Sustainability-Linked Bond Framework

Safe

Gasuhe crossing borders in energy

17 September 2021

Contents

Forewo	ord		3
1. Gası	unie's s	ustainability strategy	4
		About Gasunie	5
	1.2		5
	1.3	Gasunie's role in the Energy Transition	6
	1.5	1.3.1. Context	6
			7
		1.3.2 Decarbonising our own operations and infrastructure	
		1.3.3 Our Strategy in the Context of National Targets	7
		1.3.4. Social impact of our strategy	9
	1.4	Key energy and decarbonisation opportunities	9
		1.4.1 Hydrogen	9
		1.4.2 Green Gas	10
		1.4.3 Heat	10
		1.4.4 Carbon capture utilisation and storage ("CCUS")	10
	1.5 Ex	kternal ESG Ratings	11
	1.6 Ra	ationale for Framework	11
2. Sust	ainabil	lity-Linked Bond Framework	12
	2.1	, Selection of Key Performance Indicators	12
		2.1.1 KPI #1: Methane emissions	13
		2.1.2 KPI #2: Scope 1 and 2 greenhouse gas emissions	14
	2.2	Calibration of Sustainability Performance Targets	15
	4.4	2.2.1 SPT #1: Reduction of methane emissions	16
		2.2.2 SPT #2: Reduction of Scope 1 & 2 greenhouse gas emissions	18
	ר ר		22
	2.3	Impact on Bond Characteristics	ZZ
		2.3.1 A coupon step-up or upward margin adjustment during	2.2
		the lifetime of the bond	22
		2.3.2 A coupon step-down or downward margin adjustment	
		during the lifetime of the bond	22
		2.3.3 A cash-premium payment at maturity of the bond	22
	2.4	Reporting	22
	2.5	Verification and External Review	23
		2.5.1 Second Party Opinion	23
		2.5.2 Verification and Assurance	23
3. App	endix		24
· · · · · · · · · · · · · · · · · · ·	3.1	CO ₂ equivalents emission reporting according to the	
		Greenhouse Gas Protocol	24
	3.2	Description of initiatives to reduce our CO ₂ equivalent emissions	25
	5.2		20
_ · · ·			

Disclaimer

27

Foreword

The European Union aims to be climate-neutral by 2050, which it intends to achieve through an energy transition. We at Gasunie believe this goal is within reach. As a leading infrastructure operator that matches energy supply to demand in the Netherlands and the northern part of Germany, we are in a unique position to accelerate the energy transition. We are taking our responsibility by making significant investments in our essential infrastructure and via clear decarbonisation targets.

At the start of 2020, we launched Vision 2030 strategy, which captures our plans for the coming ten years. Over this period, we will transform from a gas transmission company into an energy infrastructure company. We believe that the transition to a sustainable, reliable, and affordable energy supply can only be achieved through an integrated solution, involving a combination of multiple energy carriers (including electricity, hot water, and various gases).

The growing share of sustainable energy sources will result in increasing fluctuations in the energy supply and prices. Society must be able to count on a reliable energy supply even in the face of changing dynamics. To support our customers, we will continue to provide accessible and cost-effective natural gas transmission and storage.

Against this background, we are now launching this Sustainability-Linked Bond Framework ("the Framework") to further implement our Vision 2030 strategy, clearly communicate our transition strategy and partner with our investors in delivering this strategy. This Framework provides us with an opportunity to attach clear economic incentives to our commitment to achieve specific sustainability outcomes throughout our transition and decarbonisation process. Our Treasury Department will oversee all debt instruments issued under the Framework on an annual basis, to provide our stakeholders with a clear view of our sustainability related successes, challenges, risks and opportunities.

At Gasunie, we believe in sharing knowledge and insight and in joining forces so that the energy transition can be executed. We hope you will join us in helping to realise this vision.

Han Fennema

CEO and Chairman of the Executive Board

1. Gasunie's sustainability strategy

1.1 About Gasunie

Gasunie is an energy infrastructure company that is wholly owned by the Dutch state. Gasunie's objective is to ensure safe, reliable, affordable and sustainable energy infrastructure services, ensuring that everyone has access to energy, always. This is of crucial importance to the economy and society. Gasunie has three strategic pillars, which rest on the foundations of its organization:

- Ensuring a **safe, reliable, affordable and sustainable gas infrastructure** in its core area;
- Contributing to an **efficient gas infrastructure and services** for a properly functioning European natural gas and LNG market;
- Accelerating the transition to a CO2-neutral energy supply.

Gasunie's infrastructure, services and geographical position are at the heart of the north-western European gas market. Gasunie has two principal activities:

1. Providing regulated, open-access transport services through the gas transport network in the Netherlands and Germany.

Gasunie operates the infrastructure for the large-scale transport, storage and conversion of gas. At the moment, this is mainly natural gas, but the energy transition is increasingly bringing about a shift towards green gas and hydrogen. An increasing share of Gasunie's focus and management attention is going into the acceleration of a climate-neutral energy supply. As a result Gasunie is investing in projects in the areas of green gas, hydrogen, heating, CCUS (carbon capture, utilisation and storage) and LNG (liquefied natural gas).

2. Offering energy infrastructure services, either independently or in partnership with other parties.

Gasunie's transport and infrastructure services connect the producers of energy to the (end) users of energy. Gasunie operates and develops energy infrastructure and energy trading platforms: gas transport networks, international transit pipelines, gas storage, gas conversion, LNG infrastructure and virtual gas trading platforms. The company is also working on the construction and operation of hydrogen, heat and carbon capture, utilisation and storage (CCUS) networks. Gasunie gives third parties non-discriminatory access to its services.



