Gasunie Fixed-Income
Investor Presentation

Welcome!
November 2020
Disclaimer

• The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union and applicable as of 30 June 2020

• The figures in this report are derived from N.V. Nederlandse Gasunie’s 2019 annual report, as adopted by the General Meeting of Shareholders on 24 March 2020 and N.V. Nederlandse Gasunie’s 2020 half-year report

• This presentation is not an offer or solicitation of an offer to buy or sell securities. It is solely for use at the investor presentation and is provided as information only. This presentation does not contain all information that is material to investors

• This presentation may contain projections or other forward-looking statements regarding future events or the future financial performance of N.V. Nederlandse Gasunie and its subsidiaries. We wish to emphasise that these statements are management predictions and that actual events or results may differ materially

• IFRS 16 was adopted as of 1 January 2019
Presenting team

Janneke Hermes  
*CFO*  
With Gasunie since: 2002  
Previous experience: Various management roles at Gasunie Finance, Strategy and Human Resources

Bart Jansen  
*Manager Treasury & Corporate Finance*  
With Gasunie since: 2019  
Previous experience: Director of Treasury for Nuon, Coca Cola HBC and GrandVision

Adriaan Stel  
*Group Controller*

Gea Paas Broekman  
*Treasury Front Office Manager*  
G.Paas.Broekman@gasunie.nl
Key messages for today

Crossing borders in energy
• Dutch state-owned utility with core regulated business and long-term contracts
• Strong government support and good relationship with regulators
• Clear strategy towards 2030 and beyond
• Gasunie has continuously reinvented itself in a changing environment
• Powering the phase-out of the Groningen Gas Field
• Linking pin in the energy value chain

Strong financials and financial policy
• Consistent multi-year performance
• Prudent financial policy
• Adequate liquidity backup and balanced debt maturity profile
• Strong credit ratings with stable outlook
• Minimal impact of COVID-19 on operations and financials

Accelerating the energy transition
• Committed to ambitious Dutch and European climate policies
• Existing energy transition projects give us opportunity to scale up
• Gasunie is planning significant energy transition investments
• Exploring possibilities to create a Transition Bond Framework

CSR policy
• Concrete implementation of SDGs in Gasunie Green Deals
• Sustainalytics ESG Risk Rating ranks Gasunie in top 10% among industry peers
Crossing borders in energy

Strong financials and financial policy

Accelerating the energy transition

CSR policy

Appendix
Dutch state owned utility with core regulated business and long term contracts

**Gasunie business units**

- **Gasunie Transport Services** (GTS) (fully regulated)
  - YE2019 assets €6.6bn
  - FY2019 revenue €921m

- **Gasunie Deutschland** (GUD) (fully regulated)
  - YE2019 assets €1.6bn
  - FY2019 revenue €247m

- **Participations** (partly regulated and/or long-term contracts)
  - YE2019 assets €1.4bn
  - FY2019 revenue €144m

**Participations include:**
- EnergyStock gas storage services (100%)
- BBL UK gas connection (60%)
- Nord Stream-1 gas pipeline (9%)
- Gate LNG terminal (50%)
- Hynetwork Services (100%)
- Vertogas certification of green gases (100%)
- EnergyStock hydrogen conversion (100%)
- Gridwise Engineering & Services (100%)
Strong government support and good relationship with regulators

• Dutch government explicitly expresses support for Gasunie’s desire to take a leading position in green gas and hydrogen and play an active role in the development of infrastructure for heat and Carbon Capture, Storage and Utilisation (CCUS)

• Ministry of Finance underlines that Gasunie should be enabled to finance investments that facilitate the energy transition

• Project HyWay 27 explores the use of national gas infrastructure for the transport and storage of hydrogen in the future, in collaboration with TenneT and the Ministries of Economic Affairs and Finance

• WarmtelinQ agreement with the Ministry of Economic Affairs and Climate Policy is a big step in realising Gasunie’s ambition to obtain a position in large-scale heat networks

• Over the past years, collaboration between GTS and ACM has improved significantly

• In the new regulatory period 2022-2026, Dutch regulator ACM will allow GTS to substantially accelerate the recovery of investment costs

• Constructive discussions ongoing between GUD and German regulator BNetzA on next regulatory period 2023-2027
Clear strategy towards 2030 and beyond

Our mission
Gasunie is a leading European energy infrastructure company whose core activities are gas transport and gas storage. 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.

Our vision
We believe in a sustainable future with a balanced energy mix and a lasting role for diversified gas. We believe that we serve our customers best with innovative gas and related infrastructure solutions.

Strategic focus areas

- Facilitate our customers with our infrastructure
- Advise on security of supply and liquidity
- Minimise our costs
- Strengthen position in green gas and hydrogen
- Take leading position in green gas and hydrogen
- Play active role in development of infrastructure for heat and CCUS
- Optimising value of existing infrastructure
- Facilitating the EU gas market
- Contributing to the energy transition

Our three strategic pillars

- Optimising value of existing infrastructure
  Ensuring a safe, reliable, affordable and sustainable gas infrastructure in core area
- Facilitating the EU gas market
  Contributing to an efficient gas infrastructure and services for a properly functioning European natural gas and LNG market
- Contributing to the energy transition
  Accelerating the transition to a carbon-neutral energy supply
Gasunie has continuously reinvented itself in a changing environment

