



**CONTINUOUSLY GROWING.  
CREATING THE FUTURE.**

Annual Report 2020

# VNG AT A GLANCE

VNG, headquartered in Leipzig, Germany, is a corporate group comprising more than 20 companies that offers a broad range of gas and infrastructure services and has more than 60 years of experience in the energy market. The group has established its gas expertise with German and European companies and holdings along nearly the entire value chain. With around 1,300 employees, VNG is also one of the region's major employers.

The company's business activities are organised into four business areas: Trading & Sales, Transport, Storage and Biogas. On the basis of these core competencies, VNG is increasingly focusing on new areas of business in the fields of green gases, digital infrastructures and neighbourhood solutions in line with the 'VNG 2030+' strategy and 'Green. Digital. With Gas.' vision.

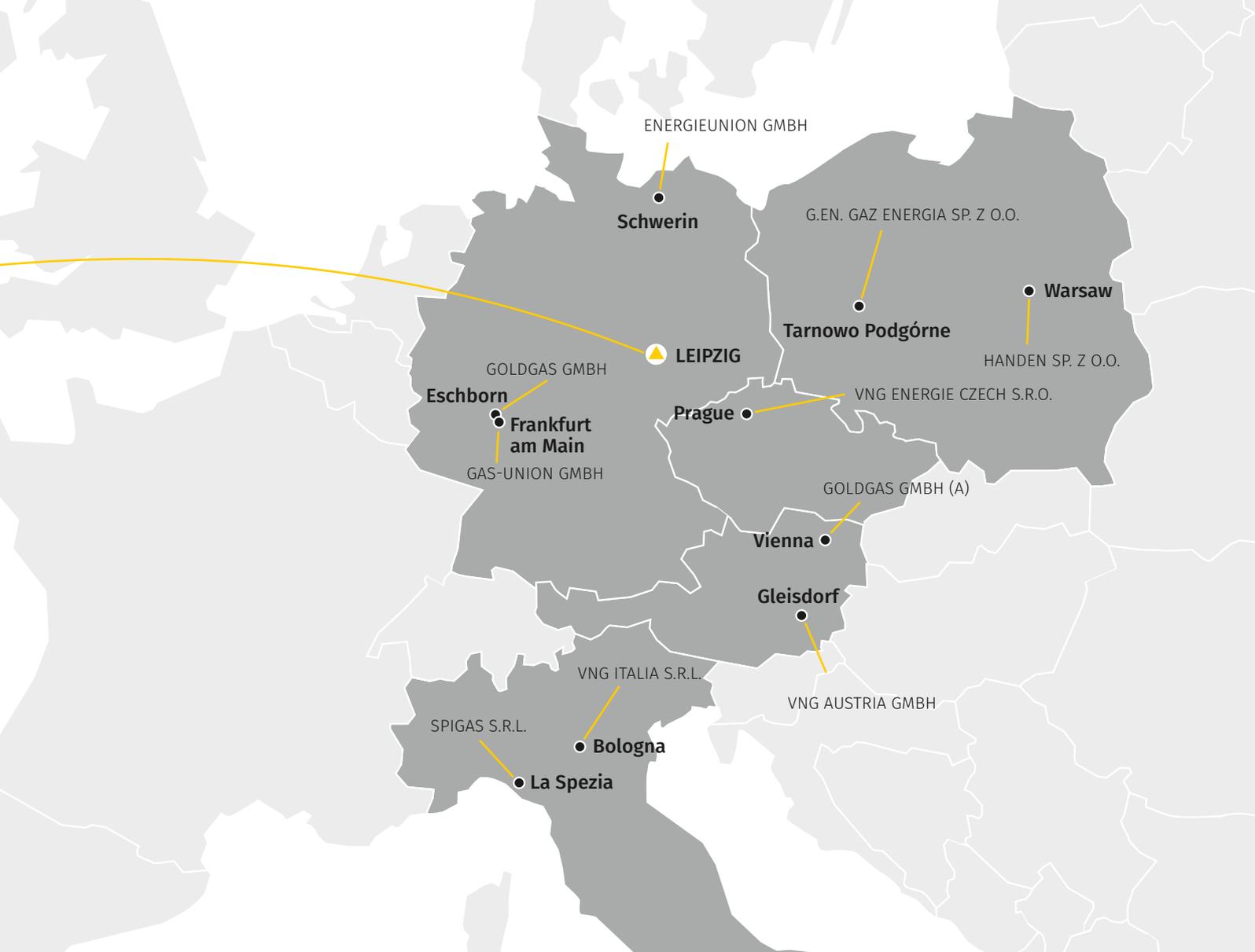
- BALANCE ERNEUERBARE ENERGIEN GMBH
- GDMCOM GMBH
- GEOMAGIC GMBH
- INFRACON INFRASTRUKTUR SERVICE GMBH & CO. KG
- MGMTREE GMBH
- MOVIATEC GMBH
- ONTRAS GASTRANSPORT GMBH
- VNG AG
- VNG GASSPEICHER GMBH
- VNG HANDEL & VERTRIEB GMBH
- VNG INNOVATION GMBH

## TRADING & SALES BUSINESS AREA

Trading natural gas is one of the company's core activities. In addition, VNG offers gas, electricity and energy-related services. Our portfolio ranges from full supply to individual and highly flexible supply concepts. Through VNG Handel & Vertrieb GmbH and its trading companies and holdings, VNG reliably supplies natural gas to regional utilities, industrial companies and commercial and household customers in Germany and abroad.

## TRANSPORT BUSINESS AREA

Through the distribution of gas and the provision of pipeline-related services, the Transport business area guarantees supply security in Germany. As an independent transmission system operator, ONTRAS Gastransport GmbH guarantees non-discriminatory access to the network and, together with its subsidiaries, contributes to a functioning European gas market. ONTRAS is also leading the push for the use of green energy in the German gas network. In this context, one focus is on developing future options for the sustainable use of gas infrastructure in the new world of energy.



## STORAGE BUSINESS AREA

Underground gas storage facilities represent a central component of the gas infrastructure and play an essential role in shaping the energy system of tomorrow. As the third-largest storage operator in Germany, VNG provides reliable, safe and efficient gas storage through VNG Gasspeicher GmbH and has extensive expertise in the operation, maintenance and commercialisation of storage capacities. The company's range of services also includes intelligent and flexible storage products and special engineering services.

## BIOGAS BUSINESS AREA

VNG has concentrated its activities related to biogas and biomethane in the Biogas business area since 2020. In this context, biogas is one of the most important growth segments. BALANCE Erneuerbare Energien GmbH currently operates 37 biogas facilities in Eastern and Northern Germany. The focus of its activities is on plant optimisation and successively expanding its level of vertical integration as a plant operator. In the future, VNG will thus have additional opportunities to increase the share of renewable energy sources in the gas network.

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## Key figures

in € million	2020	2019
Billed revenue <sup>1</sup>	9,827	10,550
Adj. EBIT <sup>2</sup>	179	133
Consolidated profit	46	117
FFO <sup>3</sup>	192	120
Net cash investments	314	215
Non-current net liabilities <sup>4</sup>	847	737
Equity ratio (%)	20	20

1 Prior to application of the IFRIC agenda decision on IFRS 9

2 EBIT adjusted for extraordinary and non-recurring income items

3 Funds from operations, i.e. consolidated earnings adjusted for non-cash income and expenses as well as gains/losses from the disposal of fixed assets

4 Net financial liabilities plus provisions for pensions and decommission-less inventories that can be liquidated at short notice

## Key performance data

	2020	2019
Number of employees at year end <sup>1</sup>	1,305	1,155
Group companies and holdings	69	65
Number of European countries with VNG holdings	5	5
Gas send-out in billion kWh	599	516
High pressure pipeline system in km	7,500	7,500
Storage capacity in billion m <sup>3</sup>	2.2	2.2

1 Total employees of all fully consolidated companies; as of 31 December 2020



# CONTINUOUSLY GROWING. CREATING THE FUTURE.

Gas will play a key role in the energy system of the future. This is because the world of molecules – consisting of natural gas, renewable and decarbonised gases as well as the gas infrastructure – addresses the energy policy demands of today and tomorrow in a special way, serving as both a cornerstone of the energy supply and offering potential solutions that will bring the ambitious climate change targets in Germany and Europe within reach. Gas will continue to play a critical role in ensuring that the energy revolution remains affordable in the future.

Through its gas expertise, VNG wants to do its utmost to help shape the transformation towards carbon neutrality. This is also why we systematically continued our own transformation over the year 2020. Against the backdrop of groundbreaking political decisions, we have not only been successful in our established business and in the biogas sector, but have also once again intensified our activities in the field of hydrogen as an energy source. Thus, in an extremely challenging financial year, we have made progress with the implementation of our strategy – and laid the foundations for further growth as a pioneer for green gases in decarbonising markets.

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Gas combines lower emissions with supply security and is thus an important component of decarbonisation.

# FOREWORD BY THE EXECUTIVE BOARD

Dear shareholders and business partners,  
dear friends of the company,

2020 was a year that we will remember for a long time to come. Allow us to start by saying that VNG mastered the challenges of the coronavirus pandemic with aplomb. Despite the difficult circumstances, we succeeded in optimally balancing three issues of the highest priority: we swiftly implemented measures to protect the health of VNG employees, we maintained stable business operations, thus contributing to overall corporate stability and gas supply security, and we made further substantial progress in implementing the group's 'VNG 2030+' strategy.

As such, we can once again report another highly successful financial year from an operative point of view. With an adjusted EBIT of €179 million, we were able to continue the strong performance we recorded in previous years. At the same time, the past year was marked by the organisational and operational impact of the coronavirus pandemic, our systematic work on implementing the 'VNG 2030+' strategy and the acquisition and restructuring of Gas-Union GmbH. Although our consolidated earnings of €46 million fell short of expectations due to extraordinary events, we are nevertheless highly satisfied overall thanks to our solid operating performance in the financial year and the large number of challenges we overcame.

We are especially proud that all of VNG's business areas once again contributed to the successful annual results and the further development of the company in the past year. The Transport business area was once again a cornerstone of VNG in the 2020 financial year, generating results on a par with the previous year. Performance in the Trading & Sales business area last year slightly exceeded the prior year's level; here, above all, domestic wholesale trading with key accounts as well as the retail business and activities in foreign markets once again improved. The Storage business area likewise played an important role in the company's success, and was able to increase its result compared to the previous year thanks to a significantly more positive market environment. The progress we have made in the Biogas business area is also quite encouraging. This reflects the successful implementation of the 'VNG 2030+' strategy in a special way – for example, our subsidiary BALANCE Erneuerbare Energien GmbH was able to generate a positive



**Ulf Heitmüller,**  
Chief Executive Officer

**Hans-Joachim Polk,**  
**Chief Infrastructure & Technology Officer**

contribution to earnings overall and once again greatly expanded its portfolio of plants through acquisitions.

In addition to regular business activities, a special focus was on group-wide measures specific to COVID-19 to protect the health of the workforce. This clearly demonstrated that the cultural change initiated a few years ago is paying off for VNG. For example, thanks to the significant progress we made in the digital transformation of our work processes, the transition to mobile work, working from home and other flexible working models was, for the most part, quite smooth. In order to look after our employees' well-being irrespective of the coronavirus pandemic, at VNG we will continue to work tirelessly to further improve our proven high standards of occupational safety, as we have already done in previous years.

Although the COVID-19 pandemic brought additional organisational and operational hurdles, at VNG we resolved to continue working systematically on our strategic goals and to keep our eyes on the future – and that is what we did in 2020. With the update to our proven 'VNG 2030+' strategy adopted in June, we reaffirmed the path we have taken to profitably develop our core natural gas business and our established Trading & Sales, Transport and Storage business areas. We fleshed out our plans with a view to the upcoming transformation of the energy markets, and in this context, we are focusing on the decarbonised business with a long-term perspective; in addition to the digital infrastructure, this primarily includes continuing our significant growth in the biogas sector as well as in the promising future technology of hydrogen.



To underpin this focus, we developed a 'Green Gases' vision for our company last year. On the one hand, this takes into account that we have already been able to take some important steps in this forward-looking field in recent years: after all, with BALANCE Erneuerbare Energien GmbH as one of the leading operators of biogas facilities in Germany, we have been committed to a carbon-neutral energy source for years. At the same time, we are increasingly focusing on hydrogen as a climate-friendly and promising energy source. In this context, we are encouraged by generally positive signals from the political arena. Although we still see a need for regulatory and administrative action in numerous areas, we support the ambitious climate

policy efforts to ramp up this energy source of the future. That is why we are already pulling out all the stops to make our business areas and our infrastructure hydrogen-ready and, as a gas specialist, to be able to make a substantial contribution to carbon neutrality by 2050 in the coming years and decades.

One important hydrogen project that could soon become a reality is the 'Energiepark Bad Lauchstädt'. The project partners VNG, DBI, Uniper Hydrogen and ONTRAS submitted the funding application for the project, involving the construction of a 30 MW electrolysis plant, on time in December 2020. Although the application was already a milestone in itself, a positive decision would be a cause for celebration, because within the framework of the real-world laboratory we

would have the opportunity, together with the project partners involved, to consolidate all the central issues surrounding the green hydrogen value chain in a single project – from production to storage and transport to the end user to the economic and regulatory environment. But beyond this flagship project, we are also looking for the technologies of the future in cooperation with research institutes and other business partners and, as an important advocate for gas, are actively involved in national and European initiatives and committees – always with the aim of establishing the right framework for the creation of a functioning and economically viable energy system with green gases.