Gasunie is a connecting factor in the energy value chain

1.2 Gasunie's Approach to Sustainability

Gasunie's strategy is well geared towards helping to achieve the UN Sustainable Development Goals ('SDGs')¹ – contributing to a better society by ensuring a safe, sustainable, reliable and affordable energy infrastructure. We have incorporated four core SDGs into our Corporate Social Responsibility ('CSR') policy:



Besides the core SDGs, our CSR policy is also geared towards contributing to five supplementary SDGs focused on future-proofing our core activities.



The company has created nine Gasunie Green Deals² which help translate the SDGs into concrete activities for our company and contribute to our vision for 2030. In the second half of 2021, we will add further substance to these Green Deals and seek to maximise the transparency and quantification of their impact. An overview of our Green Deals is shown below:

1 https://sdgs.un.org/goals

² https://www.gasunie.nl/en/about-gasunie/csr/allocating-gasunies-green-deals-to-the-sdgs

Deal 1: Reduce greenhouse emissions during the construction of energy projects	Deal 2: Circular and CO2-neutral procurement	Deal 3: Redeployment of existing assets
Deal 4: Take social responsibility	Deal 5: Build a diverse and inclusive organisation	Deal 6: Contribute to biodiversity
Deal 7: Cut gas transport energy use	Deal 8: Develop strategy for energy procurement	Deal 9: Cut CO ₂ equivalent emissions in daily operations

To the other goals in the SDGs universe, we contribute indirectly based on the 'Do No Harm' principle. Although we are not actively working on these SDGs, we are respecting these goals and not doing any harm in those areas.

1.3 Gasunie's role in the Energy Transition

The following section sets out the key elements of Gasunie's transition strategy. Where appropriate we have referenced the corresponding sections of the ICMA Climate Transition Finance Handbook³.

1.3.1. Context⁴

As the Netherlands and Germany move towards a low-carbon economy, Gasunie sees many opportunities emerging from the energy transition. The energy that we all use is transported and supplied either in the form of electrons (electricity) or in the form of molecules (fuels or hot water). In a climate-neutral society, energy will consist of molecules for 30% to 50%⁵. We operate one of north-western Europe's densest transmission networks for molecules. In thirty years' time, this network will no longer transport natural gas, but will instead transport hydrogen, green gas, heat and CO₂, without compromising on reliability and safety.

Gasunie has decades of knowledge and experience in the area of natural gas transmission and storage. We are harnessing this knowledge, in close collaboration with other parties, for the transport and storage of other molecules, i.e. hydrogen, green gas, heat and CO₂. We will also be able to use part of our existing infrastructure for that, especially since demand for gas is set to slowly decline and the need for a double gas network (for low-calorific Groningen gas and imported high-calorific gas) with the current scale is reducing.

We intend to gradually build a hydrogen transmission and storage infrastructure that branches off to future hydrogen networks in our neighbouring countries⁶. This hydrogen backbone will be built cost-effectively: most of the backbone will be made up of adapted natural gas pipelines. In the province of Zeeland we show that it can be done, safely and reliably ⁷.

4 Aligned with ICMA Climate Transition Finance Handbook element 2 ("Business model environmental materiality") 5 Source: <u>https://www.rijksoverheid.nl/documenten/kamerstukken/2020/03/30/kamerbrief-over-kabinetsvisie-water-</u> stof

6 https://www.gasunie.nl/en/expertise/hydrogen/hydrogen-projects

7 https://www.hynetwork.nl/en/news/gasunie-hydrogen-pipeline-between-dow-and-yara-operational

³ https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Climate-Transition-Finance-Handbook-December-2020-091220.pdf

Although not directly involved in the production of gas, we are part of an alliance that aims to contribute to the development of the supply and demand of green gas and we are set to scale up green gas feed-in to our gas grid over the coming years. The alliance aims to contribute to 2 billion m3 of green gas production and transport by 2030, up from the current approximate of 150 million m3 of green gas produced in the Netherlands. In Rotterdam and Amsterdam, we are, as a transport pipeline operator, part of consortia that have set out to inject industrially captured CO₂ into empty gas fields in the North Sea⁸.

In the province of Zuid-Holland, we want to build WarmtelinQ⁹, a large-scale regional heat grid that transports residual heat from the Rijnmond industrial area to the cities of The Hague and Leiden.

1.3.2 Decarbonising our own operations and infrastructure¹⁰

In early 2020, Gasunie captured its strategy in an outlook for the coming ten years in our Vision 2030. Our ambitions are clear. By 2030, we will have transformed from a gas transmission company into a broad energy infrastructure company, transporting natural gas, green gas, hydrogen, CO₂ and heat in a safe, reliable, affordable and sustainable way. In order to facilitate this transformation, we intend to invest €7 billion in energy transition infrastructure over the period to 2030. This will enable us to play a key role in achieving the ambitious climate goals set in the Netherlands, Germany and the European Union.

Gasunie transports and stores natural gas for third parties that book transport capacity on our networks and storage capacity in our storage facilities. We need energy to compensate for friction losses during natural gas transport, keep the gas grid at pressure and to blend natural gas with nitrogen. Gasunie uses natural gas and electricity for this purpose. Burning this natural gas and generating this electricity produces CO₂ and NO_x emissions.

Natural gas consists primarily of methane, a greenhouse gas. We report carbon emissions in accordance with the rules of the Greenhouse Gas Protocol. These emissions are categorised in three groups (scopes) and expressed in CO₂ equivalents¹¹, such that all emissions are recorded using a standardised measure¹².

Through the implementation of our Green Deals (see Section 1.2), we are stepping up our efforts to decarbonise our own operations and infrastructure considerably this decade, while executing our role in society's energy transition.

1.3.3 Our Strategy in the Context of National Targets

The EU aims to be climate-neutral by 2050 – an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal and in line with the EU's commitment to global climate action under the Paris Agreement. EU Member States are required to develop national long-term strategies on how they plan to achieve the greenhouse gas emissions reductions needed to meet their commitments under the Paris Agreement and EU objectives.