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>Groningen Gas field discovered</td>
</tr>
<tr>
<td>1963</td>
<td>Formation of Gasunie</td>
</tr>
<tr>
<td>1969</td>
<td>Gas grid mid-60s</td>
</tr>
<tr>
<td>1972</td>
<td>Gas grid mid-90s</td>
</tr>
<tr>
<td>1987</td>
<td>Expanding its European footprint</td>
</tr>
<tr>
<td>2005</td>
<td>Unbundling Gasunie (gas transport) and GasTerra (gas trading). Gasunie 100% state-owned</td>
</tr>
<tr>
<td>2006</td>
<td>Participation in BBL</td>
</tr>
<tr>
<td>2008</td>
<td>Acquisition of Gasunie Deutschland</td>
</tr>
<tr>
<td>2011</td>
<td>Gate LNG terminal</td>
</tr>
<tr>
<td>2012</td>
<td>Minority stake in NordStream</td>
</tr>
<tr>
<td>2013</td>
<td>16.5% stake in European Gas Pipeline Link (EUGAL)</td>
</tr>
<tr>
<td>2018</td>
<td>Nitrogen installation Zuidbroek (FID) and hydrogen pipeline in Zeeland</td>
</tr>
<tr>
<td>2020</td>
<td>Infrastructure Outlook 2050</td>
</tr>
<tr>
<td>2022</td>
<td>Djewels 20MW electrolyser</td>
</tr>
<tr>
<td>2023</td>
<td>WarmtelinQ</td>
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<tr>
<td>2025</td>
<td>Super Critical Water gasification plant (SKW)</td>
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<tr>
<td>2026</td>
<td>Porthos CCUS</td>
</tr>
<tr>
<td>2027</td>
<td>HyStock hydrogen storage facility</td>
</tr>
<tr>
<td>2028</td>
<td>North Sea Wind Power Hub</td>
</tr>
<tr>
<td>2030</td>
<td>EnergyStock hydrogen storage facility</td>
</tr>
<tr>
<td>2031</td>
<td>Gasunie &amp;Tennet Infrastructure Outlook 2050</td>
</tr>
<tr>
<td>2032</td>
<td>Djewels 20MW electrolyser</td>
</tr>
<tr>
<td>2033</td>
<td>WarmtelinQ</td>
</tr>
<tr>
<td>2034</td>
<td>Super Critical Water gasification plant (SKW)</td>
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<tr>
<td>2035</td>
<td>Porthos CCUS</td>
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<tr>
<td>2036</td>
<td>HyStock hydrogen storage facility</td>
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<tr>
<td>2037</td>
<td>North Sea Wind Power Hub</td>
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<tr>
<td>2038</td>
<td>EnergyStock hydrogen storage facility</td>
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<tr>
<td>2039</td>
<td>Gasunie &amp;Tennet Infrastructure Outlook 2050</td>
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<tr>
<td>2040</td>
<td>Djewels 20MW electrolyser</td>
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<tr>
<td>2041</td>
<td>WarmtelinQ</td>
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<tr>
<td>2042</td>
<td>Super Critical Water gasification plant (SKW)</td>
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<tr>
<td>2043</td>
<td>Porthos CCUS</td>
</tr>
<tr>
<td>2044</td>
<td>HyStock hydrogen storage facility</td>
</tr>
<tr>
<td>2045</td>
<td>North Sea Wind Power Hub</td>
</tr>
</tbody>
</table>
### Powering the phase-out of the Groningen gas field

<table>
<thead>
<tr>
<th>Groningen gas field will go on standby in 2022</th>
<th>The Dutch government has ordered Exxon/Shell-company NAM to phase out the <strong>largest onshore natural gas field</strong> in Europe</th>
</tr>
</thead>
</table>
| Gasunie is expanding its nitrogen blending capacity, converting foreign high-cal gas into low-cal gas of Groningen-quality. This compensates the entire Groningen field production | • **Wieringermeer N₂ blending station 10x scale-up** (completed December 2019)  
• **New €500m N₂ blending station** in Zuidbroek (completion April 2022) |
| Gasunie enables large industrial consumers to switch to high-cal gas | Nine largest Dutch **high-volume industrial gas users** are ordered to:  
• either **stop** using gas altogether  
• or **switch** from low-cal gas to high-cal gas |
Gasunie’s Vision for 2030

By 2030 ...

- The gas transport company has become an **energy infrastructure company**
- We **facilitate** the energy market as we have always facilitated the natural gas market
- We **store and transport** natural gas, green gas, hydrogen, CO₂ and heat...
- ...in a safe, reliable, affordable and **sustainable** way

- Gas production in Groningen is **zero**
- Export and domestic demand for natural gas has **declined**...
- ...although 75% of Dutch homes will still use **natural gas**
- More **foreign natural gas** is brought to our region, via pipes and ships
- Thanks to our **N₂ plants**, natural gas quality equals that of Groningen gas
- Our Dutch natural gas storage facilities are **still important**

- The contours of the hydrogen market are **clearly visible**
- We operate our **open access regulated hydrogen backbone** in the Netherlands...
- ...having **adapted** the natural gas pipelines for this
- We offer storage in the form of **hydrogen caverns**
- We run **electrolysis facilities**, where market parties can convert hydrogen
- We operate or will participate in a successful **hydrogen exchange**

- Meanwhile, **green gas insertion** will be scaled up considerably...
- ...and we have an active role in **heat infrastructure** and **CO₂** storage and transport

<table>
<thead>
<tr>
<th></th>
<th>Production</th>
<th>Conversion</th>
<th>Transport</th>
<th>Storage</th>
<th>Certification</th>
<th>Services</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNG</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green gas</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCUS</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat</td>
<td>✔</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our asset portfolio remains predominantly regulated. The exact % regulated/unregulated will depend on political choices and the success rate in realising new energy projects.
Gasunie is the linking pin in the energy value chain
Crossing borders in energy