Our commitment to green gases and hydrogen is particularly important to Central and Eastern Germany, the regions in which we have had strong roots for over 60 years. Here we played a leading role in initiating an important debate on the specific potential of a hydrogen economy in the newly-formed German states in 2020 by commissioning a group of Fraunhofer institutes to conduct a study entitled 'Hydrogen Master Plan for Eastern Germany'.

Looking inwards, we firstly note for 2020 that despite the positive developments mentioned above, the COVID-19 pandemic was also a stress test for VNG. We worked systematically to achieve the successes of 2020 – tremendous collegiality, but also a high degree of flexibility and discipline in the face of extraordinary challenges, could be seen across all areas of the company. The results of this hard work and dedication make us, as the Executive Board, particularly proud. The acquisition and restructuring of Gas-Union GmbH under very special conditions in a tight time frame was a further testament to this dedication and, at the same time, a major milestone for the company. We



**Bodo Rodestock,**  
Chief Financial & HR Officer

Technologies such as power-to-gas offer new options when it comes to combating climate change. A large-scale real-world laboratory could begin operations in 2021 at the 'Energiepark Bad Lauchstädt'.



want to take this positive energy with us into what we hope will soon be a return to normality and harness it for the further transformation of VNG. The positive feedback from employee surveys on VNG's working environment and attractiveness as an employer confirms that our employees are on our side.

The political course set in 2020 clearly demonstrates that combating climate change and working towards sustainability are gaining in importance across all sectors. This only further validates our conviction that we are on the right track with the strategy we have adopted for the group and our focus on decarbonising our business. In the future, we will increasingly supplement our efforts to transform our core product with further measures aimed at improving sustainability;

for example, we plan to conduct a comprehensive review of the entire group for the first time in the current year. This will form the basis for identifying areas with the potential to reduce carbon emissions within the company, and for identifying and establishing further relevant sustainability criteria and thus for further improving VNG's overall sustainability performance in the future.

Gas can be green – through its ‘VNG 2030’ strategy, VNG is focusing on the energy system of the future built on renewables.



Esteemed readers, in 2020 we succeeded in unleashing the power that comes from our company’s strengths and competencies on the one hand, and flexibility and agility on the other. Moreover, we managed to use our resources in both a highly efficient and responsible manner. Together with our solid capital base and excellent operating performance, these factors guarantee that we will be able to continue systematically executing our strategy. The bottom line is that VNG has already made significant progress along its strategic path. We have proven that we can powerfully propel our business forward and successfully transform it. Today, we stand on a solid foundation and are confident that the company is well positioned for the future.

Now, more than ever, we are convinced that VNG, with its expertise in all aspects of gas, has everything it needs to continue to favourably shape its future viability and play an important role in making the efforts of the energy revolution a success. This is especially true in light of the need to never lose sight of affordability and supply security in this major restructuring of the energy system. With an eye on the general conditions prevailing in the gas sector, we will continue to work tirelessly to draw attention to the specific actions that need to be taken and the necessary adjustments that need to be made. The sustainable energy system of the future needs not only the world of electrons, but also the world of molecules.

At the same time, the current market positioning of our core product, natural gas, is being met with public criticism.

The premature debate on the rejection of what is currently one of the key energy sources of our time creates uncertainties for business planning and investment on the one hand, but on the other hand also jeopardises a ramp-up of green gases and thus ultimately the pursuit of decarbonisation as a whole. To us, one thing is certain: natural gas and the gas infrastructure are of fundamental importance, particularly if we are to meet short-term climate targets. At the same time, we are specifically advancing the transformation of natural gas as an energy source by investing in renewable and decarbonised gases in order to fulfil our role as a green gas specialist in the long term as well.

We would like to sincerely thank our shareholders, customers, partners, the works council and the Supervisory Board for their constructive and trusting cooperation during the previous financial year. Furthermore, we would also like to take this opportunity to once again congratulate our shareholder VNG Verbundnetz Gas Verwaltungs- und Beteiligungsgesellschaft mbH on the 30th anniversary of its founding in December 1990, and extend our heartfelt thanks for the outstanding partnership and support we have enjoyed for the past 30 years. Our municipal shareholders are the most meaningful proof of VNG's deep regional roots in Eastern Germany and in the market.

We would also like to extend our special thanks to the employees of VNG for their extraordinary efforts and dedication over the past year.

The Executive Board



**Ulf Heitmüller**

CHIEF EXECUTIVE OFFICER



**Hans-Joachim Polk**

CHIEF INFRASTRUCTURE & TECHNOLOGY OFFICER



**Bodo Rodestock**

CHIEF FINANCIAL & HR OFFICER

You can learn more about our strategy, biogas, hydrogen and our regional focus beginning on page 10.

# REPORT OF THE SUPERVISORY BOARD

The Supervisory Board was comprehensively informed at regular intervals and in a timely manner by the Executive Board on the development and situation of the Company and its significant transactions in writing and in verbal presentations. On the basis of these reports and the information provided to us, the Supervisory Board monitored the management and addressed the development of the divisions, the financial position of the Company, issues related to financial planning, investment planning and human resources planning as well as all measures that require the approval of the Supervisory Board pursuant to the Articles of Association, and discussed these at length.

The Supervisory Board convened four times in the financial year 2020 and held one extraordinary meeting. The main points on the agenda included:

- ▶ the separate and consolidated financial statements for 2019,
- ▶ the mid-range planning 2021–2023,
- ▶ the domination and profit and loss transfer agreements entered into between VNG AG and goldgas GmbH, and BALANCE Erneuerbare Energien GmbH and Gas-Union GmbH,
- ▶ the conclusion of a bank guarantee agreement, new loans and extension of credit lines,
- ▶ reporting on the development of the Biogas division and the resolutions to acquire portfolios of biogas facilities,
- ▶ the 2020 strategy update with a summary of the strategy and a focus on existing business and growth fields,
- ▶ the acquisition of Gas-Union GmbH,

- ▶ the dissolution of the Advisory Board of VNG AG,
- ▶ various reporting on the regular tax field audit at HANDEN,
- ▶ the post-merger integration of Gas-Union GmbH and
- ▶ the Green Gases 2030 vision and the Biogas industrial safety concept.

The Supervisory Board addressed the earnings situation and the strategic realignment of the Company based on the status report of the Executive Board.

Within the framework of its advisory and oversight function, the Supervisory Board addressed the activities of the Company in the Gas Trading division, developments in the Gas Storage division and projects in the Transport division. In addition, it looked closely at other investments held by the Company.

Based on these consultations and the reports submitted by the Executive Board, the Supervisory Board is satisfied that management has complied with the requirements.

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft audited the financial statements of VNG AG as of 31 December 2020 and the management report for the financial year 2020, including the underlying bookkeeping, and in compliance with the requirements of Section 6b (3) of the German Energy Industry Act [Energie-wirtschaftsgesetz, EnWG] and rendered an unqualified audit opinion. In addition, it audited the consolidated financial statements pursuant to IFRS for the year ending 31 December 2020 and the group management report. Here, too, the independent auditor rendered an unqualified opinion. The auditor's reports were issued to all members of the Supervisory Board. The Supervisory Board acknowledged the findings of the audit.

The Supervisory Board reviewed the separate financial statements of VNG AG and the management report as well as the consolidated financial statements and Group management report. Based on the final conclusions of this review, the Board has no objections to make. The independent auditor attended the meeting of the Supervisory Board to discuss the financial statements and reported on the key findings of the audit. The Supervisory Board approved the financial statements for the year ending 31 December 2020 compiled by the Executive Board. The financial statements are therewith ratified. In addition, the Supervisory Board approved the consolidated financial statements of VNG AG for the year ending 31 December 2020 and the group management report.

The Supervisory Board concurs with the proposal for the appropriation of retained earnings submitted by the Executive Board.

The Dependent Company Report of VNG AG pursuant to Section 312 of the German Stock Corporation Act [Aktiengesetz, AktG] that the Executive Board is required to prepare was submitted to us. The auditor reviewed this report and rendered the following unqualified opinion pursuant to Section 313 (3) of the AktG.

‘Based on our audit performed in accordance with professional standards and our professional judgment, we confirm that

1. the factual statements made in the report are correct
2. the consideration paid by the Company to the legal transactions stated in the report was not excessively high, and
3. first and second-tier subsidiaries were not disadvantaged by the measures undertaken at the instigation of VNG.’

Based on its review, the Supervisory Board agrees with the assessment made by the independent auditor.

In light of the final conclusions of its review the Supervisory Board does not have any objections to the Declaration made by the Executive Board that concludes the Dependent Company Report.

There were no personnel changes with regard to the composition of the Supervisory Board and its committees in 2020.

The Supervisory Board would like to take this opportunity to express its thanks and appreciation to the Executive Board and all the employees for their hard work in the 2020 financial year.