12 A breakdown of our historic emissions data can be found in Appendix 2.

^{8 &}lt;u>https://www.gasunie.nl/nieuws/2-bcm-alliantie-voor-groen-gas-gaat-van-start</u> (in Dutch -) 9 http://warmteling.nl/

¹⁰ Aligned with ICMA Climate Transition Finance Handbook element 1 ("Issuer's climate transition strategy and governance"), element 3 ("Climate transition strategy to be science-based including targets and pathways) and element 4 ("Implementation transparency")

 $[\]Pi$ For the purposes of our calculation, we assume that 1kg of methane contributes 25 times as much to climate change as 1kg of CO₂.

The Dutch and German governments have committed to reduce their countries' respective greenhouse gas ("GHG") emissions by 49% and 65% by 2030 compared to 1990 levels. To do this, the Netherlands, Germany, and the EU will need to transition from an energy system that is primarily based on fossil fuels to an energy system based on renewable energy sources.

Dutch Climate Act ¹³		German Climate Action Law ¹⁴		European Green Deal ¹⁵	
49% CO ₂ reduction by 2030	49% reduction in national CO ₂ emissions by 2030 (compared to 1990 levels)	65% CO ₂ reduction by 2030	65% reduction in national CO ₂ emissions by 2030 (compared to 1990 levels)	2050 Climate- neutral continent	55% reduction in CO_2 emissions across the EU by 2030 (compared to 1990 levels)
	95% reduction in national CO ₂ emissions by 2050 (compared to 1990 levels) 100% CO ₂ -neutral electricity supply by 2050		88% reduction in national CO ₂ emissions by 2040 (compared to 1990 levels) Net-zero CO ₂ emis- sions by 2045		Aims to make Eu- rope climate -neu- tral by 2050 EU investment plan will mobilise €1trn to move to a clean, circular economy, restore biodiversity and cut pollution Hydrogen will play a key role in the transition, as a fuel and as a raw feedstock

With the phasing out of coal, the Dutch and German Governments and energy system participants have increased their focus on the importance of gas molecules for our future energy supply. In 2020, the German government published its national hydrogen strategy¹⁶; and the Dutch government published a number of policy directions, including government views on the role of gas in the energy system ¹⁷, hydrogen ¹⁸, and the Green Gas Roadmap ¹⁹.

Regardless of the transition pathway, we are confident that our essential transport infrastructure will have a crucial role to play in the energy system and we are making significant investments in this respect. Gasunie has been investing in natural gas infrastructure for nearly sixty years and in energy transition projects for over a decade. The knowledge and experience we have gained along the way put us in an ideal position to scale up and contribute materially to the energy transition.

¹³ https://www.government.nl/topics/climate-change/climate-policy

¹⁴ https://www.bundesregierung.de/breg-en/issues/climate-action

¹⁵ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-gre<u>en</u>-deal_en

¹⁶ https://www.bmwi.de/Redaktion/EN/Publikationen/Energie/the-national-hydrogen-strategy.html

¹⁷ https://www.rijksoverheid.nl/onderwerpen/duurzame-energie/documenten/kamerstukken/2020/03/30/kamerbrief-overde-rol-van-gas-in-het-energiesysteem-van-nu-en-in-toekomst_

^{18 &}lt;u>https://www.rijksoverheid.nl/documenten/kamerstukken/2020/03/30/kamerbrief-over-kabinetsvisie-waterstof</u>

¹⁹ https://www.rijksoverheid.nl/onderwerpen/duurzame-energie/documenten/kamerstukken/2020/03/30/kamerbrief-routekaart-groen-gas_

1.3.4. Social impact of our strategy

Gasunie is furthermore stepping up efforts to address the societal impact of its products and services, including the impact on its stakeholders. We have provided some further details below to explain how we are doing this.

Affordable energy (Green Deal #3)

We deem the reuse of existing assets as crucial for an affordable build-up of the infrastructure for hydrogen, CO2 and green gas. Our envisaged national hydrogen backbone will consist of roughly 85% recycled natural gas pipes, supplemented by new pipes. A major advantage of this is that the costs will be a factor of four lower than if entirely new pipelines were laid.²⁰

Social chain (Green Deal #4)

When purchasing products and services, we want to have as much insight as possible into their origins in order to be sure that we only do business with suppliers who, like us, respect people and the environment. We join independent monitoring organisations that tackle abuses in the area of social responsibility. When contracting suppliers, from 2021 onwards we will look at 'social return' so that people with a distance to the labour market are (once again) given the opportunity to participate in the working process at our suppliers.

Inclusion and diversity (Green Deal #5)

We believe that a diverse organisation leads to more creativity, innovation and better decisions. That is why we are developing a more structural approach to inclusiveness and diversity. We want to be an organisation where everyone's talent is seen and recognised. Starting in 2022, we will set KPI's for more gender equality in management positions and the creation of more jobs for people with a distance to the labour market.

Sustainable employability

The working population is ageing, and this also affects us. Employees must continue working for longer. For this reason, sustainable employability is an important topic for us. Gasunie employees have personal allowances available to them that they can use to work on their sustainable employability. They can spend such allowances on their health and fitness, flexibility, work situation and career. We offer free labour market scans for employees that want to increase their chances in the labour market.

1.4 Key energy and decarbonisation opportunities²¹

As outlined in Section 1.3, Gasunie has been investing in natural gas infrastructure for nearly sixty years and in energy transition projects for over a decade. The knowledge and experience we have gained along the way places us in an ideal position to scale up and contribute materially to the energy transition. Below we provide an overview below of the projects that we have earmarked for the next ten years and provide further details on our four focus areas of: hydrogen; green gas; district heating grids; and, carbon capture utilisation and storage (CCUS).