Strong financials and financial policy

Accelerating the energy transition

CSR policy

Appendix
Consistent multi-year performance

<table>
<thead>
<tr>
<th>FY revenues per regulated BU (€m)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTS</td>
<td>928</td>
<td>932</td>
<td>921</td>
</tr>
<tr>
<td>GUD</td>
<td>224</td>
<td>220</td>
<td>247</td>
</tr>
</tbody>
</table>
Prudent financial policy

• Gasunie is committed to maintaining at least a **solid A rating**
• Financial policy is aimed at maintaining **broad access** to money and capital markets
• End-2019 weighted average effective interest rate of long-term outstanding debt is **2.4% per annum**
• Dividend payout 2018-2021 is fixed at 70% of annual net profits normalised for non-cash items. In the event of major changes, the policy can be reviewed

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net debt/fixed assets*</td>
<td>46%</td>
<td>43%</td>
<td>43%</td>
<td>42%</td>
</tr>
<tr>
<td>FFO/net debt</td>
<td>18%</td>
<td>20%</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td>FFO/interest</td>
<td>7.9</td>
<td>9.0</td>
<td>9.9</td>
<td>8.5</td>
</tr>
</tbody>
</table>

All according to Gasunie Annual Reports
*Net debt including guarantees/tangible fixed assets
Adequate liquidity backup and balanced debt maturity profile

- Weighted average maturity of long-term debt: 5.5 years
- Gasunie has the following issuance programmes:
  - €7.5bn EMTN programme
  - €750m ECP programme
- In H1 2020 Gasunie reached an agreement with the EIB for a €240m long-term loan to build a new N₂ blending station in Zuidbroek. We do not expect to draw on this loan before 2021
- In H1 2020 the committed revolving credit facility with a group of international banks was renewed for an amount of €600m for a period of five years with an option of two one-year extensions
- ESG criteria have been added to this €600m revolving credit facility

<table>
<thead>
<tr>
<th>Debt Instrument 2019YE (€m)</th>
<th>Drawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans from the European Investment Bank</td>
<td>571</td>
</tr>
<tr>
<td>Euro Medium Term Notes</td>
<td>2,552</td>
</tr>
<tr>
<td><strong>Total Gross Long-Term Debt</strong></td>
<td><strong>3,123</strong></td>
</tr>
</tbody>
</table>

![Debt Maturity Profile YE2019 (€m)](image_url)

![Long-Term Debt Overview](image_url)
## Strong credit ratings with stable outlook

<table>
<thead>
<tr>
<th><strong>Ratings</strong></th>
<th><strong>STANDARD &amp;POOR'S</strong></th>
<th>Latest update: 5 June 2020</th>
<th><strong>Moody’s</strong></th>
<th>Latest update: 6 September 2019</th>
</tr>
</thead>
</table>
| **Strengths** | • AA- long term corporate rating  
• Stable outlook | | |  
• A1 long-term issuer rating  
• Stable outlook  
• Low business risk profile underpinned by regulated monopoly gas transmission network operations  
• Good cash flow visibility through 2021 following regulatory determinations in Germany and the Netherlands  
• Strong implicit support from Gasunie's owner, the Dutch government |
| **Key metrics** | • Company’s credit metrics benefitted from court ruling on current Dutch regulatory framework | | |  
• Gasunie will continue to maintain a solid financial profile with FFO/Net Debt at least in the high teens and Net Debt/Fixed Assets below 55% |
| **Factors that could lead to a downgrade** | • FFO-to-debt ratio below 11% and a rating downgrade for the Dutch State | | |  
• FFO/Net Debt < high teens and Net Debt/Fixed Assets >55% |

Latest update: 6 September 2019

Latest update: 5 June 2020
Impact of COVID-19 limited to slight delays in construction of projects

- Maintenance and construction projects are ongoing. Small delays on a few projects cannot be excluded.
- Gasunie has not experienced any liquidity effects. We renewed our €600m Revolving Credit Facility.
- We have not requested government emergency financial support in the Netherlands or Germany.

- Management has no reason to expect that COVID-19 will have an adverse impact on 2020 financial results.
- Operating result for FY2020 expected to be higher than FY2019 mainly due to commissioning of first pipeline of EUGAL project.
- FY2020 Capital expenditure expected to be in line with FY2019 levels at around €400-450m.

<table>
<thead>
<tr>
<th>H1 2020</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>712</td>
</tr>
<tr>
<td>EBITDA</td>
<td>492</td>
</tr>
<tr>
<td>EBIT</td>
<td>332</td>
</tr>
<tr>
<td>Result after tax</td>
<td>257</td>
</tr>
<tr>
<td>Cash Flow from Operations</td>
<td>534</td>
</tr>
<tr>
<td>Capex</td>
<td>-173</td>
</tr>
</tbody>
</table>

End of period, amounts in €m

- H1 2020 revenues have increased compared to H1 2019 due to higher tariffs, rising capacity demand in NL and lower capacity demand in GER.
- H1 2020 EBITDA and EBIT increased compared to H1 2019 primarily due to higher revenues as expenses remained in line with H1 2020.
- H1 2020 result after taxation was impacted by lower dividend paid by Nord Stream (in H1 2019 both a regular dividend and a dividend for a previous financial year were paid).
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossing borders in energy</td>
<td>6</td>
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<tr>
<td>Strong financials and financial policy</td>
<td>14</td>
</tr>
<tr>
<td>Accelerating the energy transition</td>
<td>20</td>
</tr>
<tr>
<td>CSR policy</td>
<td>25</td>
</tr>
<tr>
<td>Appendix</td>
<td>28</td>
</tr>
</tbody>
</table>
Committed to ambitious Dutch and European climate policies

