is of the same quality as Groningen gas.

Reportable incidents

Incidents resulting in absence, medical treatment, replacement work or fatalities.

Scope 1, 2 and 3

The Greenhouse Gas Protocol, the prevailing standard for reporting on CO₂ emissions, breaks down emissions according to their source. It is divided into scope 1 (direct emissions as a result of our own activities), scope 2 (indirect emissions from the procured energy) and scope 3 (all other indirect emissions as a consequence of our business operations).

Security of supply

In the Netherlands, this is understood to mean: the number of times gas transport was interrupted because no, or insufficient, gas was able to flow through our infrastructure, irrespective of whether GTS in the Netherlands was able to supply sufficient gas to customers. In Germany, it is understood to mean: the number of times that our infrastructure was unable to supply sufficient gas to customers. The scores attained by Gasunie in the Netherlands and Germany are added together to produce the total target score.

Stakeholders

Organisations or persons with a certain interest in the company.

Total Reportable Frequency Index

A measure for safety; the number of 'reportable' incidents (incidents leading to absence, medical treatment, alternative work or fatalities) per 1 million hours worked, assuming 1,600 working hours per FTE per year.

TSO (NL)

Transmission system operator: (TSO) is an entity responsible for the transport of energy in the form of natural gas or electricity at a national or regional level, by means of permanent infrastructure.

WACC

The Weighted Average Cost of Capital, usually abbreviated to WACC.

Disclaimer

Where this report refers to 'we' or 'us', this means the activities of N.V. Nederlandse Gasunie, unless otherwise explicitly specified. Activities of the two segments of Gasunie always refer to Gasunie Deutschland (GUD) and Gasunie Transport Services (GTS).

The interactive annual report presented on our dedicated annual report website and the PDF version of the annual report on our corporate website are derived from Gasunie's 2022 Annual Report based on the European Single Electronic Filing format (hereafter: the ESEF reporting package). The ESEF reporting package is also available on our corporate [website](#). In case of any discrepancies between the dedicated annual report website, the PDF version, and the ESEF reporting package, the latter prevails. The auditor's report and assurance report of the independent auditor on our dedicated annual report website and included in the PDF version relate only to the ESEF reporting package.

In the event of inconsistencies or differences of interpretation between the original Dutch report and the translated English report, the Dutch report shall prevail.

Contact

We invite readers of the report to provide us with feedback by email: info@gasunie.nl.

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