1.4.1 Hydrogen

Together with a large number of partners, Gasunie wants to develop the hydrogen market step by step and bring down the cost of green hydrogen. We are involved in building increasingly large-sized electrolysis plants and have joined the thought process on plans for offshore wind farms that will supply these plants with green power, like NortH2 ²², North Sea Wind Power Hub (NSWPH ²³) and AquaVentus ²⁴.

20 https://www.gasunie.nl/en/news/gasunie-decision-on-hydrogen-infrastructure-is-milestone-for-energy-transition

²¹ Aligned with ICMA Climate Transition Finance Handbook element 4 ("Implementation transparency")

²² https://www.north2.eu/

²³ https://northseawindpowerhub.eu/

^{24 &}lt;u>https://www.aquaventus.org/</u>

In June 2021, the Dutch State Secretary for Economic Affairs has requested Gasunie to develop the national infrastructure for transporting hydrogen. The HyWay27 research report²⁵ published at the same time provides an economic and technic rationale for the construction of this hydrogen backbone. The realisation of infrastructure gives certainty to developers of hydrogen supply and demand projects that the connecting infrastructure will be available.

1.4.2 Green Gas

As a Gas Transmission Operator (TSO), Gasunie plays a key role in the integration of the future energy mix, including green gas. Green gas²⁶, produced mainly through the fermentation and gasification of biomass, is a more sustainable alternative to natural gas and has the potential to play a substantial role in the transition to a greener economy. In the Netherlands, the Climate Agreement has set 2 billion m³ as the target volume of green gas that is to flow through the networks by 2030²⁷. The existing infrastructure allows us to transport and store green gas on a large scale. By facilitating the development of various technologies, together with partners, Gasunie is aiming to realise half of this target volume for the whole of the Netherlands. In doing so, the focus is on industrialising green gas production.

1.4.3 Heat

The Netherlands wants to reduce its natural gas consumption and carbon emissions. In urban areas, the reuse of residual heat from industry is a cost-effective alternative. In 2019, the Ministry of Economic Affairs and Climate Policy assigned Gasunie to develop and operate WarmtelinQ. WarmtelinQ is the main transport pipeline that is intended to, from 2024, transport residual heat in the form of hot water from industry in Rotterdam to homes, companies and greenhouses in the Rotterdam/The Hague area.

1.4.4 Carbon capture utilisation and storage ("CCUS")

Carbon capture utilisation and storage (CCUS) is one of the very few options that energy-intensive industries, such as refineries and chemical plants, have to avoid large amounts of carbon emissions in the short term and at a relatively low cost. It allows these industries to contribute to meeting the climate targets and keeps them as part of the Dutch economy. Gasunie is committed to facilitating the development of CCUS by developing CO₂ transport and storage infrastructure together with partners from across all levels of the supply chain. In this context, we are developing Porthos²⁸ (in the Rotterdam/ Rijnmond region), Athos²⁹ (in the Amsterdam/IJmond region), and Carbon Connect Delta³⁰ (in the province of Zeeland). Porthos is scheduled to be up and running first, with the system expected to be operational in 2024, followed by Athos in 2026, and Carbon Connect Delta in 2030.

These projects have the potential to make a substantial contribution to reducing the volume of greenhouse gases present in the atmosphere. For example, it is expected that in the early years, the Porthos project will be able to store approximately 2.5 million tonnes of CO2 per year. The Carbon Connect Delta project aims to build on this by capturing approximately 1 million tonnes from 2023, with a growth potential of up to 6.5 million tonnes in 2030.

27 https://www.klimaatakkoord.nl/documenten/publicaties/2019/06/28/national-climate-agreement-the-netherlands

²⁵ https://www.hyway27.nl/en/latest-news/hyway-27-realisation-of-a-national-hydrogen-network

²⁶ https://www.ieabioenergy.com/wp-content/uploads/2018/04/green_gas_web_end.pdf

^{28 &}lt;u>https://www.porthosco2.nl/project/</u>

²⁹ https://athosccus.nl/project-en/

³⁰ https://www.smartdeltaresources.com/en/carbon-connect-delta

1.5 External ESG Ratings

Gasunie recognises the importance of benchmarking our ESG performance against external benchmarks and ratings. In this regard we have a panel of ESG rating agencies who we actively engage with – including ISS ESG and Sustainalytics.

Through such engagement we are able to ensure our sustainability policies and disclosure remains relevant and market leading. Naturally, such monitoring is complemented with engagement with a range of other stakeholders on ESG topics, such as investors, suppliers, banks and our shareholder.

As of September 2021 our ESG ratings are as per the below table. While these may continue to fluctuate as methodologies evolve, we aim to keep improving our ESG ratings year on year.

	Summary of s	elected	Gasunie	ESG	Ratings
--	--------------	---------	---------	-----	---------

	Rating category	Sector percentile
ISS ESG ⊳	Prime (B)	Top 20%
	Medium risk	Top 10%

1.6 Rationale for Framework

This Framework is an important next step for Gasunie to further align its financing strategy with its long-term strategic and sustainability objectives as outlined in its Vision 2030 strategy. It follows the structuring of a sustainability-linked loan in 2020 with its relationship banks.

The issuance of Sustainability-Linked Bonds will enable the company to further position its sustainability strategy and decarbonization commitments with its wider debt investor base. In doing so, it hopes to help stimulate the growth of the sustainable debt market and further attract ESG-focused investors to its credit profile.