Leipzig, 31 March 2021

The Supervisory Board

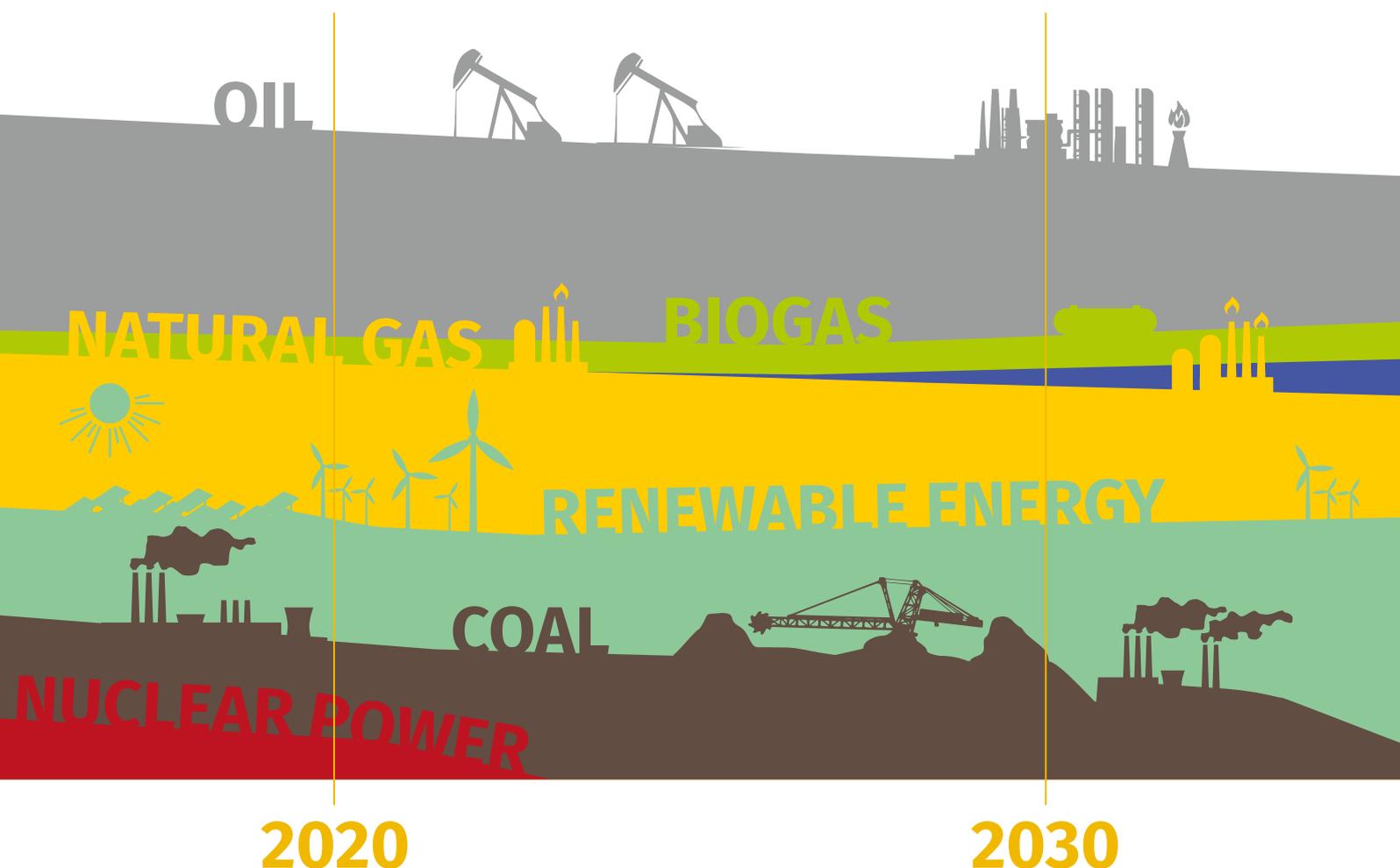


**Thomas Kusterer**

CHAIRMAN OF THE SUPERVISORY BOARD

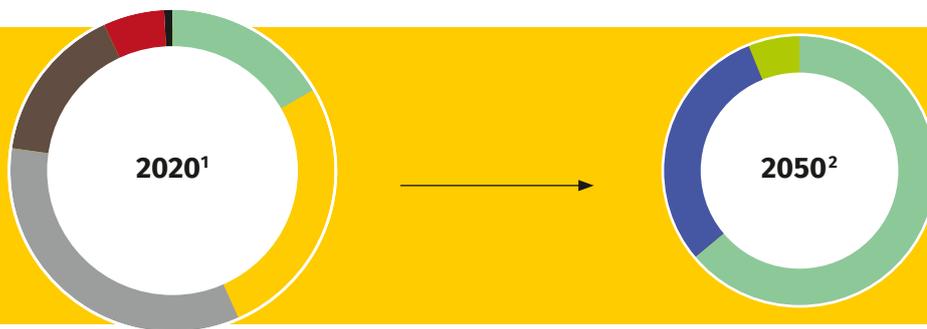
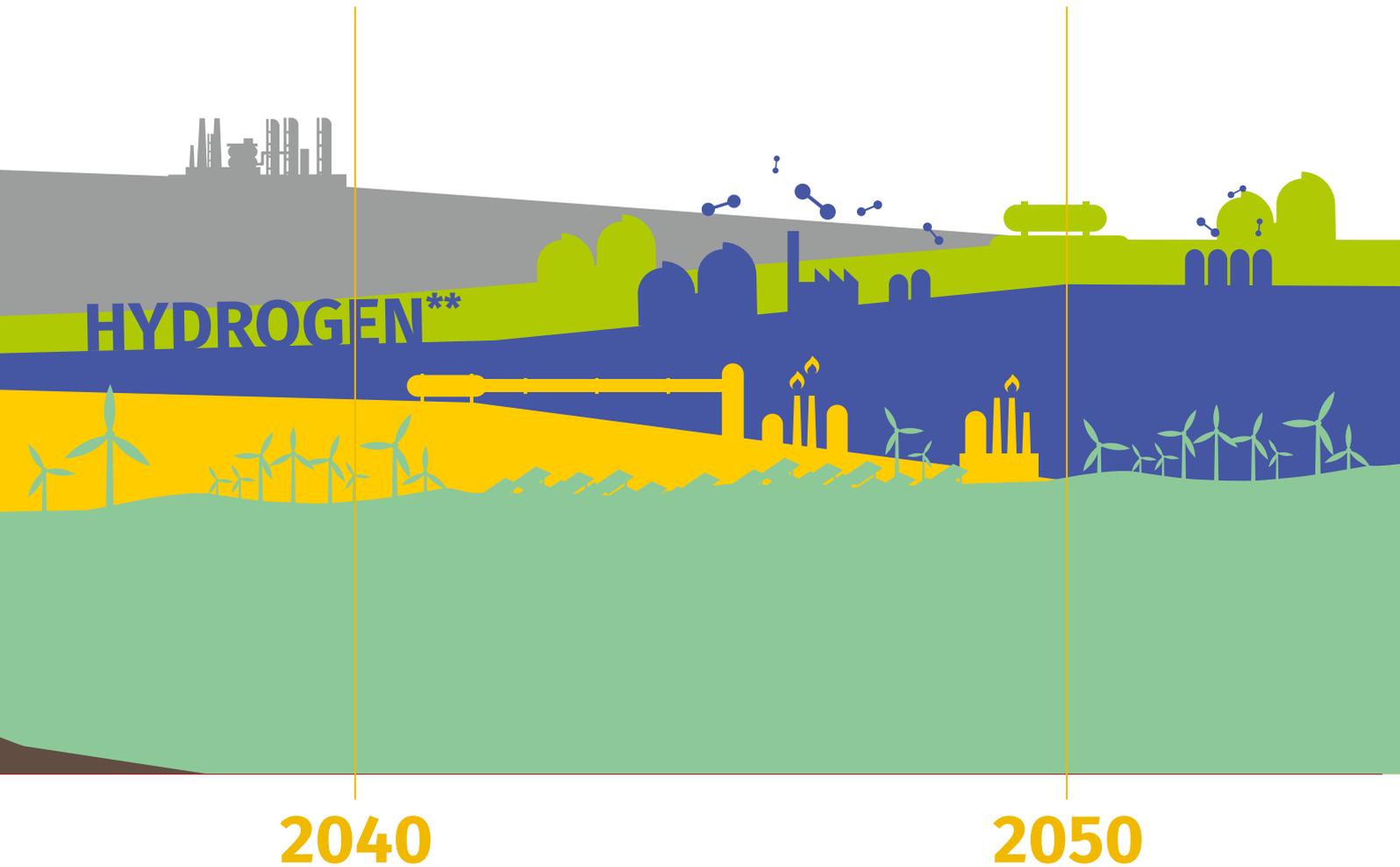


# ACHIEVING CARBON NEUTRALITY WITH GAS\*



The energy system will fundamentally change over the next 30 years, with renewable energy sources gradually replacing fossil fuels. In this context, gas will play a central role in each phase of decarbonisation.

\* This simplified schematic representation shows the projected changes in the German energy supply by energy source between now and the year 2050.  
 \*\* This includes green, blue and turquoise hydrogen (see also the hydrogen colour system section on page 28).



**Current energy mix in Germany**

■ Oil	33.9%
■ Natural gas	26.6%
■ Renewable energy	16.8%
■ Coal	15.9%
■ Nuclear power	6.0%
■ Other	0.8%

1 Source: AGEB, December 2020

**Carbon-neutral energy mix from 2050 onwards**

■ Renewable Energy	64%
■ Hydrogen	30%
■ Biogas	6%

2 Source: VNG's own estimates, based on a total energy supply of 1,900 TWh

# NEW PERSPECTIVES ON GAS

All signs point to green – fuelled by groundbreaking political decisions, the trend towards decarbonisation once again picked up speed in 2020. As a consequence, attention has increasingly focused on renewable energy sources and carbon-neutral gases in recent months. At the same time, there is widespread agreement that natural gas will be a major component of the German energy mix until 2030 and beyond. On the following pages, we invite you to read about why this is the case and why our core product plays an essential role in supply security, economic efficiency and decarbonisation in the energy market. You can also read about how VNG is preparing for the future with a strategy update and a green gas roadmap.

## SAFEGUARDING SUPPLY – DRIVING DECARBONISATION

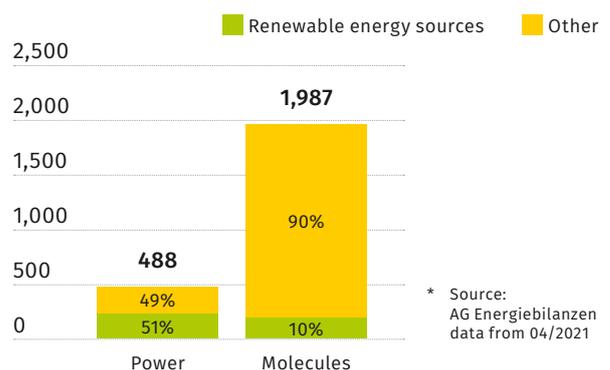
Gaseous energy sources present numerous opportunities in the transformation towards carbon neutrality. This is because the ‘world of molecules’ can make a considerable contribution to decarbonising the energy landscape – while renewable energy sources already accounted for just over 50 percent of electricity generation in Germany in 2020, supplying energy through molecules only accounted for ten percent. As such, there is still enormous potential for CO<sub>2</sub> savings in the course of the transition from fossil to renewable and decarbonised gas. What is more, molecular energy sources still account for approximately 80 percent of final energy consumption in Germany (source: AG Energiebilanzen).

Until the market ramp-up of carbon-neutral gases, to which VNG is actively committed, natural gas will be indispensable in various sectors in the medium to long term. After all, it provides energy for commerce and industry, it is used to heat about half of the

homes in Germany and it is the ideal alternative – for now – to coal and nuclear power plants when it comes to generating electricity. Furthermore, over the course of the energy revolution, the entire gas infrastructure will provide the necessary flexibility in conjunction with the intermittent power obtained from wind and solar energy. In addition, there is another key factor that must be kept in mind – the supply of energy needs to be affordable during the transformation in the coming years and decades, and this is a condition that natural gas fulfils.

Hence, today we can say that gas plays an indispensable role in energy supply security. In 2020, its share of the energy consumed in Germany rose from approximately 25 to nearly 27 percent. But that isn’t all there is to say about this energy source – it is already making a significant contribution to achieving the CO<sub>2</sub> reduction targets for 2030, and it still has plenty of untapped potential, particularly where low-emission gas solutions can replace other energy sources with higher carbon content in the short term, e.g. oil heating, diesel ships and coal-fired power plants. And last but not least, intensive work is already underway to make natural gas ‘greener’. At VNG, for example, we are developing concepts for adding hydrogen to an energy source that is already in widespread use – biogas. This can further improve the climate footprint – and, in the long run, pave the way for the complete decarbonisation of the energy system.

Energy supply of final energy consumption in TWh\*





## FOCUS ON: ENERGY DIALOGUE IN THE ERA OF THE PANDEMIC

*»VNG faced unprecedented challenges in the wake of the COVID-19 pandemic, as did many others. We are proud to report that all of these challenges were mastered with great effort – from protecting the health of employees to maintaining business operations and the strategic development of the company. In addition, we are doing everything we can to keep the exchange of ideas and opinions with stakeholders from the worlds of civil society, academia, and politics flowing. After all, an ongoing dialogue with all of the stakeholders is crucial to success, whether to create understanding of the key role of gas or to draw attention to necessary energy policy decisions. Indeed, we are convinced that with our product, we can significantly contribute to a clean, cost-efficient and secure energy system, and we will continue to be a strong proponent of the importance of gas in the ongoing transformation process towards carbon-neutral gas in the future.«*

**Ulf Heitmüller**

CHIEF EXECUTIVE OFFICER



**MORE ON THIS**

see page 2-7



## STRATEGY UPDATE 2020: FOR A GREEN, DIGITAL AND GAS-BASED FUTURE

VNG has already been working on its strategic transformation since 2017 to ensure it is prepared for the upcoming changes in the energy market. In our 'VNG 2030+' strategy, we have outlined the prospects for our

### OGMP 2.0 – GREATER TRANSPARENCY ON METHANE EMISSIONS

As part of the European Green Deal to combat climate change, in 2020 the EU set a target to further reduce methane emissions. One key aim is to improve the measurement, reporting and verification of emissions. Against this background, the VNG subsidiaries VGS, ONTRAS and BALANCE, together with numerous other companies, have signed the Memorandum of Understanding to join the voluntary Oil & Gas Methane Partnership 2.0 Initiative (OGMP 2.0). The primary goal is to increase transparency in this area and to develop tangible measures for this purpose. This is a continuation of the commitment by major industry players to reduce methane emissions in the gas sector – between 1990 and 2019, these were already reduced by more than 40 percent through infrastructure upgrades and preventive maintenance, with methane emissions from the gas sector accounting for just under six percent of total EU emissions at the last count (Source: UNFCCC).

business through 2030 and beyond. Our objective is to profitably develop established business, open up new business areas and play a key role in shaping the energy revolution as an expert in gas and infrastructure. After four years of successfully implementing our strategy, it was recently updated in June 2020.

In this update, we place a strong emphasis on further developing our core business and we take two trends into account to an even greater extent than before – on the one hand, we want to focus on the field of digital infrastructures. This is because our core competencies in the operation of critical gas infrastructure can also be applied to the transport and storage of data. On the other hand, we are pursuing the goal of guiding and helping to shape the green transformation of the energy market by increasingly aligning our activities with the decarbonised business. This includes, above all else, maintaining our substantial growth of recent years in the biogas sector – because biogas is currently the only carbon-neutral gas that is already regionally available in large quantities.

Hydrogen has also been a fixed part of the company's strategy since mid-2020 as a promising energy source with excellent long-term prospects. The difference to previous years is that we are preparing to take the step from concept to implementation starting in 2021. With flagship projects such as the real-world laboratory in Bad Lauchstädt, we want to demonstrate that we are a technological pioneer and carve out a position for ourselves as a major player in the value chain of carbon-neutral gases – always with the aim of contributing to a decarbonising economy and society as a successful gas supplier.



## FOCUS ON: TRANSPORT & STORAGE

»Thanks to its outstanding performance in 2020, VNG Gasspeicher (VGS) has once again been able to continue its success story. In recent years, it has systematically repositioned itself, cut costs and shut down inefficient storage facilities. Today, VGS is constantly developing ideas for new storage products and their marketing and is thus able to make the most of market conditions. ONTRAS Gastransport GmbH also remains resolutely focused on the future. In the challenging past few months, the team not only continued to conduct its core business, gas transport, in a reliable and stable manner, but also played an important role in the development of the European hydrogen backbone network. Together with other partners from Germany and abroad, ONTRAS has made an important contribution to the development of a European hydrogen infrastructure in various regions.