Dutch Climate Act (2019)
- **49% CO₂ reduction** in national CO₂ emissions by 2030 (compared to 1990 levels)
- **95% CO₂ reduction** in national CO₂ emissions by 2050 (compared to 1990 levels)
- **100% CO₂-neutral electricity supply** by 2050

European Green Deal (2019)
- Aims to make Europe the **first climate-neutral continent** by 2050
- Reaching this target will require **action by all sectors** of the economy
- **Hydrogen** will play a key role in the transition, as a fuel and as a raw feedstock
- EU investment plan will mobilise **€1 trillion** to move to a clean, circular economy, restore biodiversity and cut pollution

Gasunie is an active player in the energy transition
- Natural gas consumption in **2030** in NL approx. 75% compared to 2019, in GER unchanged or rising
- In **2050** at least half of society’s energy will continue to come from molecules

Focus Areas
- Hydrogen
- CCUS
- Green Gas
- Heat

**49% CO₂ REDUCTION BY 2030**

**2050 CLIMATE-NEUTRAL CONTINENT**

**CO₂ REDUCTION BY 2030**

**H₂ 2050**

**49% reduction in national CO₂ emissions by 2030 (compared to 1990 levels)**

**95% reduction in national CO₂ emissions by 2050 (compared to 1990 levels)**

**100% CO₂-neutral electricity supply by 2050**

**Aims to make Europe the first climate-neutral continent by 2050**

**Reaching this target will require action by all sectors of the economy**

**Hydrogen will play a key role in the transition, as a fuel and as a raw feedstock**

**EU investment plan will mobilise €1 trillion to move to a clean, circular economy, restore biodiversity and cut pollution**

**Natural gas consumption in 2030 in NL approx. 75% compared to 2019, in GER unchanged or rising**

**In 2050 at least half of society’s energy will continue to come from molecules**
Existing energy transition projects give us opportunity to scale up

- Gasunie is perfectly positioned to play a key role in the energy transition
- Pilot projects are necessary to successfully play this key role
- Short-term showcases, partnering, attracting European subsidies, private investments and the introduction of additional policy instruments are essential elements
- In order to scale up, we need to secure long-term commitments from both the government and industries

<table>
<thead>
<tr>
<th>type</th>
<th>name</th>
<th>project</th>
<th>operational</th>
<th>2030 goal</th>
<th>2050 goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green gas</td>
<td>SKW</td>
<td>Super critical water gassification</td>
<td>2020</td>
<td>2 bcm green gas injection in our network</td>
<td>additional green gas for industry and logistics</td>
</tr>
<tr>
<td>Green gas</td>
<td>Booster Wijster</td>
<td>Green gas booster</td>
<td>2019</td>
<td>2 bcm green gas for residential heating</td>
<td>additional green gas for industry and logistics</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>HyStock</td>
<td>1 MW electrolyzer pilot plant</td>
<td>2019</td>
<td>2 GW electrolyzer capacity</td>
<td>Hydrogen Backbone</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>Zeeland hydrogen pipeline</td>
<td>Hydrogen transport from Dow to Yara</td>
<td>2018</td>
<td>Hydrogen Backbone</td>
<td></td>
</tr>
<tr>
<td>Hydrogen</td>
<td>Hydrohub</td>
<td>Research center for industrial green hydrogen use</td>
<td>2018</td>
<td>2 GW electrolyzer capacity</td>
<td></td>
</tr>
<tr>
<td>Green gas</td>
<td>Biogas Netwerk Twente</td>
<td>First farmer-to-residential green gas grid</td>
<td>2017</td>
<td>2 bcm green gas for residential heating</td>
<td>additional green gas for industry and logistics</td>
</tr>
<tr>
<td>LNG Gate</td>
<td>Rotterdam LNG Terminal</td>
<td></td>
<td>2011</td>
<td>Brunsbüttel LNG terminal</td>
<td></td>
</tr>
<tr>
<td>Hydrogen</td>
<td>Vertogas</td>
<td>Green gas certification</td>
<td>2009</td>
<td>Green gas &amp; Hydrogen certification</td>
<td></td>
</tr>
</tbody>
</table>
Our Vision 2030 strategy contains large-scale energy transition projects for which no investment decision has yet been made.

We expect the large majority of these projects to become part of a regulated framework.

LT contracts with counterparts with a modest risk profile will provide majority of non-regulated sustainable energy project revenues.

Momentum for these new energy transition projects seems promising.

COVID-19 leading to growing European support for economic recovery through investments in renewable energy, in particular hydrogen.

The Hydrogen Backbone project is the major strategic challenge Gasunie is facing today.

Gasunie is planning significant energy transition investments:

- Djewels 1-2-3 €70m
- WarmtelinQ €360m
- German LNG €277m
- Porthos €220m
- SKW €250m
- Magnum Power Station €170m
- Athos €250m
- Hydrogen Backbone €1,500m
- North Sea Wind Power Hub €500m
- NorthH2 €500m

Most project CAPEX will be split between project partners. Gasunie’s share in total project CAPEX.