2. Sustainability-Linked Bond Framework

This Framework is aligned with the International Capital Markets Association ("ICMA") Sustainability-Linked Bond Principles ("SLBPs"), 2020 version³¹. The SLBPs are a set of voluntary guidelines that outline best practices for financial instruments to incorporate forward-looking ESG outcomes and promote integrity in the development of the Sustainability-Linked Bond market by clarifying the approach for issuance of Sustainability-Linked Bonds. Any future changes in the standards mentioned above may be implemented in future versions of this Framework.

The Framework follows the structure of the SLBPs and includes the following sections:

- 1. Selection of Key Performance Indicators (KPIs)
- 2. Calibration of Sustainability Performance Targets (SPTs)
- 3. Bond characteristics
- 4. Reporting
- 5. Verification

This Framework will apply to any Sustainability-Link Bonds issued by Gasunie and will be in force as long as any Sustainability-Linked Bond is outstanding.

2.1 Selection of Key Performance Indicators

Gasunie has selected the following KPIs for potential inclusion in Sustainability-Linked Bonds. The KPIs are core, relevant, and material to our business- and sustainability strategy. Additionally, the selection of the KPIs is consistent with our long-term strategic commitment to continuously improve the safety, reliability and sustainability of our operations towards a fully CO₂ neutral energy infrastructure by 2050.

The selected KPI's focus on the direct operational footprint of our infrastructure. These KPI's are within Gasunie's full operational control and apply to areas where we can act now to further reduce our own environmental footprint in order to lead by example. Future updates of this Framework may incorporate additional KPIs related to supplementary sustainability priorities and/or our role in the energy transition.

KPI definition	Methane emissions, measured by a total amount of methane (CH_4) emissions for a given year in kilotonnes of CO_2 equivalents.				
Baseline	Full calendar year 2020: 138 kilotonnes of CO ₂ equivalents				
Rationale	Gasunie Scope 1 emissions (2020)				
	 1% 44% 55% Scope 1: Methane emissions Scope 1: Gas use installations Scope 1: Other 				
	Methane emissions are the second biggest contributor to climate change ³² , after emissions from carbon dioxide. Reducing methane emissions is therefore essential for companies in the energy sector to contribute to international climate targets.				
	Following a re-assessment of 2020 figures, methane emissions caused by fugitive, pneumatic, unburned and vented gas account for 44% of Gasunie's total Scope 1 emissions in 2020. Hence, reducing methane emissions is a key priority and an important part of Gasunie's long-term commitment to achieve a fully CO ₂ neutral energy infrastructure by 2050.				
	Gasunie aims to contribute to significantly reduce methane emissions and be among the front-runners in Europe in this respect. To exchange best practices with industry peers and promote transparency, Gasunie is a signatory to the 'Methane Guiding Principles' ³³ and the 'Oil and Gas Methane Partnership 2.0' ³⁴ .				
	Reducing methane emissions in the energy industry is also a key focus area of the European Commission to reach 2030 climate targets and the 2050 climate neutrality goal. In 2020, the European Commission launched a dedicated EU Strategy to reduce methane emissions.				
Scope	Total gross methane emissions for N.V. Nederlandse Gasunie (holding company), comprising the methane emissions of all operated entities: Gasunie Transport Services B.V., Gasunie Deutschland GmbH & Co. KG, BBL Company B.V., EnergyStock B.V. and Hynetwork Services B.V.				
Methodology	Total gross methane emissions for all operated entities of N.V. Nederlandse Gasunie, measured by an absolute figure of methane emissions in kilotonnes of CO ₂ equivalents.				
	The reported figure in kilotonnes of CO_2 equivalents is prepared in accordance with the rules of the Greenhouse Gas Protocol ³⁵ . For the purposes of our calculation, it is assumed that 1kg of methane has a global warming potential of 25kg of CO_2 equivalents (GWP=25).				

2.1.1 KPI #1: Methane emissions

³² EU Methane Strategy (2020), https://ec.europa.eu/energy/sites/ener/files/eu_methane_strategy.pdf 33 https://methaneguidingprinciples.org/

³⁴ http://ogmpartnership.com/

³⁵ https://ghgprotocol.org/

	ope 1 and 2 greenhouse gas emissions		
KPI defini- tion	Scope 1 and 2 greenhouse gas emissions (market based) ³⁶ , measured by a total amount of emissions for a given full calendar year in kilotonnes of CO ₂ equivalents.		
Baseline	Full calendar year 2020: total Scope 1 and 2 greenhouse gas emissions (market based) of 313 kilotonnes of CO ₂ equivalents.		
Rationale	Share of Scope 16-2 emissions (2020) 34% = Scope 1 6-2 emissions (location based) = Scope 3 emissions		
	Besides transforming its infrastructure to enable a low carbon future, Gasunie recognises its responsibility to significantly reduce its own carbon footprint in order to retain its 'licence to operate' and contribute to the targets of the Paris Agreement on Climate change.		
	Our Scope 1 greenhouse gas emissions are a direct effect of our own operations and are mainly driven by methane (CH4) emissions (44%) and other emissions deriving from gas fired compressors and compression engines, gas consump- tion for heating buildings and boilers at gas receiving stations (56%). Scope 2 emissions include the indirect emissions of energy procured, mainly related to the use of electricity for electrical compressors and for the production of nitrogen.		
	As depicted above, Gasunie's total Scope 1 and 2 emissions (location based) account for 66% of the company's total Scope 1, 2 and 3 emissions in 2020. As such, reducing our these emissions is a material effort and key part of Gasunie's long-term commitment to achieve a fully CO ₂ neutral energy infrastructure by 2050.		
Scope	Total Scope 1 and 2 emissions (market based) for N.V. Nederlandse Gasunie (holding company), comprising the emissions of all operated entities: Gasunie Transport Services B.V., Gasunie Deutschland GmbH & Co. KG, BBL Company B.V., EnergyStock B.V. and Hynetwork Services B.V.		
Methodology	Total Scope 1 and 2 greenhouse gas emissions (market based) for all operated entities of N.V. Nederlandse Gasunie, measured by an absolute figure of emissions in kilotonnes of CO ₂ equivalents. This figure is calculated as the sum of gross Scope 1 and market based Scope 2 emissions. In calculating the market based Scope 2 emissions, a zero CO ₂ equivalent emission factor is applied to the elec- tricity use of Gasunie that is covered by Guarantees of Origin ("GoO") or other contractual instruments ³⁷ . A GoO is a tracking instrument defined in article 15 of the European Renewable Energy Directive 2009/28/EC (that is replaced by 2018/2001/EC) and labels electricity from renewable sources to provide informa- tion to electricity customers on the source of their energy). The reported figure in kilotonnes of CO ₂ equivalents is prepared in accordance with the rules of the Greenhouse Gas Protocol.		