*The infrastructure of VGS and ONTRAS together form the foundation for the development of sustainable hydrogen value creation in Eastern Germany and thus also for the development of the 'Energiepark Bad Lauchstädt'. Here, we stand on the verge of doing nothing less than pioneering work in the H<sub>2</sub> sector.«*

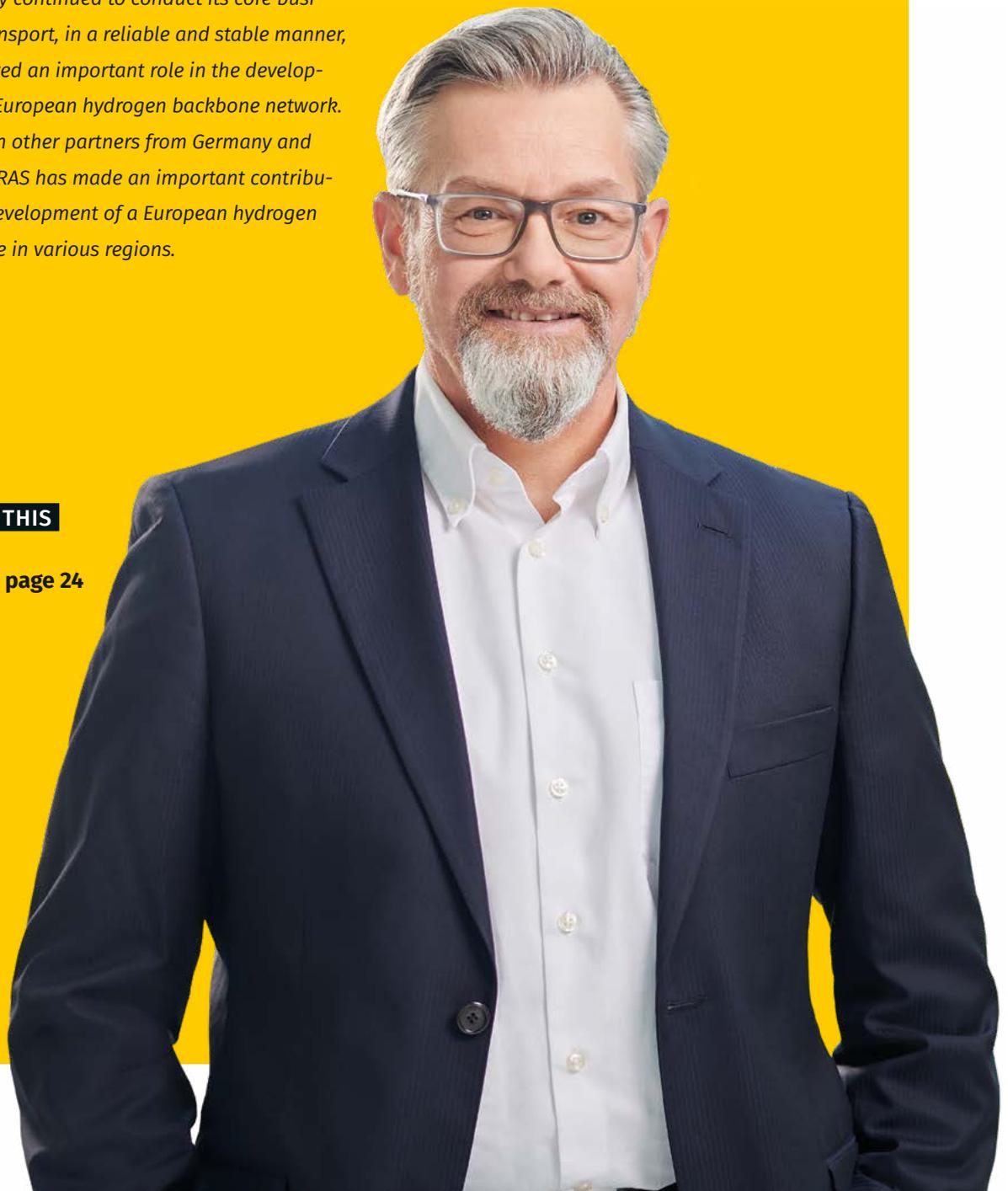
### **Hans-Joachim Polk**

CHIEF INFRASTRUCTURE & TECHNOLOGY OFFICER



**MORE ON THIS  
TOPIC**

**starting on page 24**



## EISENHÜTTENSTADT: LESS CO<sub>2</sub> THANKS TO NATURAL GAS

A project currently being carried out by VNG Handel & Vertrieb in cooperation with ArcelorMittal, the world's largest steel and mining company, illustrates how natural gas can contribute to the reduction of greenhouse gas emissions in the industrial sector in practice. At its Eisenhüttenstadt site (in the German state of Brandenburg), the blast furnace used in steel production will gradually be converted to run on natural gas beginning in 2021. This can reduce its CO<sub>2</sub> emissions by five percent per annum. At the same time, analyses and feasibility studies are beginning to look at the possibility of adding carbon-neutral hydrogen – a major step towards more sustainable steel production.

## OUR 'GREEN GASES' VISION: THE MISSION IS TO ACHIEVE H<sub>2</sub>-READINESS BY 2025

In addition to the strategy update, last year VNG developed a roadmap for its activities in the field of renewable and carbon-neutral gases. This maps out the path for the company's green transformation and supplements the 'VNG 2030+' strategy with project and research priorities for the coming years, among other elements. At the heart of this roadmap is the question of which role gaseous energy sources should play in the energy world from 2030 onwards – and what we as VNG want to achieve in the field of green gases by then.

Biogas and biomethane are already established components contributing to the success of the energy revolution and continue to represent important growth areas for VNG. But they are not the only energy sources we have in mind when decarbonising our product range – another key goal is to become H<sub>2</sub>-ready. Specifically, this means that as the hydrogen economy ramps up, we want to systematically put ourselves in a position to store, transport and distribute hydrogen. Although this poses a variety of challenges for each of our business areas, it also offers tremendous potential to reduce CO<sub>2</sub> emissions as well as providing exciting opportunities for developing new, innovative technologies.



Substituting gas for coal can reduce carbon emissions and cut energy costs in the industrial sector in the future – as is the case here in Eisenhüttenstadt.



## FOCUS ON: DIGITAL TRANSFORMATION

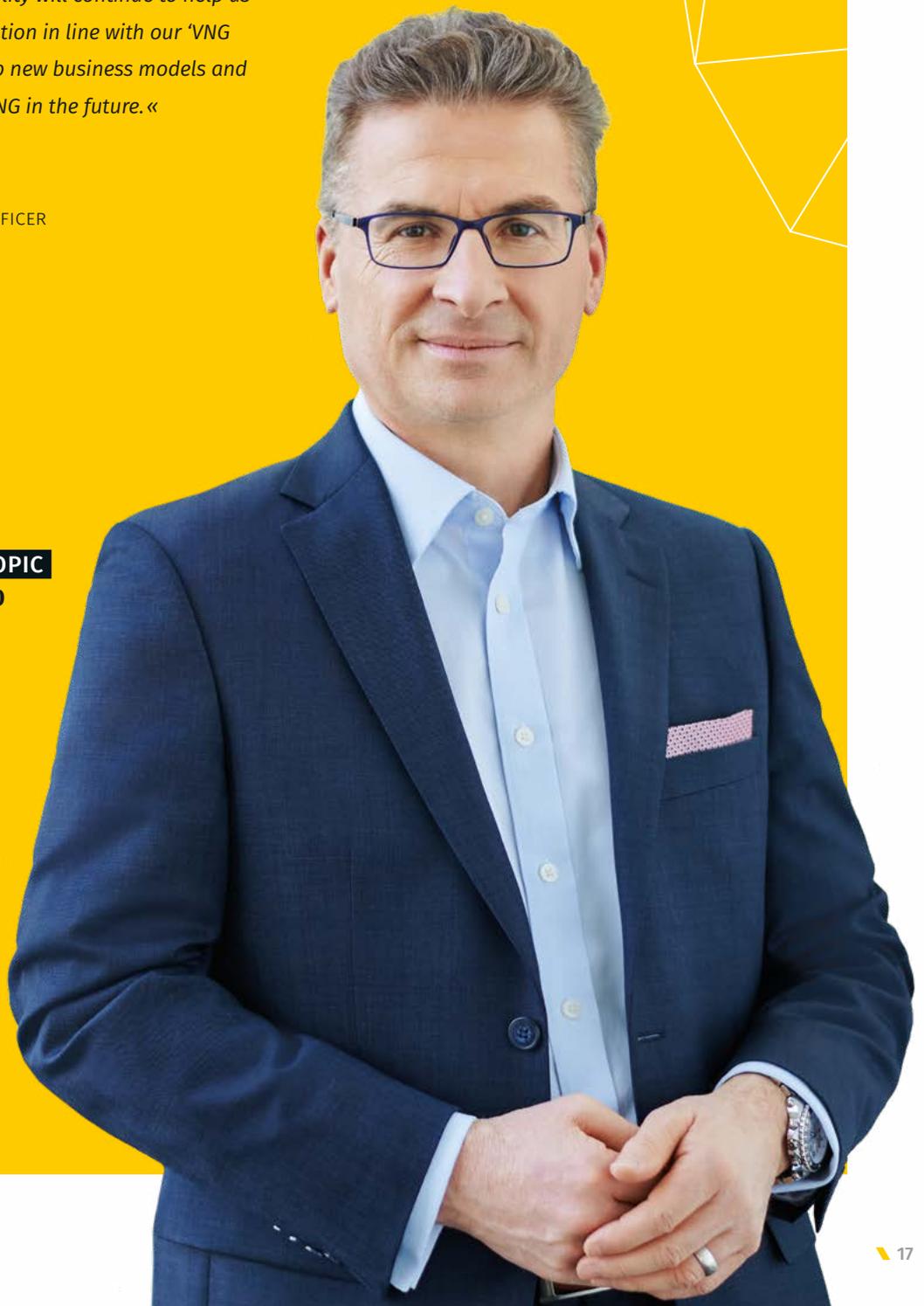
»Last year, we demonstrated that we were on the right track when we started upgrading our IT landscape a few years ago. The switch to working from home has been almost seamless, both from a technical perspective and in terms of our employees' skills and abilities. Together with the hard work and dedication of our entire workforce, this was essential to successfully making it through the year 2020 – and this new agility will continue to help us transform our organisation in line with our 'VNG 2030\*' strategy, develop new business models and increase the value of VNG in the future.«