- Green gas
- Hydrogen
- CCUS
- LNG
- Heat

2021

2030
Potential Gasunie Transition Bond Framework

Gasunie Transition Bond

- Gasunie has identified a significant portfolio of existing and future investments related to the energy transition
- Ambition to (re)finance these investments under a Gasunie Transition Bond Framework aligned with ICMA Guidance on Transition Bonds (when available)
- Framework anticipated to be in place in 2021
- Specific Second Party Opinion focusing on transition
- Use of Proceeds in line with the strategy and energy transition themes of Gasunie

Possible investment purposes

1. **Hydrogen**
   Investments in transportation and storage of hydrogen, with a focus on “blue” and “green” hydrogen

2. **Green Gas**
   Investments in feed-in and storage of green gas, including required modifications to the gas network

3. **Heat**
   Investments in the development of large-scale heat grids and related infrastructure

4. **Carbon Capture, Storage and Utilisation**
   Investments in the transportation, compression, storage and utilisation of CO₂
## Concrete implementation of SDGs in Gasunie Green Deals

<table>
<thead>
<tr>
<th>Core SDGs</th>
<th>Flanking SDGs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>● investigation started</td>
<td>●● action programme started</td>
<td>●● tangible results</td>
</tr>
<tr>
<td>Reduce greenhouse emissions during the construction of energy projects</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Circular and CO\textsubscript{2}-neutral procurement</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Redeployment of existing assets</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Take social responsibility</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Build a diverse and inclusive organisation</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Contribute to biodiversity</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Cut gas transport energy use</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Develop strategy for energy procurement</td>
<td>●●</td>
<td>●●</td>
</tr>
<tr>
<td>Cut CO\textsubscript{2}-equivalent emissions in daily operations to 128 kt by 2030, with less than 50 kt attributable to methane</td>
<td>●●●</td>
<td>●●●</td>
</tr>
</tbody>
</table>
Sustainalytics ESG Risk Rating ranks Gasunie in top 10% among industry peers

**Sustainalytics ESG Risk Rating**
- Gasunie is assessed as being “at medium risk of experiencing material financial impacts from ESG risk factors”
- The ESG Risk Rating is mainly driven by the ESG Risk exposure related to the Gas Utilities industry, which is relatively high compared to other industries
- The management of material ESG risks by Gasunie is viewed as “strong”
- The ESG Risk Rating improved from 29.0 (2019) to 24.4 in 2020, ranking Gasunie 7th out of 67 companies in the Gas Utilities subindustry

**Enhanced transparency on ESG topics going forward**
- The Gasunie integrated annual report is aligned with the GRI Sustainability Reporting Standards (CORE application) and the principles of Integrated Reporting from IIRC
- In line with industry best practices, Gasunie is committed to continue to enhance its transparency towards stakeholders on its ESG policy commitments and management of ESG risks

**Source:** Sustainalytics ESG Risk Rating report for Gasunie (21 October 2020)
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossing borders in energy</td>
<td>6</td>
</tr>
<tr>
<td>Strong financials and financial policy</td>
<td>14</td>
</tr>
<tr>
<td>Accelerating the energy transition</td>
<td>20</td>
</tr>
<tr>
<td>CSR policy</td>
<td>25</td>
</tr>
<tr>
<td>Appendix</td>
<td>28</td>
</tr>
</tbody>
</table>
2030
On track together

We are Gasunie

Natural gas

Infrastructure

Extraction of Groningen gas terminated

Hydrogen

CO2

Knowledge

Transport

Conversion

CO2-reduction

Storage

Lifelong learning

Flexible

Digitisation

Continuous improvement

Job rotation

75% of homes use natural gas

Green gas

Energy transition

Green gas

Natural gas

Nitrogen

Hydrogen

Fossil gas

TenneT

Netherlands

Green gas

Environment
Energy transition at a glance

Molecules alongside electrons
- By 2050, solar and wind power will account for up to 50% of energy consumption in the Netherlands and Germany
- The other half will come from green ‘molecules’, mainly gases. Hydrogen is a good example of a sustainable gas

Smart and flexible energy system
- Electricity, heat and gas will need to be increasingly integrated in order to absorb the fluctuations in solar and wind power production
- And will therefore require close collaboration between different energy infrastructures to ensure reliability of the energy system

Energy Transition focus areas
1. Hydrogen
2. Green gas
3. Heat
4. Carbon Capture, Utilisation and Storage

Importance of storage and transport
- Gaseous transport and storage provides a solution to variable energy production by solar and wind power
- Energy storage in molecules is 1000x more efficient than energy storage in electrons
- Gases are a factor 10 to 20 more efficient to transport in large quantities relative to electricity
Our assets are perfectly positioned to play a key role in the energy transition

Capacity 20 GW

Owner: TenneT
High-voltage electricity grid

Investment plans:
Reinforcing existing grid
New offshore wind connections

Capacity 350 GW

Owner: Gasunie
High-cal gas grid

Investment plans:
Hydrogen grid by 2030,
connecting industrial clusters and storage

Owner: Gasunie
Low-cal gas grid

Investment plans:
Facilitate 2 bln m³
green gas feed-in

*Dutch grids taken as an example.

In a Combined Grid:

- Power plants use green hydrogen or (bio) gas to produce electricity
- Electrolysis plants use green electricity to produce green hydrogen

Why hydrogen is needed

[Graph showing demand, production, and supply.]
Moving towards 2030 and 2050 with hydrogen

The energy transition requires new forms of infrastructure and intelligent use of existing networks. Gasunie wants to invest in new infrastructure for renewable gases such as hydrogen.