KPI #2' Scope 1 and 2 greenhouse gas emission

³⁶ https://ghgprotocol.org/ 37 Scope 2 emissions can be reported using both the Market Based approach as well as the Location Based approach. In the Market Based approach, a zero CO₂ equivalent emission factor is applied to the electricity use covered by Guarantees of Origin or other contractual instruments. The Location Based approach applies an average grid emission factor to the electricity use.

2.2 Calibration of Sustainability Performance Targets

The specific Sustainability Performance Target(s) and related observation date(s) for a given Sustainability-Linked Bond will be determined in line with the envisioned trajectory of Gasunie towards its long-term commitment to achieve a fully CO₂ neutral energy infrastructure by 2050 as outlined in the following sections. As the Science Based Targets Initiative (SBTi) methodology for companies in the oil & gas sector is currently under development, the targets included in this framework cannot be benchmarked against the science-based decarbonisation pathways of the SBTi. However, Gasunie is committed to benchmark and reconsider the Sustainability Performance Targets once the SBTi methodology for the Oil & Gas sector becomes available.

The applicable KPI(s), Sustainability Performance Target(s) and related observation date(s) for a given Sustainability-Linked Bond will be specified in the relevant documentation of the specific transaction (e.g. Final Terms).



2.2.1 SPT #1: Reduction of methane emissions



2.2.2 SPT #2: Reduction of Scope 1 & 2 greenhouse gas emissions

Sustainability Performance Target (SPT)	Gasunie's total Scope 1 and Scope 2 greenhouse gas emissions (market based) in kilotonnes of CO ₂ equivalents for the full calendar year 2030 will not exceed the value derived via the following formula: 70 + (0.137 * transported gas volume in TWh) In this formula, the fixed figure of 70 is related to the maximum level of methane (CH ₄) emissions in kilotonnes of CO ₂ equivalents. The 0.137 value is related to carbon intensity of other scope 1 and 2 emissions (market based) per TWh of natural gas transported.
Observation date	31-12-2030
Historical performance, ambition level & peer compa- rison	Scope 1 o 2 emissions (market based), historical performance and 2030 SPT ⁴ In kton CO _{2e} In kton CO ₂ In kton Kton Co ₂ In kton Co ₂



In case the total transported gas volume in 2030 equals the volume of 2020 (1,085 TWh), the SPT results in a reduction of total Scope 1 and 2 emissions (market based) to 219 kilotonnes of CO₂ equivalents (i.e. a 30% reduction compared to the baseline performance). Comparing this scenario with 1990 levels, the reduction will amount to 70% and exceeds national Dutch- and German-, as well as European 2030 targets for reducing greenhouse gas emissions. The European Climate Law targets a reduction of greenhouse gas emission of at least 50% and towards 55% compared to 1990 levels. The SPT is in line with Gasunie's ambition to have a fully CO₂ neutral energy infrastructure by 2050.

As shown in the graph below, comparing Gasunie with its European peer Gas TSO companies, the company is a top performer in terms of total Scope 1 and 2 emissions (market based) emissions per GWh of gas transported. Given that the 2030 target also exceeds the targets of peer companies, the SPT to further reduce these emissions is viewed as ambitious.



Supported by an internationally recognized technical consultancy company, Gasunie has identified a variety of measures to further reduce its greenhouse gas emissions. All measures are included in the asset management and procurement programmes of Gasunie and include, amonst others, the development of new zero-emissions regulating stations, enhanced capacity management and temporary decommissioning. Following the completion and commissioning of its nitrogen blending station (Zuidbroek) (Q2 2022), Gasunie will increase the use of electric powered compressors, which can be powered by renewable electricity (zero CO₂ equivalent emission factor market based Scope 2). As a result of this increased electric compression the Scope 1 emissions related to gas fired compression will decrease significantly.

Illustrative key measures taken by Gasunie to reduce Scope 1 and 2 emissions (market based) are highlighted below:



In terms of challenges to reach the target, Gasunie identifies as the most imminent one the continuous identification and implemention of measures to avoid methane leakage. Additionally, given the fast transition into a less carbon intensive world, Gasunie is also required to rapidly adapt to the new demands and regulatory requirements, which involves therefore several efforts in terms of organizational, cultural and scale changes on a corporate level.

Furthermore, the fact that Gasunie's Scope 1 and 2 emissions are also directly linked to external factors that the company might not be able to control also imposes a challenge. Due to the phasing out of the Groningen gas field, the supply of low-calorific natural gas at Gasunie entry points is falling faster than the demand at our exit points. This means that in the coming years more and more high-calorific gas requires conversion into low-calorific gas. This conversion requires nitrogen to be added to the gas (blending), which in turn requires more compression of gas. Both the production of nitrogen and compression increases Scope 1 & 2 emissions.

2.3 Impact on Bond Characteristics

The proceeds of Sustainability-Linked Bonds will be used for general corporate purposes.