### **Bodo Rodestock**

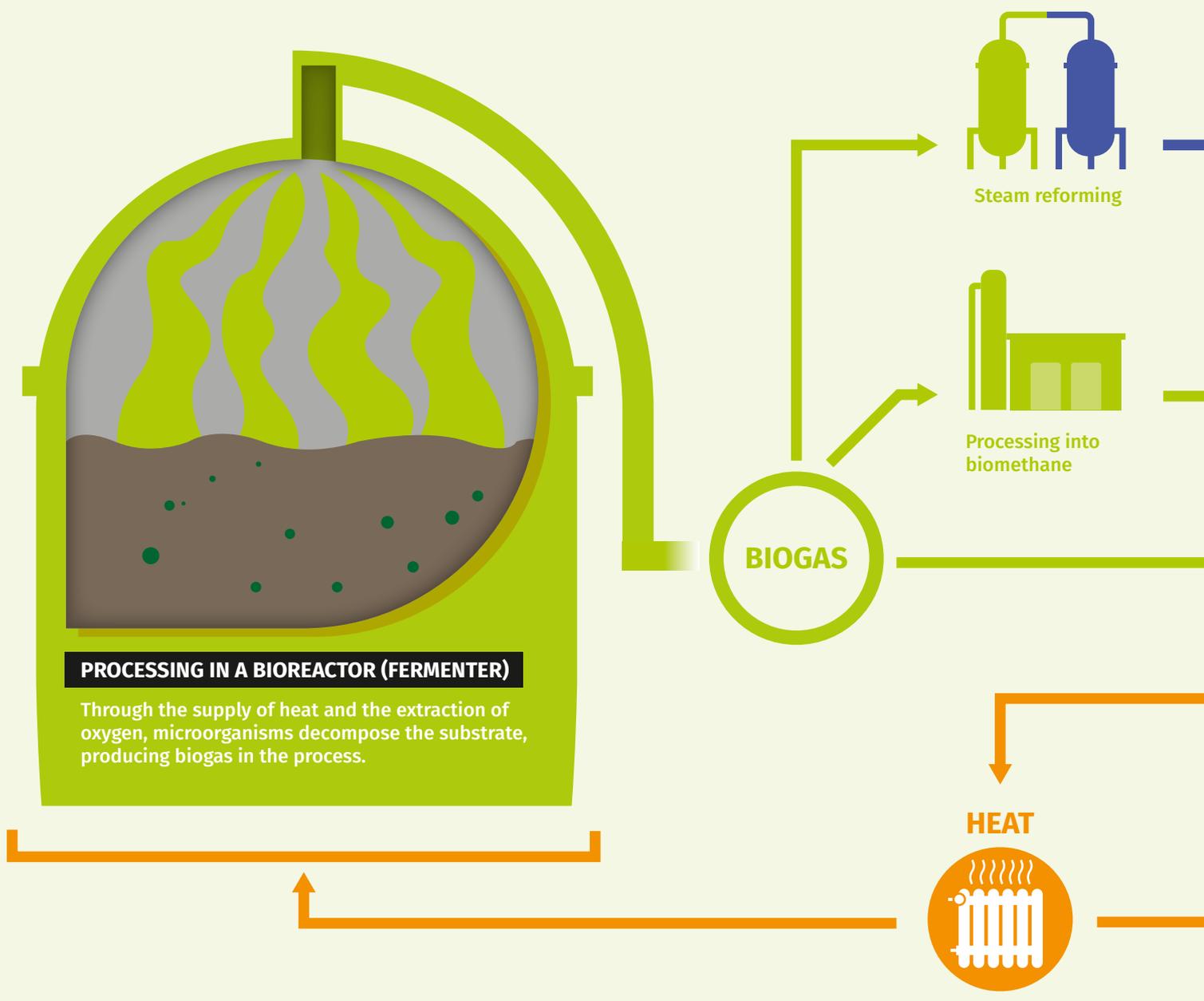
CHIEF FINANCIAL & HR OFFICER



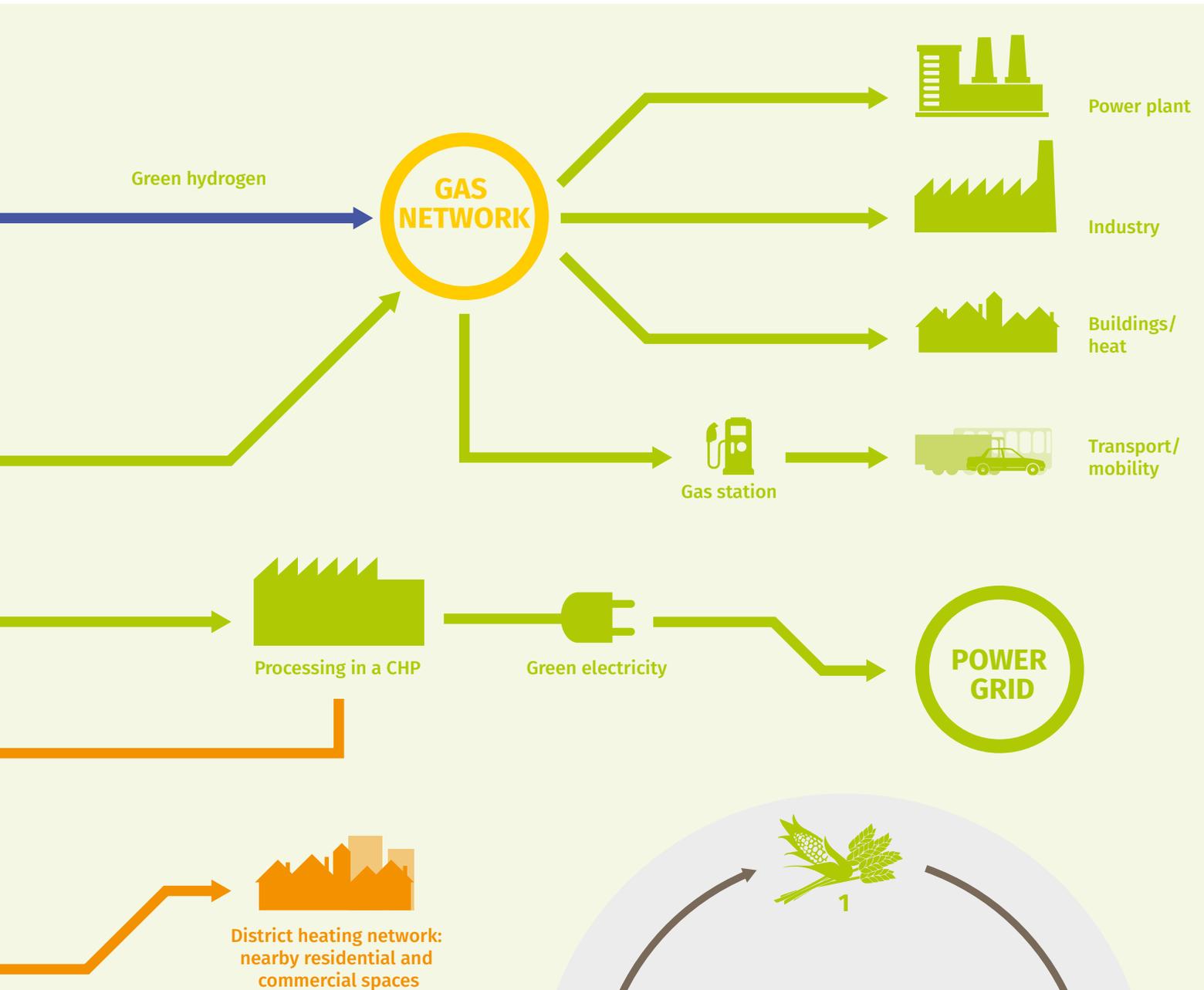
**MORE ON THIS TOPIC**  
starting on page 30



# BIOGAS – A POWERFUL WAY TO COMBAT CLIMATE CHANGE



Biogas is carbon-neutral, renewable, locally available and can be used in a variety of ways for electricity and heating applications. It thus plays a major role in helping achieve carbon neutrality. Furthermore, gas from biomass is an important component of regional value chains.



1. Renewable raw materials and residual materials
2. Biogas production
3. Processing of fermentation residues into high-quality biological plant fertiliser
4. Support for regional agriculture with predictable income for the supply of the substrates used and access to processed plant fertiliser

1 Biogas production in biogas facilities operated by BALANCE

# BIOGAS – CLEAN AS A WHISTLE

Biogas is an important domestic and renewable energy source and harbours great potential for the successful implementation of the energy revolution and a carbon-neutral future. Similar to hydrogen, the optimal form and use of this energy source depends on the energy policy framework in place in the various sectors. As one of the largest biogas producers in Germany, VNG is committed to making this green energy source a more important part of a sustainable energy economy.

## THERE'S NOTHING CLOSER THAN RENEWABLE GAS FROM THE REGION

In order to create a low-emission energy system, an economic ramp-up of green gases as an alternative to coal, nuclear power and other fossil fuels is needed in addition to renewable energy from the wind and the sun. As part of our strategy, we have therefore been focusing intensively on renewable biogas since 2017, which can already be produced reliably, locally and in line with demand today. In this context, we particularly benefit from the many years of expertise in this field of our subsidiary BALANCE Erneuerbare Energien GmbH, which was founded in 2006.

The benefits are clear: biogas can be used directly in combined heat and power plants on site to generate green electricity and play a role in maintaining grid stability when a stable base load is required or load fluctuations from renewable energy sources need to be balanced out – after all, it is always available and can be produced and stored regardless of the weather. It also plays a prominent role in the success of the heating revolution. For example, it can be used to generate a supply of heat in the immediate vicinity of the biogas facility. Purified into biomethane of natural gas quality, it can be fed into the existing grid,

significantly reducing carbon emissions in the gas supply.

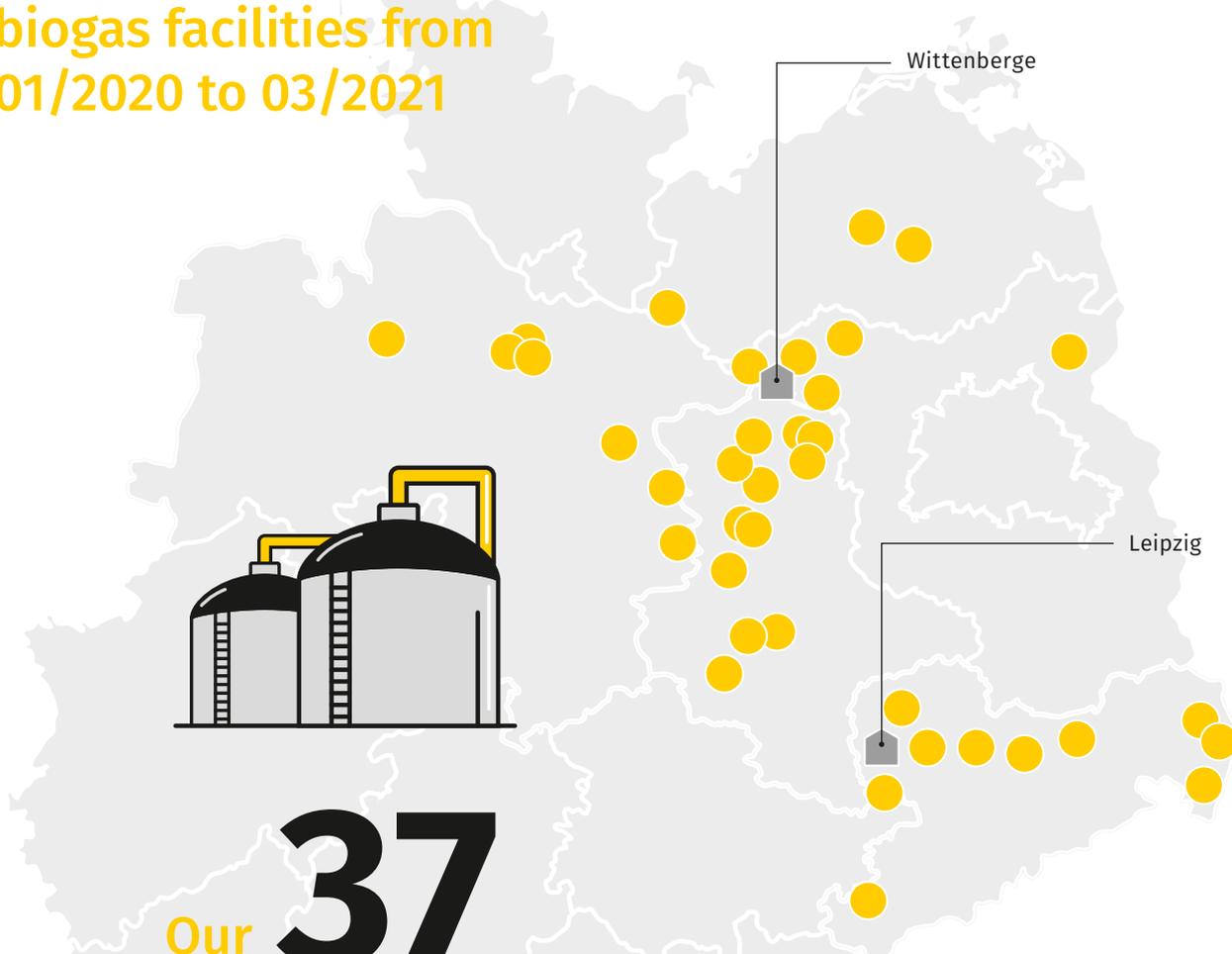
Highly efficient biogas facilities like those operated by our subsidiary BALANCE Erneuerbare Energien GmbH are climate-friendly energy producers. Not only the product itself, but the production process is also particularly sustainable – the biomass used in our plants, for example, is composed of renewable raw materials and residual materials that come from the respective local regions in the vicinity of the plants. Furthermore, the residual biogas fermentation products make high-quality fertilisers, which in turn can be used in agriculture. In this way, a sustainable cycle is created. As a result, we are also making a valuable contribution to regional value creation, particularly in rural areas.

## BALANCE CONTINUES TO GROW

BALANCE Erneuerbare Energien GmbH successfully continued its ambitious growth in 2020 and early 2021. Through acquisitions and takeovers, the VNG subsidiary was able to increase the number of plants it owns to 37 by March 2021 – this corresponds to more than a fivefold increase in the size of its portfolio since 2018. With around 150 megawatts of thermal firing capacity, the company is now one of the leading biogas facility operators in Germany. Due to the high concentration of plants in the newly-formed German states, BALANCE also succeeded in forming plant clusters in 2020. In addition, the company continued to improve the operational performance of its existing plants as well as those newly acquired.

# +11

biogas facilities from  
01/2020 to 03/2021



Our **37**  
plants can supply

**~48,000**  
households with renewable  
electricity and up to

**47,000**  
households with  
green gas.

In biogas production, the VNG subsidiary BALANCE relies on renewable raw materials.

## WHITHER GOEST THOU, BIOGAS?

As a company that is clearly committed to decarbonisation, we want to leverage the multifaceted potential of biogas and biomethane and seize the opportunities for new renewable value chains. That is why we remain committed to ensuring that they will continue to be integral components in the energy system of the future, even after the subsidies included in Germany's Renewable Energy Act expire. After all, they can be used immediately in the electricity, heating and transport sectors and contribute significantly to achieving the climate targets – given the right framework conditions. Important changes are on the horizon, particularly as a result of the 2021 amendment to the Renewable Energy Act: while the exclusion of the flexibility bonus and flexibility premium and the capping of surcharges in tenders that have not been exhausted stand in the way of the necessary further flexibilisation of biogas facilities on the one hand – which clearly limits the prospects for their continued operation – the increase in tender volumes and maximum bid rates should be viewed positively, on the other.



## SUSTAINABLE REGIONAL ECONOMIC CYCLES

In addition to modernising its locations by investing in state-of-the-art technology and process optimisation, BALANCE is also adapting to the conditions in the respective regions. The VNG subsidiary is now integrated into regional economic cycles throughout Eastern Germany and in some areas of Northern Germany, thus strengthening rural communities and working closely with farmers in many places. This is because the suppliers of the fermentation residues used by the farmers and the sales markets for fermentation residues are usually located within a radius of a few kilometres around the plants.

Partnerships of this kind are also key to solving challenges in agriculture – in addition to the use of farm manure, for example, it will be possible to utilise a greater range of crop varieties in the future and thus contribute to biodiversity in agriculture via the input materials of biogas facilities. BALANCE intends to expand its activities here in the coming years through further projects and partnerships.



BALANCE is committed to a sustainable energy economy with moderate use of resources.

As the operator of numerous biogas facilities, BALANCE works closely with farmers in many locations and strengthens rural communities.



We recently campaigned heavily for an improvement in the framework conditions, among other efforts, before Germany's Building Energy Act came into force. In this context, we worked to ensure that the role of biogas, in particular, is recognised in the building industry, which is an essential prerequisite for a climate-friendly residential sector. In the future, we will also work ceaselessly to develop new ideas and products, including above and beyond the energy source itself. This is because biogas facilities harbour significant potential in another area: they can play a role in the production of hydrogen and thus, over the long term, meet the growing demand for this future energy source.

One example of this is production via a process known as steam reforming on the basis of biogas or biomethane. Furthermore, it is possible to link biogas and power-to-gas plants together. In this context, our subsidiary BALANCE is conducting research and development activities together with our Green Gases department to create appropriate scenarios for functioning, efficient energy and material cycles – for the sustainable hydrogen economy of tomorrow.