2016 Paris Agreement:
Global warming set at a max. 2°C. This requires CO₂-reduction in the Netherlands of:
- 40-50% in 2030
- 85-100% in 2050
Hydrogen as a fuel and as a raw material can help to achieve CO₂-reduction targets.
Our hydrogen quadruple jump

**HOP**
**2021-2022**
Prepare the market: promote electrolysis and H₂ applications in the industrial clusters

**STEP**
**2023-2025**
Develop regional infrastructure: start phased roll-out of backbone

**JUMP**
**2026-2028**
Facilitate growth and creation of market: connect industrial clusters with each other, storage and other countries

**JUMP**
**2029-2030**
Ready for the global market: continued growth of offshore wind for hydrogen, realisation of import and transit

Hydrogen hub decision year

© Gasunie
### Electrical and hydrogen storage capacity in comparison

<table>
<thead>
<tr>
<th>Powerwall</th>
<th>Battery</th>
<th>Mega battery</th>
<th>Pumped hydro storage</th>
<th>Storage in natural gas field</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Powerwall" /></td>
<td><img src="image" alt="Battery" /></td>
<td><img src="image" alt="Mega battery" /></td>
<td><img src="image" alt="Pumped hydro storage" /></td>
<td><img src="image" alt="Storage in natural gas field" /></td>
</tr>
<tr>
<td>10 kWh = energy for 1 day for 1 home</td>
<td>100 kWh = 400 km of driving</td>
<td>130 MWh = 10000 powerwalls</td>
<td>250 GWh</td>
<td></td>
</tr>
<tr>
<td>10 x</td>
<td>1300 x</td>
<td>1900 x</td>
<td>180 x</td>
<td></td>
</tr>
</tbody>
</table>

#### Hydrogen Storage Capacity

<table>
<thead>
<tr>
<th>H₂ gas bottle</th>
<th>H₂ tubetrailer</th>
<th>Liquid H₂ storage (Cape Canaveral)</th>
<th>H₂ in salt cavern</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="H₂ gas bottle" /></td>
<td><img src="image" alt="H₂ tubetrailer" /></td>
<td><img src="image" alt="Liquid H₂ storage" /></td>
<td><img src="image" alt="H₂ in salt cavern" /></td>
</tr>
<tr>
<td>30 kWh</td>
<td>30 MWh</td>
<td>10 GWh</td>
<td>240 GWh</td>
</tr>
<tr>
<td>1000 x</td>
<td>333 x</td>
<td>24 x</td>
<td>191 x</td>
</tr>
<tr>
<td>46.000 GWh</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Contribution to the energy transition: hydrogen

**Hydrogen further explained**

- **Green hydrogen can play a substantial role** in the energy transition, while in the short term, **blue hydrogen can help to accelerate the hydrogen market** in the coming decades and substantially reduce CO₂ emissions.
- Hydrogen produced from natural gas in a process which releases carbon dioxide is called **grey hydrogen**. However, if the CO₂ is captured, stored or reused, then it's considered **blue hydrogen**. **Green hydrogen** is produced through electrolysis using renewable energy sources.
- The largest operational battery is 100 MWh whilst a hydrogen cavern could hold up to 240,000 MWh. Therefore hydrogen offers a good solution to **store large quantities** of renewable energy.
- Large-scale use of hydrogen requires a reliable network for transport and storage. Leveraging more than 90% of Gasunie's existing infrastructure can produce a network with a capacity of about 10 GW that can be converted by 2030 with estimated capex of €1.5bn.
- Based on the Dutch Climate Agreement, preparations will be made for a national hydrogen infrastructure and the government will contribute €30-40m annual CAPEX subsidy for hydrogen projects and potentially OPEX subsidy in future.

---

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>HyStock: 1 MW value chain operational</td>
<td>&gt;100 MW P2G projects operational</td>
<td>&gt;1 GW P2G projects</td>
</tr>
<tr>
<td>Converted H₂ pipeline operational</td>
<td>Dozens of H₂ refuelling stations operational</td>
<td>P2G en H₂ are key in the electricity sector</td>
</tr>
<tr>
<td>Several refuelling stations operational</td>
<td>Several H₂ pipelines operational</td>
<td></td>
</tr>
<tr>
<td>Development &gt;20 MW P2G (Nouryon)</td>
<td>&gt;= 1 Blue H₂ project operational</td>
<td></td>
</tr>
<tr>
<td>Development of &quot;Blue H₂&quot; project (Equinor/Vattenfall)</td>
<td>Development &amp; construction large-scale P2G projects</td>
<td></td>
</tr>
<tr>
<td>Development large-scale P2G projects (NSWH)</td>
<td>Development &amp; construction of H₂ caverns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Making existing infrastructure available for H₂ usage</td>
<td></td>
</tr>
</tbody>
</table>
Contribution to the energy transition: CCUS

Carbon Capture, Storage and Utilisation further explained

- In the Climate Agreement, the industry and government announced CCUS as one of the means to reduce CO₂ emissions. CCUS is not a final destination, but rather a part of the energy transition journey. CCUS can prevent CO₂ from escaping into the atmosphere. One interesting development is taking the CO₂ captured and using it elsewhere, like in commercial greenhouses for the production of fruit and vegetables.
- Gasunie has a wealth of relevant knowledge and know-how on gas transport and storage. With this expertise, Gasunie can make a valuable contribution to the development of a safe carbon capture, storage, and transportation system in NL. It is with good reason that Gasunie was asked, together with Dutch energy institute EBN, to advise on the transport and storage of CO₂. We presented our joint report to the Dutch House of Representatives, along with a ‘roadmap’.
- The Dutch government announced it wants to store ~10 Mton of CO₂ per year in empty offshore gas fields by 2030 (49% less CO₂).
- From November 2020 CCUS projects are eligible for Dutch SDE++ subsidy. Industrial emitters can start building a CCUS business case.

Porthos (Rotterdam CCUS)

- Storage and transport system to facilitate the storage of CO₂ in empty gas fields deep in the North Sea bed from 2023.
- Partners: EBN, Port of Rotterdam Authority, Gasunie.
- Project investment is expected to amount to about €500m in the coming years (50% Gasunie).
- Expected annual CO₂ reduction 2.5 mln tonnes.