However, either the failure to satisfy one or more of the Sustainability Performance Target(s) highlighted in section 2.2., or their achievement, will impact the financial characteristics of Sustainability-Linked Bonds. The following sections outline the various approaches for impacting the financial characteristics of Sustainability-Linked Bonds.

The applicable approach for impacting the financial characteristics for a given instrument will be specified in the FinalTerms of the relevant documentation of the applicable Sustainability Linked Bond.

2.3.1 A coupon step-up or upward margin adjustment during the lifetime of the bond

In case this approach is applicable, failure to meet one or more SPTs will result in an interest rate increase applicable to all interest periods following the observation date (starting therefore on the next coupon payment after observation date and applicable until maturity of the bond).

2.3.2A coupon step-down or downward margin adjustment during the lifetime of the bond

In case this approach is applicable, achievement of one or more of the SPTs will result in an interest rate decrease applicable to all interest periods following the observation date (starting therefore on the next coupon payment after observation date and applicable until maturity of the bond). The target value for achievement shall be included in the final terms of the relevant bond transaction.

2.3.3 A cash-premium payment at maturity of the bond

In case this approach is applicable, failure to meet one or more SPTs will result in an additional cash payment on top of the principal amount to investors or lenders at maturity of the bond.

2.4 Reporting

Gasunie will communicate annually on the relevant KPIs and SPTs, including disclosure on up-to-date information such as baselines where relevant, on its website and/or annual report, as applicable.

Gasunie's integrated annual report, which already includes information on current sustainability performance, will additionally report on the performance of the selected KPIs (KPIs value as of 31st of December of the reporting year), including baselines and historical trajectory where relevant, covered by an assurance statement of the statutory auditor (please refer to section 2.5.2 for more details).

Additional to annual reporting, following the observation date of any of the Sustainability Performance Targets, a verification assurance report confirming the KPIs performance relative to the SPTs will be made available on Gasunie's website (Dutch and English versions). On a regular basis, Gasunie will also disclose any information that enables investors to monitor the level of ambition of the SPTs. This shall include, for example: any update in the issuers' sustainability strategy or on the related KPI/ESG governance, any relevant M&A activities which might impact SPTs, or, more generally, any information relevant to the analysis of the KPIs and SPTs. This information shall either be disclosed directly on Gasunie's website or included in relevant financial reporting.

2.5 Verification and External Review

2.5.1 Second Party Opinion

ISS-ESG, a recognized and independent provider of ESG Solutions, has provided a Second Party Opinion report in which it has verified the alignment of this Sustainability-Linked Bond Framework with the Sustainability-Linked Bond Principles (ICMA, 2020), as well as assess the materiality and relevance of the selected KPIs, the rationale and level of ambition of the proposed SPTs, the relevance and reliability of selected benchmarks and baselines, and the credibility of the outlined strategy to achieve the SPTs.

The Second Party Opinion report is available on the Investor Relations section of the Gasunie corporate website.

2.5.2 Verification and Assurance

Independent assurance will be provided by a qualified external auditor, which will assess Gasunie's performance on the KPIs included in this framework on an annual basis as part of providing assurance on the integrated annual report of Gasunie.

A specific Verification Assurance Report will be provided by the auditor at time of a target observation date for a given SPT, based on which a potential adjustment of the financial characteristics of a specific Sustainability-Linked financial instrument will be triggered.

3. Appendix

3.1: CO2 equivalents emission reporting according to the Greenhouse Gas Protocol

This table shows gross and net CO₂ equivalent emissions for Gasunie as a whole. Gross CO₂ equivalent emissions have not been corrected for sustainably procured electricity.

			1		
Scope	2020	2019	2018	2017	2016
(in kilotonnes of CO2 equivalents)					
l (direct effect of own operations)	313	248	255	260	307
2 (indirect effect of energy bought in, location based)	398	397	412	451	395
3 (other indirect effect, for instance of nitrogen bought in)	373	298	221	182	115
Total scope 1 + 2 + 3 (location based)	1,084	943	888	892	817
Decarbonising through Guarantees of Origin scope 1	0	0	0	0	0
Decarbonising through Guarantees of Origin scope 2	398	317	247	180	78
Decarbonising through Guarantees of Origin scope 3	330	204	111	67	0
Total decarbonising through Guarantees of Origin	728	521	358	247	78
Total scope 1 + 2 + 3 (market based)	686	626	641	713	739

SPT #1: Reduction of methane emissions	Mobile flaring	Gas flaring is done using a mobile flaring instal- lation. In 2020, Gasunie procured its own mobile flaring installation. The environmental impact of flaring, whereby natural gas is burned off, is lower than if the gas is vented. Approximately 525,000m ³ of natural gas was flared in 2020. In 2019, this was 872,000m ³ . By using flaring instead of venting, an environmental benefit of 6.7 kilotonnes of CO2 equivalents was achieved in 2020.
	Leak Detection and Repair (LDAR) programme	Some of the methane emissions are caused by small leaks at connections and appendages. It is a complex matter to track down these leaks because of the high number of stations and the length of the transport system. We set up an LDAR programme to track down, quantify and repair leaks. We use the NEN-EN 15446 measuring method developed by the Environmental Protection Agency (EPA) for this. Gasunie runs an LDAR programme at various types of sites, such as compressor stations, gas receiving stations, metering and regulating stations and high-pressure valve locations.
		In 2020, the European Commission launched a strategy to further bring down methane emissions in the energy industry. The main elements of the European Commission's paper are focused on transparent reporting, running Leak Detection And Repair (LDAR) programmes and reducing natural gas venting and flaring in the energy industry. Supplementary legislation in this area is expected in 2021.
	Mobile recompression	For some years, we have been using a mobile recom- pression unit which we use to recompress as much as possible of the gas that would otherwise have had to be vented, and transfer it to another pipeline. This reduces the amount of gas vented. In 2020, recompression returned approx. 597,000m ³ to the network.
	Nitrogen displacement	Another way to avoid having to vent gas from a pipeline is to use nitrogen to displace the gas, thereby transferring it to a different pipeline. Where possible, this technique is applied.