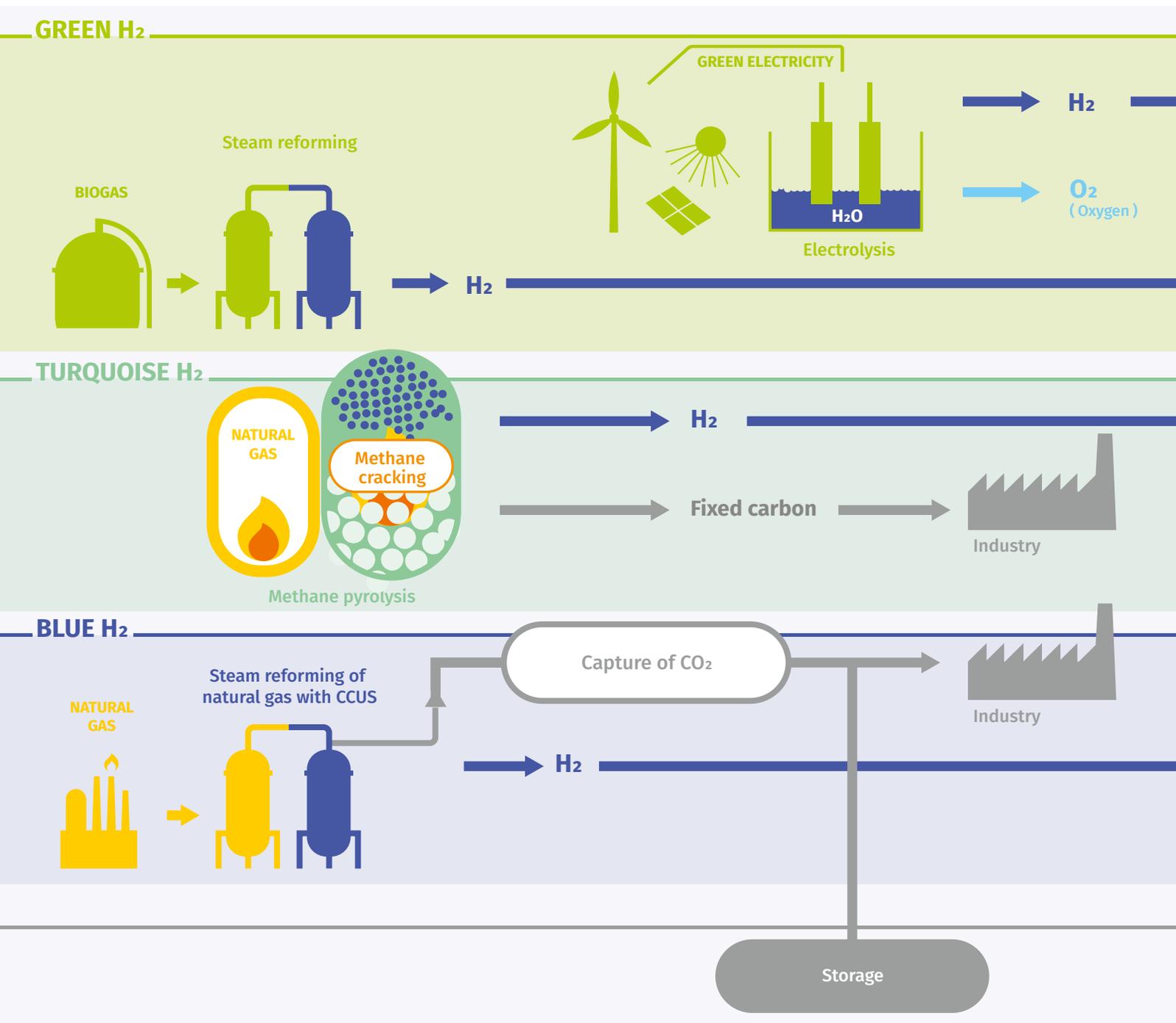
## FOCUS ON: GREEN GASES

*» Establishing our own team of green gas experts was an important milestone we reached in 2020 within the scope of our strategic focus on decarbonisation. We have thus successfully intensified our activities in the field of renewable and decarbonised gases. The young team has been highly motivated over the past year, working on numerous ideas and projects around the topic, especially on our 'Green Gases' vision and the submission of the application for the 'Energiepark Bad Lauchstädt' as a real-world laboratory for the energy revolution. Through these efforts, the team is actively working on our transformation. «*

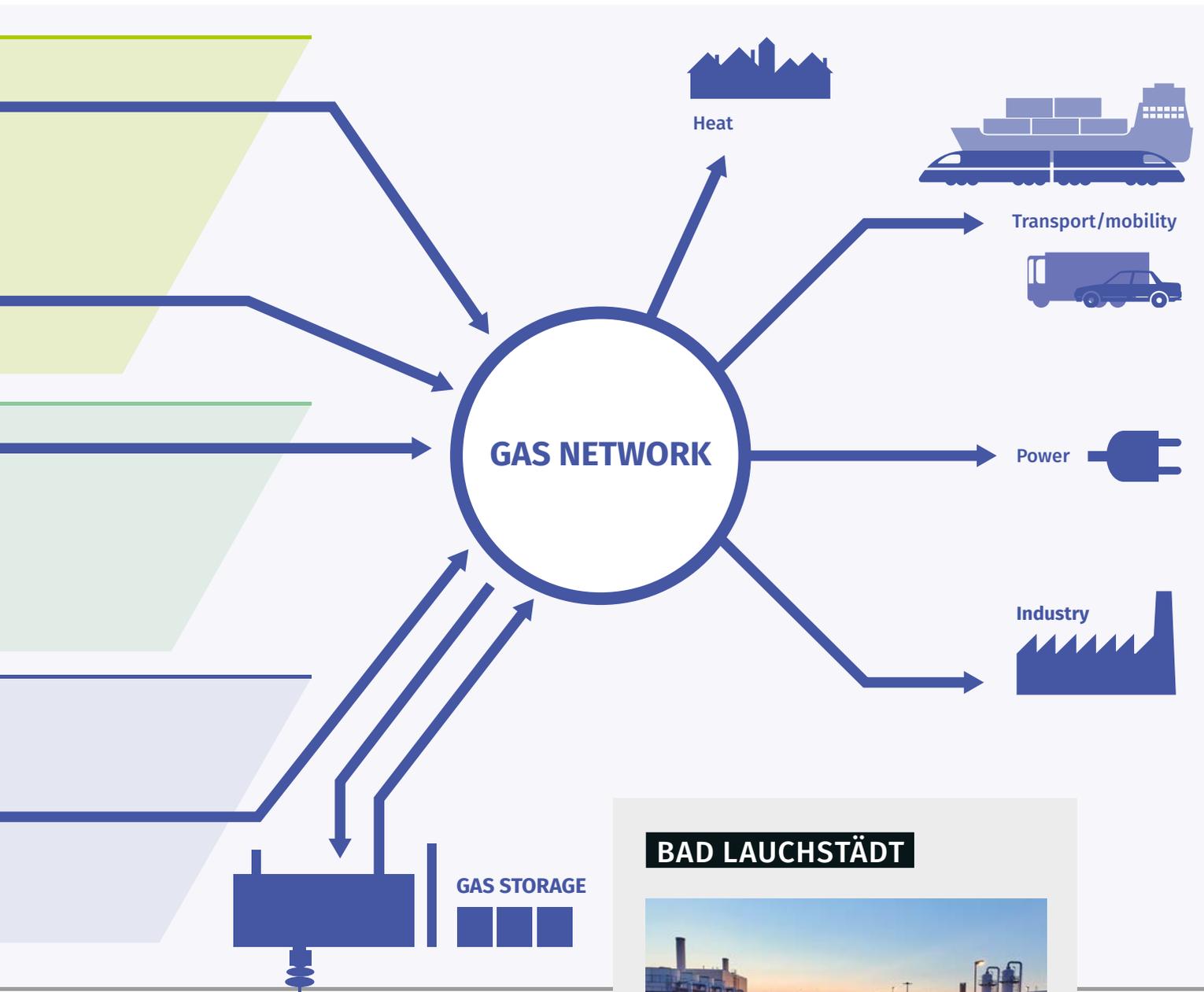
**Hans-Joachim Polk**

CHIEF INFRASTRUCTURE & TECHNOLOGY OFFICER

# HYDROGEN – THE ENERGY SOURCE OF TOMORROW



VNG is systematically gearing itself towards developing gas-based, technology-agnostic solutions for the decarbonisation of the energy system and applying them across a variety of sectors.



Potential storage option

**H<sub>2</sub>-CAVERNS**  
for the large-scale and  
long-term storage of energy

### BAD LAUCHSTÄDT



A schematic diagram of the 'Energiepark Bad Lauchstädt' for the generation, storage, transport, marketing and utilisation of hydrogen is available on the internet.



## READY FOR THE RAMP-UP

Hydrogen has excellent prospects of becoming the carbon-neutral technology of the future in the energy market over the long term. At the political level, the National Hydrogen Strategy in Germany marked the start of the ramp-up; the EU Hydrogen Strategy followed in July 2020. These initiatives reinforce our resolve to systematically forge ahead with the transformation we have begun in the field of green gases, both internally and externally.

Successfully ramping up the hydrogen market, however, will require our strategies to be implemented quickly and systematically. In this context, the focus should always be on a technology-agnostic approach. This is the only way that this future energy source can become an economical and efficient method of combating climate change – and pave the way for Germany to achieve carbon neutrality.

### VNG CONSOLIDATES H<sub>2</sub> EXPERTISE UNDER ONE ROOF

As VNG, we have everything we need to actively shape the decarbonisation process with solutions from the world of molecules. As hydrogen will be an essential part of the energy future, we incorporated it into our long-term plans at an early stage – first in 2017 in the ‘VNG 2030+’ strategy and then again last year in more detail and with a commercial perspective in our individual business areas. In this context, our well-developed infrastructure will play a special role in the future. For example, we are preparing to transport an increasing share of carbon-neutral gases through our pipelines by increasingly adding hydrogen – ultimately until the existing grids are completely converted into a hydrogen system. Thanks to our independent subsidiary ONTRAS’ high-pressure pipeline system and VNG Gasspeicher’s storage facilities, we are ideally

### MOVING FORWARD TOGETHER – AND ACHIEVING SUSTAIN- ABLE H<sub>2</sub> VALUE CREATION IN EASTERN GERMANY

VNG has deep regional roots in Eastern Germany. This is why we also view ourselves as a partner and facilitator in the energy revolution and the structural change in our region. The development of a carbon-neutral hydrogen economy, combined with new local value creation, is also being discussed intensively in Eastern Germany.

With the ‘Hydrogen Master Plan for Eastern Germany’, a study developed on VNG’s initiative by various Fraunhofer institutes and led by the newly founded Fraunhofer IEG in Cottbus, we would like to make a contribution to achieving a successful hydrogen ramp-up in Eastern Germany.

In the ‘Hydrogen Master Plan for Eastern Germany’, experts from the Fraunhofer Society analyse Eastern Germany’s concrete potential with respect to the development of a carbon-neutral hydrogen economy in the region. In this context, the study outlines the respective strengths of the federal states and analyses their stakeholder networks as well as their economic and scientific competences. Furthermore, concrete case studies are used to generate forecasts of possible hydrogen demand for the industrial and transport sectors in Eastern Germany. The master plan is accompanied by specific recommendations for measures that can actually be taken to achieve a hydrogen market ramp-up by 2030. The focus here is on promoting cooperation between the federal states.

positioned to make a key contribution to the development of a carbon-neutral hydrogen economy.

In addition, we are working on making our business areas H<sub>2</sub>-ready. The focus here lies increasingly on our own projects and pilot projects. One milestone in this regard was our submission in December 2020 of an application to build a real-world laboratory for the energy revolution – the ‘Energiepark Bad Lauchstädt’ – to be funded by Germany’s Federal Ministry for Economic Affairs and Energy (BMWi). This brings us one step closer to the implementation of an important flagship project.

If our application is approved, this real-world laboratory would give us the first opportunity to test all parts of the hydrogen value chain and the gradual market

ramp-up of power-to-gas technology with our project partners – under actual conditions and on an industrial scale. After preparing the site, renewable electricity from a wind farm will ultimately be converted into green hydrogen with the help of a large-scale electrolysis plant. This could then be temporarily stored in a converted cavern operated by our subsidiary VNG Gasspeicher and transported via a rededicated pipeline from ONTRAS to users – where the hydrogen could be used in industrial, transport and urban energy solutions. In this way, we want to prove that the efficient development of a sustainable hydrogen economy is both technically and economically possible using the existing gas infrastructure.



**Production, transport and storage of green hydrogen: the power-to-gas concept could be tested on an industrial scale at the Energiepark Bad Lauchstädt beginning in 2021.**

## GREEN, BLUE, TURQUOISE: THE FULL SPECTRUM FOR RAPID DECARBONISATION

Just as natural gas is indispensable in the short and medium term, hydrogen will be decisive for the success of the energy revolution and the achievement of climate goals in the long term. This is because it can be utilised directly, is climate-friendly and can be used as a raw material for a host of other products, such as synthetic methane, synthetic liquid fuels or basic chemicals. Thus, it can drive decarbonisation even in sectors that are difficult or impossible to electrify. Furthermore, it is also possible to store electricity from renewable sources with its help – which makes hydrogen the ideal partner for power from the wind and sun.