Athos (Amsterdam CCUS)

- Together with EBN, the Port of Amsterdam and Tata Steel, Gasunie investigated the feasibility of a CCUS system in the Amsterdam/North Sea Canal region.
- The feasibility study was completed at the beginning of 2019. The project is expected to require an investment of €500-1,000m.
- Expected annual CO₂ reduction 3-8 mln tonnes.

Carbon Connect Delta (Zeeland CCUS)

- GU is member of a consortium investigating the feasibility of CCUS in Zeeland. Completion of feasibility study expected early 2021.
Contribution to the energy transition: green gas

Green gas further explained

- The potential of green gas is substantial. The objective is to produce and supply at least 2 bcm by 2030, as laid down in the Climate Agreement.
- The utilisation of green gas is CO₂-neutral and we anticipate that such renewable gas will play a substantial role in the energy transition.
- Green gas can be used in the same way natural gas is currently used and our infrastructure is ready to facilitate the use of green gas.
- Upscaling of green gas production is of eminent importance if the share of green gas in the energy mix is to increase by 2030. We are working together with a wide range of stakeholders to develop the equipment and technology needed to make green gas an undisputed choice. We share knowledge and experience with a wide range of stakeholders and wish to collaborate in order to give direction to the energy transition in order to achieve the goals set under the Climate Agreement.
- By 2030, we will be able to facilitate heating millions of homes with green gas delivered through the existing gas infrastructure.

Biogas Netwerk Twente

- Development of a renewable gas network in Twente region with multiple renewable gas producers.
- Adds 4 million m³ of biogas to existing production of 81 million m³.
- In due course, the biogas network will be able to feed 40 million m³ of renewable gas into the Cogas network. This corresponds to the average gas use of 25,000 domestic households.

SKW Asset Alkmaar BV

- Plant where supercritical water gasification is used for the sustainable and highly efficient production of renewable gases from wet biomass. So no digestates.
- Construction of this demonstration unit started in 2017. In Q4 2020 SKW demonstrates that commercial operation is feasible.
- SKW Systems and Gasunie New Energy have now agreed for a further extension in Alkmaar based on experiences so far and deep trust in the feasibility.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Biogas network Twente operational</td>
<td>Roll out SKW &gt;20 PJ</td>
<td>Biogas, biomethane and syngas are substantial part of the energy mix</td>
</tr>
<tr>
<td></td>
<td>SKW operational</td>
<td>Industrial installation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Industrial Torrgas installation Delfzijl</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 Biogas networks</td>
<td></td>
</tr>
</tbody>
</table>
Contribution to the energy transition: heat

**District heating further explained**

- About 40% of the energy we use is spent on heating
- A sustainable way of heating we can expect to see increasingly in the future is heating using a heat grid (also called ‘district heating’)
- Heat projects require a new infrastructure and new laws and regulations
- **With its experience in large energy infrastructures Gasunie has been appointed by the Ministry of Economical Affairs and Climate Policy to design, plan and install large-scale heat grids**
- In view of the heat loss that occurs during the transportation of hot water, heat grids will mainly play a role in heavily populated areas
- Gasunie regards the heat grid as an essential component in the sustainable energy mix of 2050 (as laid down in the Climate Agreement) and therefore participates in heat infrastructure projects including partnerships in geothermal energy as one of the promising sustainable heat sources

**Zuid-Holland heat network**

- **Project WarmtelinQ**: Residual heat from Rotterdam industry can be used for 25% build environment and horticulture in the province of Zuid-Holland
- Open Grid: all heat suppliers and all customers have access to WarmtelinQ under equal conditions
- Working strongly together with amongst others, Port of Rotterdam, heat companiess, the Dutch and local government
- Investment for >€500m with roll-out in 2021-2030

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Network Groningen province</td>
<td>- 2023: Zuid Holland operational</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Financials: income statement

<table>
<thead>
<tr>
<th>Income statement (€m)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020est</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>1,241</td>
<td>1,247</td>
<td>1,278</td>
<td>1,358</td>
</tr>
<tr>
<td>Depreciation expenses</td>
<td>304</td>
<td>313</td>
<td>326</td>
<td>322</td>
</tr>
<tr>
<td>EBIT</td>
<td>332</td>
<td>331</td>
<td>504</td>
<td>535</td>
</tr>
<tr>
<td>Result before taxation</td>
<td>301</td>
<td>318</td>
<td>517</td>
<td>529</td>
</tr>
<tr>
<td>Result after taxation</td>
<td>260</td>
<td>325</td>
<td>412</td>
<td>407</td>
</tr>
</tbody>
</table>
## Financials: balance sheet

### Balance sheet (€m)

<table>
<thead>
<tr>
<th>Assets</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td>9,811</td>
<td>9,583</td>
<td>9,600</td>
<td>9,817</td>
</tr>
<tr>
<td>Inventories</td>
<td>40</td>
<td>46</td>
<td>45</td>
<td>47</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>183</td>
<td>161</td>
<td>196</td>
<td>190</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>238</td>
<td>41</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>Current assets</td>
<td>461</td>
<td>248</td>
<td>297</td>
<td>309</td>
</tr>
<tr>
<td>Total assets</td>
<td>10,271</td>
<td>9,832</td>
<td>9,896</td>
<td>10,126</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total shareholder's equity</td>
<td>5,602</td>
<td>5,782</td>
<td>5,707</td>
<td>5,935</td>
</tr>
<tr>
<td>Long-term liabilities</td>
<td>3,635</td>
<td>3,171</td>
<td>3,188</td>
<td>3,558</td>
</tr>
<tr>
<td>Current financing liabilities</td>
<td>795</td>
<td>603</td>
<td>668</td>
<td>416</td>
</tr>
<tr>
<td>Trade and other payables</td>
<td>340</td>
<td>276</td>
<td>253</td>
<td>206</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>1,135</td>
<td>879</td>
<td>1,001</td>
<td>633</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>10,271</td>
<td>9,832</td>
<td>9,896</td>
<td>10,126</td>
</tr>
</tbody>
</table>
Ratings Gasunie are high compared to peers