3.2: Description of initiatives to reduce our CO₂ equivalent emissions

SPT #2: Reduction of Scope 1&2 emission	Decarbonising our electricity consumption	Gasunie is one of the top 10 corporate electricity consumers in the Netherlands. This purchasing power enables us to increase the supply of green electricity production in our core business area. In 2021, we will investigate how we can contract electricity from new North Sea wind farms to be built over the next few years. Until these new parks are built, we want to make our electricity purchases greener by purchasing local Guarantee of Origin cer- tificates. In addition to electricity, we also purchase natural gas for our own use. In 2021, we will inves- tigate whether we, as a customer, can stimulate the production of green gas.
	Temporary de- commissioning of compressor stations	As production from the Groningen gas field is phased out, we are considering temporarily decom- missioning a number of compressor stations. We are exploring whether these assets could be used for the energy transition in the future. We are planning to add further assets over the 2021-2024 period. This means that fewer greenhouse gases will be emitted and less energy will be consumed in the coming years.
	Decarbonising nitrogen pro- duction at third parties	Due to the decline in production from the Groningen gas field, an increasing amount of high-calorific gas is being bought in, which subsequently has to be converted to the right quality. This quality conver- sion takes place using self-produced nitrogen and nitrogen bought in from third parties.
	Regulating equipment that causes emissions	In 2018, we made the decision to stop renova- ting our metering and regulating stations, which delayed progress in reducing emissions from the stations to zero. Alternative ways to achieve ze- ro-emission stations are being developed. In the spring of 2021, a new zero-emission regulating concept was tested for the controlling of current regulating valves. We will make choices based on the results.

Disclaimer

THIS DOCUMENT IS INTENDED TO PROVIDE NON-EXHAUSTIVE, GENERAL INFORMA-TION. THIS DOCUMENT MAY CONTAIN OR INCORPORATE BY REFERENCE PUBLIC IN-FORMATION NOT SEPARATELY REVIEWED, APPROVED OR ENDORSED BY GASUNIE AND ACCORDINGLY, NO REPRESENTATION, WARRANTY OR UNDERTAKING, EXPRESS OR IMPLIED, IS MADE AND NO RESPONSIBILITY OR LIABILITY IS ACCEPTED BY GASUNIE AS TO THE FAIRNESS, ACCURACY, REASONABLENESS OR COMPLETENESS OF SUCH INFORMA-TION.

THIS DOCUMENT MAY CONTAIN STATEMENTS ABOUT FUTURE EVENTS AND EXPECTATI-ONS THAT ARE FORWARD-LOOKING STATEMENTS. NONE OF THE FUTURE PROJECTIONS, EXPECTATIONS, ESTIMATES OR PROSPECTS IN THIS DOCUMENT SHOULD BE TAKEN AS FORECASTS OR PROMISES NOR SHOULD THEY BE TAKEN AS IMPLYING ANY INDICATI-ON, ASSURANCE OR GUARANTEE THAT THE ASSUMPTIONS ON WHICH SUCH FUTURE PROJECTIONS, EXPECTATIONS, ESTIMATES OR PROSPECTS HAVE BEEN PREPARED ARE CORRECT OR EXHAUSTIVE OR, IN THE CASE OF THE ASSUMPTIONS, FULLY STATED IN THE DOCUMENT. GASUNIE HAS AND UNDERTAKES NO OBLIGATION TO UPDATE, MODIFY OR AMEND THIS DOCUMENT, THE STATEMENTS CONTAINED HEREIN TO REFLECT ACTUAL CHANGES IN ASSUMPTIONS OR CHANGES IN FACTORS AFFECTING THESE STATEMENTS OR TO OTHERWISE NOTIFY ANY ADDRESSEE IF ANY INFORMATION, OPINION, PRO-JECTION, FORECAST OR ESTIMATE SET FORTH HEREIN CHANGES OR SUBSEQUENTLY BECOMES INACCURATE.

THIS DOCUMENT IS NOT INTENDED TO BEAND SHOULD NOT BE CONSTRUED AS PROVIDING LEGAL OR FINANCIAL ADVICE. IT DOES NOT CONSTITUTE AN OFFER OR INVI-TATION TO SELL OR ANY SOLICITATION OF ANY OFFER TO SUBSCRIBE TO OR PURCHASE OR A RECOMMENDATION REGARDING ANY SECURITIES; NOTHING CONTAINED HEREIN SHALL FORM THE BASIS OF ANY CONTRACT OR COMMITMENT WHATSOEVER AND IT HAS NOT BEEN APPROVED BY ANY SECURITY REGULATORY AUTHORITY.

THE DISTRIBUTION OFTHIS DOCUMENT AND OFTHE INFORMATION IT CONTAINS MAY BE SUBJECT TO LEGAL RESTRICTIONS IN SOME COUNTRIES. PERSONS WHO MIGHT COME INTO POSSESSION OF IT MUST INQUIRE AS TO THE EXISTENCE OF SUCH RESTRIC-TIONS AND COMPLY WITH THEM. THE INFORMATION IN THIS DOCUMENT HAS NOT BEEN INDEPENDENTLY VERIFIED. THE ADDRESSEE IS SOLELY LIABLE FOR ANY USE OF THE INFORMATION CONTAINED HEREIN AND DEUTSCHE WOHNEN SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES, DIRECT, INDIRECT OR OTHERWISE, ARISING FROM THE USE OFTHIS DOCUMENT BY THE ADDRESSEE.