In order to ramp up a carbon-neutral hydrogen economy, all available technologies should be included in further implementation. Until large-scale electrolysis capacities are established, decarbonised hydrogen (blue and turquoise) can also be a useful addition to the energy mix alongside renewable green hydrogen, as blue and turquoise hydrogen can also be used to achieve rapid reductions in carbon emissions across a variety of sectors. In addition, competition between technologies would favour the emergence of a market that benefits all stakeholders and combats climate change at the same time.

In order to operate the generation plants cost-effectively, the National Hydrogen Strategy must now be implemented quickly – and VNG is ready to do its part. However, further regulatory reforms are needed to

fully exploit the economic and climate-friendly potential of this energy source. For example, framework conditions would need to be created to ensure that both the construction and conversion of the infrastructure are financially viable.

### THE HYDROGEN COLOUR SYSTEM

Various processes can be used to produce hydrogen. Depending on the method of generation and production-related CO<sub>2</sub> emissions, a distinction is made between green, blue, turquoise and grey hydrogen.

**Green:** Hydrogen produced in a carbon-neutral process via electrolysis using renewable electricity. Alternatively, green hydrogen can also be produced from climate-friendly biogas or biomethane, for example via steam reforming (see glossary).

**Blue:** Hydrogen produced from natural gas via steam reforming. The resulting CO<sub>2</sub> is stored in suitable geological structures via the carbon capture and storage process (CCS, see glossary).

**Turquoise:** Hydrogen obtained via methane cracking (i.e. pyrolysis, see glossary). Instead of CO<sub>2</sub>, this process produces solid carbon, which can be stored and used in various industries.

**Grey:** Hydrogen obtained from fossil energy sources, emitting CO<sub>2</sub> during the production process. A common method is steam reforming from natural gas.

When it comes to transporting carbon-neutral gases, ONTRAS is Germany's

# top

transmission system operator

## EUROPEAN CLEAN HYDROGEN ALLIANCE

The EU Hydrogen Strategy plays a key role in creating a European market for renewable and decarbonised gases. In this context, the European Clean Hydrogen Alliance (ECH<sub>2</sub>A) – as the largest high-level dialogue and body along the entire hydrogen value chain to date – represents one of the European Commission's central mechanisms for implementing the strategy.

In recent months, VNG has also increasingly advocated measures to incentivise an EU-wide market ramp-up of hydrogen. As a result, through our membership in the ECH<sub>2</sub>A, this year we will continue these efforts by participating in one of a total of six round tables focusing on 'Hydrogen in the Energy Sector'. The most important result of the ECH<sub>2</sub>A should be the identification and development of a list of feasible investment projects along the entire hydrogen value chain.



## FOCUS ON: INNOVATIVE HYDROGEN TECHNOLOGIES

»Although the real-world laboratory in Bad Lauchstädt is our largest project in the hydrogen sector now in the planning stage, it is not the only one. ONTRAS is currently working with other partners, for example in a pilot project on advancements to membrane technology in order to extract hydrogen from the gas flow a second time. And together with Salzgitter AG, we are currently examining the use of pyrolytically generated hydrogen and biomethane in steel production. We also have high hopes for VNG Innovation's investment in the British start-up HiiROC, which has developed a process for producing turquoise hydrogen via methane pyrolysis in a way that is both climate-friendly and particularly cost-effective. This also increases the potential to decarbonise our core product, natural gas.«

**Ulf Heitmüller**  
CHIEF EXECUTIVE OFFICER



VNG is systematically expanding its expertise and activities related to hydrogen in order to further shape the ramp-up of this promising future energy source.

## STRONG ROOTS – VNG IN CENTRAL AND EASTERN GERMANY



VNG takes its social responsibility seriously. Together with dedicated citizens, the company contributes to various projects for the common good and the region every year.

The 'Verbundnetz der Wärme' recognises individuals – the 'Ambassadors of Warmth' – who do volunteer work for society on a daily basis.



Through the VNG Foundation, the company has supported social, cultural and community activities for many years. This also included educational support in 2020, for example in the form of scholarships.

## FROM THE REGION, FOR THE REGION



### **FOCUS ON: THE ENERGY REVOLUTION IN EASTERN GERMANY**

*»As an energy company with gas as its core competence that has had strong roots in the region for over 60 years, VNG is playing its part in the energy revolution, with a particular focus on the conditions in the newly-formed German states. The overarching German and European climate goals present particular challenges and opportunities in this context. On a fundamental level, our home region has the right conditions to maintain and successively strengthen value creation: a diverse corporate landscape, a wealth of experience in change and transformation processes, a large concentration of research institutions and a vibrant start-up scene. In addition, we currently have access to all emerging energy sources, and in the future, this will also include hydrogen. In this environment, we as VNG want to and can contribute towards a successful energy revolution together with stakeholders from business, politics and academia as well as local citizens.«*

**Bodo Rodestock**

CHIEF FINANCIAL & HR OFFICER

As a company, we have strong ties to Central and Eastern Germany and especially with the city of Leipzig. These roots have many facets – to VNG, being a member of civil society means, on the one hand, that we are committed to the future of the energy system and providing secure jobs. This is also true when considering the potential that is specifically emerging in the newly-formed German states within the scope of decarbonisation. As one of the leading energy companies in the region, we want to seize these opportunities.

On the other hand, we believe assuming responsibility also means identifying with our region beyond our business, supporting selected initiatives and projects and actively working together with institutions and citizens for the common good. After all, far-reaching civic engagement has always been in VNG's DNA.

Hardly anything embodies this better than the VNG Foundation, where we have concentrated a large part of our charitable activities since 2009. These activities benefit children, teenagers and young adults in particular, as well as the worlds of academia and education, arts and culture, sport and social projects from a material perspective. In 2020, against the backdrop of the COVID-19 pandemic, we successfully launched an aid initiative – 'RE-START' – for the first time, in order to help maintain the economic diversity in our region.

# 200 members

have been part of the supraregional voluntary initiative 'Verbundnetz der Wärme' on average since 2001

- ▶ **2001:** 'Verbundnetz der Wärme' is launched in 2001 on the initiative of VNG AG and under the patronage of Regine Hildebrandt (†).
- ▶ **2002:** Wolfgang Thierse takes over as patron. The VDW photo exhibition 'Engagement zeigt Gesicht' ('The Face of Volunteer Work') draws public attention to the topic of volunteering for the first time.
- ▶ **2007:** The 'funding pool' is introduced: members of the 'Verbundnetz der Wärme' have the chance to receive additional financial support for activities of their associations.
- ▶ **2009:** The 'Volunteer Work Goes Back to School' project is launched. The aim is to bring the initiative's members together with clubs and young people and bring the spirit of volunteering to life.
- ▶ **2014:** Matthias Platzeck, former head of Brandenburg's state government, is appointed as patron.
- ▶ **2015:** The network produces the song 'Inspired by You'.
- ▶ **2017:** For the first time, all of the 'Ambassadors of Warmth' are nominated for the German Volunteer Award.
- ▶ **2018:** 'VDW in Your Community': VDW members network in regional discussion groups and talk to local and regional partners about current challenges and projects.
- ▶ **2019:** 'VDW on Tour': Members receive support in their public relations work through the help of volunteers and media coverage.
- ▶ **2020:** First digital appointment event, Coronavirus Relief Fund.
- ▶ **2021:** 20 Years of VDW: Manuela Schwesig, head of the state government of Mecklenburg-Western Pomerania, becomes the new patron.

## HELPING THE HELPERS – SUPPORTING VOLUNTEER WORK TOGETHER

Voluntary charitable work is an indispensable part of our society. That is why we support the 'Verbundnetz der Wärme' initiative through our VNG Foundation, for example. The initiative advocates for over 200 members and promotes volunteer work in Germany. The 'Verbundnetz der Wärme' initiative strives to strengthen the importance and perception of volunteering in all its facets and manifestations in society and politics and to actively support people who volunteer. In this content, the 'Verbundnetz der Wärme' views itself as a spokesperson, network and platform where members have the opportunity to network and exchange ideas. In addition to various campaigns throughout the year, the network elects six 'Ambassadors of Warmth' each year – our role models for volunteering. These individuals receive financial support from the VNG Foundation and active support in their public relations work and in the realisation of projects. In the pandemic year of 2020, the 'Verbundnetz der Wärme', in cooperation with the VNG Foundation, was able to provide rapid and unbureaucratic support to more than 20 associations as part of its 'Helping the Helpers' campaign, thereby providing beneficial support for volunteer work carried out under difficult conditions.

In 2021, 'Verbundnetz der Wärme' will celebrate its 20<sup>th</sup> anniversary – and with it, 20 years of dedication to volunteering.



*Volunteer work deserves social recognition as well as financial support. The 'Verbundnetz der Wärme' initiative works tirelessly for both. «*

**Manuela Schwesig**, PATRON

Through a variety of partnerships, VNG maintains a dialogue with stakeholders from the worlds of business and science as well as with the talents of tomorrow.



## STRONG PARTNERSHIPS IN ACADEMIA

Partnerships with renowned educational and research institutions are another focus of our foundation's activities. To this end, we have been collaborating with numerous universities and research institutions for many years, including the University of Leipzig, the HHL Graduate School of Management, the Leipzig University of Applied Sciences (HTWK) and the Freiberg University of Mining and Technology. For example, we sponsor courses of study, award scholarships and participate in a multitude of studies and research projects. We also regard our support for the German Scholarship Programme as an example of investing in the future and in young academics – each year, we award scholarships to exceptionally committed and talented students at the University of Leipzig and the Leipzig University of Applied Sciences (HTWK). By doing so, we not only strengthen our network in the world of science, but also create opportunities for us to find talented young people and recruit them to our company.

## 'RE-START' – TAKING THE INITIATIVE

The coronavirus pandemic represents a challenge of unprecedented magnitude for society and especially for small businesses and the self-employed. Moreover, it also posed a threat to economic diversity and innovation in our region, particularly over the course of last year. For this reason, VNG and the Smart Infrastructure Hub launched the 'RE-START' aid initiative in 2020, giving small businesses, self-employed individuals and start-ups in Central Germany that had suffered economic losses due to the coronavirus crisis the ability to apply for emergency financial assistance through the middle of the year. Within the framework of this aid initiative, twelve applicants each received a donation of between 2,000 and 4,000 euro.

## SPONSORSHIP FOR CULTURE AT ITS BEST

In addition to the initiatives and activities of the VNG Foundation, we also sponsor selected activities and institutions in the fields of art, culture, sport and education each year. For example, our long-standing partnership with the internationally renowned Gewandhaus Orchestra in Leipzig is particularly near and dear to our hearts. Since the 2006/2007 season, we have been supporting artistic expression in one of the best concert halls in the world.

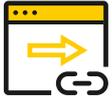
In 2020, cultural institutions were hit particularly hard by the COVID-19 pandemic. However, VNG remained a reliable partner to the Gewandhaus Orchestra, enabling the orchestra to stage its first 'Klassik airleben' livestream – an online production that included a selection of the best songs from the highly popular 'Klassik airleben' open-air concerts held in Leipzig's Rosental valley.



As a company with regional roots, VNG also supports arts and culture, such as the renowned Gewandhaus zu Leipzig.

# GROUP MANAGEMENT REPORT

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## ONLINE REPORT

<https://vng.de/bilanz>



Continuous change is the foundation of VNG's success. This also includes expanding into new areas of business, e.g. into the field of digital infrastructures.

# GROUP MANAGEMENT REPORT OF VNG

for the financial year 2020

## A. SUCCESS IN AN UNUSUAL YEAR

The year 2020 was unusual in many respects, and will long be remembered around the world on account of the coronavirus pandemic. Nevertheless, financial year 2020 turned out to be an extraordinarily good year for the VNG Group (VNG). Although the measures introduced in response to coronavirus presented a wide range of challenges for business processes, VNG's core business lines thrived in its individual business areas. At the same time, VNG was able to consistently pursue strategic growth in accordance with its 'VNG 2030+' strategy. Both of these facts reflect a further improvement in operating performance compared to the prior year. VNG's implementation of its goals indicates a substantial volume of investment and forward-looking cost management. VNG was highly active on the market, with a large number of acquisition projects in its strategic growth areas.

One prerequisite and key success criterion for this positive trend was a highly motivated workforce. The Company's employees demonstrated a high degree of resilience and commitment in financial year 2020, despite the conditions imposed by coronavirus. VNG was also able to avoid internal chains of infection by implementing a variety of measures right at the outset, and also rapidly implemented supporting protective measures to protect the health of all employees. One area of focus was on the transition to working remotely/from home.

This challenging realisation made it clear that Germany's energy supply is secure, even in times of crisis and during a pandemic. Ensuring the reliability of supply is a particular priority for VNG and its business units, and is the benchmark against which it

measures its performance every day. At the end of the day, on the whole, VNG was able to keep the protection of its employees' health, its core business processes and its individual business areas stable despite the challenging conditions. In this way, the Company managed to contribute to the reliability of the gas supply.

Against this backdrop, VNG can look back at a successful financial year 2020, and with adjusted EBIT of €179 million and consolidated profit of €46 million, it was able to continue its very good operating performance from the prior year. This year's consolidated profit was impacted by extraordinary provisions in the tens of millions of euros that were recognised in order to lessen the financial impact of tax administration proceedings in Poland. The operating result for 2020 was higher than in the prior year, when the Group generated EBIT of €133 million and consolidated profit of €117 million. Almost all of the Group's business areas exceeded expectations in the operating business.