<table>
<thead>
<tr>
<th>Long-term ratings of grid operators</th>
<th>S&amp;P</th>
<th>Moody’s</th>
<th>Fitch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Country</td>
<td>Rating</td>
<td>Outlook</td>
</tr>
<tr>
<td>Alliander N.V.</td>
<td>NL</td>
<td>AA-</td>
<td>Stable</td>
</tr>
<tr>
<td>N.V. Nederlandse Gasunie</td>
<td>NL</td>
<td>AA-</td>
<td>Stable</td>
</tr>
<tr>
<td>Enexis Holding N.V.</td>
<td>NL</td>
<td>A+</td>
<td>Stable</td>
</tr>
<tr>
<td>RTE Reseau de Transport d’Electricité</td>
<td>FR</td>
<td>A</td>
<td>Stable</td>
</tr>
<tr>
<td>Tenet Holding B.V.</td>
<td>NL</td>
<td>A-</td>
<td>Stable</td>
</tr>
<tr>
<td>Stedin Holding N.V.</td>
<td>NL</td>
<td>A-</td>
<td>Stable</td>
</tr>
<tr>
<td>Vier Gas Transport GmbH</td>
<td>DE</td>
<td>A-</td>
<td>Stable</td>
</tr>
<tr>
<td>National Grid plc</td>
<td>UK</td>
<td>BBB+</td>
<td>Negative</td>
</tr>
<tr>
<td>Enagás</td>
<td>ES</td>
<td>BBB+</td>
<td>Stable</td>
</tr>
<tr>
<td>SNAM Rete Gas</td>
<td>IT</td>
<td>BBB+</td>
<td>Negative</td>
</tr>
</tbody>
</table>

- Situation as at October 2020
- Dutch full ownership unbundled TSOs and DSOs are strongly rated companies, operating in a low-risk country
- Dutch TSOs and major DSOs operate well within the A credit-rating range
Regulatory frameworks in NL and GER provide stability in revenues

**Incentive regulation**

**Allowed revenues (revenue cap)**
Grid operators receive allowed revenues for capital and operating expenditures via the revenue cap. This revenue cap is subsequently used to calculate tariffs, invoiced to parties connected to the grid.

**Reimbursement for operating costs**
- Allowed operating expenses for an efficient TSO
- Non-influenceable and influenceable costs
- Cost-based approach for non-influenceable costs

**Reimbursement for the annual depreciation costs**
- Depreciation of regulated assets
- Depreciation according to regulatory lifetime
- Efficiency of regulated assets subject to efficiency benchmark

**Allowed return on capital**
- Rate of return on regulated asset base or invested capital as two distinct elements
- Rate of return can be defined before or after tax, nominal or real
Regulatory frameworks in NL and GER provide stability in revenues

### Earnings model

**The Netherlands**

- **Allowed Revenue**
  - Operating expenses: Non-influenceable costs + Influenceable costs
  - Capital costs: Depreciation + Allowed return on capital

Allowed return on capital = regulated asset base \times weighted average cost of capital (WACC), based on 50/50 debt/equity ratio WACC current regulatory period until 2021
- Pre-tax real WACC existing assets: 4.5% (2016) linearly declining to 3.0% (2021)
- Pre-tax real WACC new assets: 3.8% (2016) linearly declining to 3.0% (2021)

**Germany**

- **Allowed Revenue**
  - Operating expenses: Non-influenceable costs + Influenceable costs
  - Capital costs: Imputed depreciation + Allowed return on equity + Actual cost of debt

Allowed return on equity = regulated equity capital base (max 40% of total capital) \times allowed equity return (2019-2023)
- 5.12% (before corporate tax, after trade tax) for "old assets"
- 6.91% (before corporate tax, after trade tax) for "new assets"

1. €19.2m intersegment eliminations excluded
Zoom in: method decision for next NL regulatory period (REG22)

- **GTS’ allowed revenues follow from the totality of regulatory parameters set in the new Method Decision 2022-2026, due in Q1 2021**

- **Important elements of the draft REG22 method decision**
  - Benchmark score: 86.2%
  - Dynamic efficiency parameter: 0.4%
  - WACC: methodology change from the current system, based on a real WACC in combination with indexation of RAB and depreciation amounts, towards a nominal system with a nominal WACC.
  - WACC: 3.1% (2022) – 2.91% (2026) nominal pre-tax
  - Depreciation: change in methodology from linear towards an accelerated depreciation system
  - New WACC system and new depreciation system will result in substantially accelerated recovery of investment cost
  - GTS commits to further enhancement of risk-based asset management, resulting in a continued adequate risk level and aimed at a significant decrease in costs

- **As with REG17, GTS is exploring the possibility of striking an agreement with user representatives to limit the number of lawsuits each side initiates with regard to ACM REG22 method decisions and ACM REG22 yearly tariff decisions**

- **Amendment of the Dutch Gas Act**
  - Large industrial users (>0.1 bcm/y) are to stop using low-cal gas by October 2022. GTS is obliged to make investments in its network in order to accommodate this user group’s switch to high calorific gas

- **European codes**
  - All European network regulation codes are implemented by GTS. Additional measures have been taken to prevent new balancing fraud, allowing GTS to socialise losses arising from non-payment of balancing costs