The Gas Transport business area is still a mainstay of VNG's business with a significantly positive contribution to the consolidated profit. The result exceeded the prior-year level. In the Trading & Sales business area, the domestic wholesale business with large customers in particular achieved another improvement in its operating result. The end consumer business and activities in foreign markets also contributed to the segment's success, and are up slightly year-on-year. The Gas Storage business area benefited from much more favourable market conditions for storage capacity at present, and significantly improved its result. In the Biogas business area, the successful acquisitions of biogas facilities and a year-on-year increase in the contribution to earnings

are visible results of the implementation of the 'VNG 2030+' strategy.

VNG believes that the importance of climate protection and sustainability in current and future discussions confirms that it is on the right track with its group strategy.

## B. VNG AT A GLANCE

### 1. Business model and strategic direction of VNG

VNG is a group of companies active in the European energy industry with a broad, future-oriented portfolio of products and services in gas and infrastructure, and many years of experience in the energy market. The 'VNG 2030+' strategy describes the Group's goals up to the year 2030 and beyond, and these were consistently pursued in the 2020 reporting year. However, the acceleration of megatrends that are incorporated into the strategy (digitisation and decarbonisation in particular) calls for the re-evaluation of conditions on the market, and a corresponding strategic update. In the established business areas of Trading & Sales, Gas Transport and Gas Storage, the goal is still to consistently advance the existing, profitable business. As part of the ongoing transformation of the energy markets, VNG's strategic direction also focuses on the development of the decarbonised business. As an environmentally friendly fuel with good prospects for the future, hydrogen in its various forms is integral to the Group's 'VNG 2030+' strategy. In this respect, VNG is seeking to focus on its core strengths of transportation, storage and trading throughout the entire hydrogen value added chain. In order to gain rapid entry into the hydrogen market, VNG is pushing to ensure the

implementation of preparatory measures within the relevant business areas and the execution of initial pilot projects as part of its 'H<sub>2</sub>-readiness by 2025' agenda. In addition to the digital infrastructure, the Group is also planning further, substantial growth in the Biogas business area. The strategy's aim is to focus on a decarbonised, digital and gas-based future on the basis of the Group's own strengths and capabilities relating to (natural) gas as a fuel. Throughout the value added chain, VNG is focusing on the following business areas and segments:

**Gas Transport:** ONTRAS Gastransport GmbH (ONTRAS) operates Germany's second-largest gas transmission network, with more than 7,500 kilometres of pipes and approximately 450 network interconnection points with downstream network operators, and therefore ensures non-discriminatory access to the gas network and the pipe-based German gas market. This means that the infrastructure forms an integral part of both Germany's and Europe's gas transmission network. ONTRAS has expanded its gas infrastructure further still by investing in the European Gas Pipeline Link (EUGAL). In addition to the transportation business, ONTRAS and its subsidiaries also operate telecommunications and refuelling infrastructure for alternative fuels, and provide a wide range of network-related and gas-related services in the non-regulated sector. Out of all of the German transmission network operators, ONTRAS still transports the largest volume of climate-neutral gases on account of its 22 biogas feed-in facilities, as well as the feeding in of hydrogen and synthetic methane via two 'power to gas' facilities.

**Gas Storage:** As Germany's third-largest storage provider, VNG Gasspeicher GmbH (VGS) operates storage facilities in central and northern Germany, and markets around 2.2 billion m<sup>3</sup> of process gas throughout Europe. VGS also functions as a technical plant manager for third-party storage facilities, and provides engineering services in the fields of plant engineering and measurement technology. Furthermore, VGS holds an investment in Erdgasspeicher Peissen GmbH (EPG), which operates and is expanding the 'Katharina' underground storage facility in Bernburg, Saxony-Anhalt. VGS is also working with ONTRAS and other partners on the 'Energiepark Bad Lauchstädt' living laboratory – a project to test green hydrogen along the entire value added chain of production, transportation, storage and trading/sales.

**Trading & Sales:** VNG Handel & Vertrieb GmbH (VNG H&V) supplies natural gas to domestic and international trading companies, distributors, public utilities companies and other large customers. It also offers services relating to the product, including for balancing grid and portfolio management. Apart from its strong base in its domestic German market, VNG H&V is above all represented in Italy, Austria, Poland and the Czech Republic through its international trading entities. ENERGIEUNION GmbH complements these business activities in Germany with access to the German electricity trading market and its range of portfolio management and invoicing services. In the retail market for natural gas and electricity, VNG is also represented in Germany and abroad through other subsidiaries and investments, such as goldgas GmbH (goldgas) in Germany, and G.EN Gaz Energia Sp. z o.o. in Poland. In the 2020 reporting year, VNG

H&V was able to continue optimising its trading activities in central European markets by bundling and standardising its natural gas portfolio.

VNG managed another achievement with respect to the implementation of its strategic goals in financial year 2020 with the completion of the acquisition of Gas-Union GmbH (Gas-Union). As one of the leading German players in the natural gas sector, this acquisition reinforces VNG's gas business, particularly in the field of trading and sales. In addition to increasing the volumes sold, work on integrating VNG H&V's trading portfolio into VNG H&V started in the fourth quarter. This is expected to be completed over the course of the next financial year. With the fulfilment of the requirements stipulated by the antitrust authorities, VNG became the sole shareholder of Gas-Union as at 30 September 2020.

**Biogas:** VNG bundles its activities relating to biogas as a fuel via BALANCE Erneuerbare Energien GmbH (BALANCE) and its subsidiaries. The focus is on the production of biogas and biomethane, and therefore the optimisation of existing facility locations and the exploitation of new potential value added. For VNG, biogas is an important element of the decentralised energy system of the future, and provides a way to increase the share of green gases in the gas network in the long term. The Biogas business area is one of the most important growth areas as part of the 'VNG 2030+' strategy. Nine facilities were added to the existing portfolio in financial year 2020, including as a result of acquisitions in Brandenburg (Prignitz and Uckermark). As at 31 December 2020, BALANCE

operates 35 biogas facilities in eastern and northern Germany, with an installed firing thermal capacity of around 136 MW.

**Green gases:** VNG's green gases division is devoted to supporting the market ramp-up and the political discussion, coordinating the Group's activities, and developing operating projects throughout the core value added areas of generating, transporting, storing and marketing renewable and decarbonised gases. The focus in this regard is on hydrogen. In 2020, as a result of group-wide collaboration, the Green Gases 2030 vision was developed, which prioritises future business activities for VNG based on an evaluation of future developments in the market and general conditions.

**Digital infrastructure:** VNG's core expertise in the reliable operation of critical infrastructure can also be applied to the transportation and storage of data. VNG invests in the expansion and operation of digital infrastructure through various different investments and subsidiaries. GasLINE Telekommunikationsnetzgesellschaft deutscher Gasversorgungsunternehmen mbH & Co. KG, for example, is expanding its network of approximately 13,000 km of optic fibres. GDMcom GmbH (GDMcom) offers services in the fields of documentation, telecommunications and software. Through Schneider GmbH, a service provider for complex cable and pipeline installation, GDMcom adds the network planning, construction/installation and maintenance/fault resolution of fibre optic infrastructure to the internal value added. GEOMAGIC GmbH focuses on modern IT solutions and energy consulting services. caplog-x GmbH specialises in IT

services, cloud services, and application and data management for the energy sector, as well as data processing centres for critical infrastructure.

**Innovation:** VNG Innovation GmbH is currently a strategic partner for five start-up companies in the energy sector. The company's activities focus on supporting the initiation and implementation of partnership projects between VNG and start-ups, and on managing and investing in those startups. VNG Innovation Consult GmbH provides consulting services relating to innovation and start-ups. Both VNG Innovation GmbH and VNG Innovation Consult GmbH base their work on their partnership with SpinLab – The HHL Accelerator in Leipzig. As part of this strategic partnership, the companies work with the SpinLab to find start-ups and bring them to Leipzig, where they are given targeted advice and support with pilot projects in preparation for further financing from VNG Innovation GmbH. In order to continue supporting this, VNG Innovation GmbH has invested in SpinLab's 'Smart Infrastructure Ventures' venture capital fund, which focuses on supporting start-ups during their seed phase.

**District solutions:** As part of the updating of the strategy and the associated stronger focus, as well as the bundling of resources and investment funds, the decision was made to no longer pursue the district solutions business line as it was. Activities in this field were discontinued entirely at the end of 2020.



## 2. Financial performance indicators and targets

VNG's strategic direction is based on economic performance indicators, and matches its financial strategy. This strategy is aimed at profitable business activity, creates transparent financial guidelines, and assesses the viability of the strategic direction. The existing syndicated loan agreement with a volume of €700 million, supplemented by promissory note and shareholder loans, provides the main capital base for the diversified financial portfolio, and gives the Group a solid financial foundation. A green promissory note loan was issued for the first time in the past financial year.

VNG's financial strategy is based on the following core goals: generating positive cash flows and a suitable, risk-adjusted return, and avoiding risks to the Group's ability to continue as a going concern. The Group is mainly managed on the basis of adjusted EBIT. Non-recurring effects on earnings that cannot be planned for are not taken into consideration. Other financial targets relate to the cash flow indicator 'funds from operations' (FFO), as well as the levels of long-term net debt, the equity ratio and net investment. The focus is placed on information about the Group when it comes to steering the operation, monitoring forecast quality and reporting to executive management, the Supervisory Board and shareholders. These figures are arrived at in accordance with International Financial Reporting Standards (IFRS).

## 3. Research and development

The discussion surrounding green gases has gained a huge amount of momentum over the past year. The main focus is on hydrogen as a key component of a renewable energy system, which has been given an additional boost by the publication of various hydrogen strategies by the EU and Germany's national government. VNG shares the view that decarbonised and renewable gases are essential if an efficient energy transition is to be achieved.

The number of VNG's research projects in the field of green gases rose year-on-year. Against the backdrop of the current issue of the long-term storage of renewable energy, VNG was once again an active member of the HYPOS (Hydrogen Power Storage & Solution) East Germany network in 2020. The goal is to develop a model region for a green hydrogen economy in central Germany. As part of the seventh energy research programme published by the German federal government, VNG and other partners from industry and the research sector have developed a project outline for the generation, transportation, storage and marketing of green hydrogen in Bad Lauchstädt, which is to be implemented in the next few years as part of a living laboratory supported by the German Federal Ministry of Economics and Technology (BMWi). Another important milestone was reached in financial year 2020 with the submission of the application for the subsidisation of 'Energiepark Bad Lauchstädt'. In the 'Biogas Steam Reforming' project, VNG is working to exploit another green source of hydrogen, which integrates seamlessly with the expertise profile of BALANCE. The aim of the research project is to generate hydrogen from raw biogas with no intermediate preparation, and to put it to use in the transport sector in particular. As part of a Franco-German partnership, ONTRAS is involved in a project

aimed at testing membranes for the separation of hydrogen from hydrogen/natural gas mixtures. In a pilot system at the ONTRAS hydrogen feed-in facility in Prenzlau, different membranes will be tested to determine their effectiveness and suitability for separating hydrogen from gas mixtures with different proportions of hydrogen.

VNG also helps customers who require substantial amounts of energy to switch to renewable energy sources, and develops tailored concepts for this purpose. VNG was, for example, able to secure the engagement for a feasibility study being carried out by a major manufacturer in the automotive sector, the purpose of which is to identify ways to make automotive production more environmentally friendly and facilitate potential future partnerships.

In another project, VNG is working with Salzgitter Flachstahl GmbH, Salzgitter and the Fraunhofer Research Institution for Energy Infrastructures and Geothermal Systems (IEG) on transitioning steel production to climate-neutral processes. As part of an initial study, scenarios were developed for the supply of hydrogen, and various different methods for producing hydrogen and the necessary infrastructure were compared.

VNG is working with a network of Fraunhofer Institutes on an 'H<sub>2</sub> Master Plan East Germany' aimed at ascertaining and exploiting the potential for generating and using hydrogen in the core region of eastern Germany. The declared goal is to identify potential value added, and promising economic clusters as an optional arrangement for the structural transformation.

## C. REPORT ON ECONOMIC POSITION

### 1. Conditions on the market

**Macroeconomic developments:** Global economic growth was heavily influenced by the course of the coronavirus pandemic from February 2020 onwards. Since then, governments have found themselves forced to impose far-reaching restrictions on society and business in order to slow or contain the spread of the new virus. At first, economic and monetary support allowed the industrialised nations in particular to cope better with the consequences of the coronavirus pandemic than had originally been anticipated.

The outbreak of the pandemic and the strict lockdown in the spring led to an unprecedented 9.8 percent drop in gross domestic product in the second quarter. The strong recovery of the German economy in the summer was halted by the second wave of coronavirus and the second lockdown. According to calculations by the German Federal Statistical Office, gross domestic product fell by a total of five percent year-on-year in 2020. Following ten years of growth, this is the sharpest decline suffered by the German economy since the financial and economic crisis of 2008/2009. The economic recovery in 2021 (which all assessments and forecasts anticipate) depends on the levels of infection moving forwards, and the associated restrictions.

**Trend for energy consumption:** In 2020, primary energy consumption in Germany fell 8.7 percent year-on-year to a historically low level. According to the working group on energy balances (Arbeitsgemeinschaft Energiebilanzen e.V.), the fall in consumption is primarily attributable to the clear impact of the

coronavirus pandemic. This was exacerbated by long-term trends such as improved energy-efficiency, substitutions in the energy mix, and relatively mild weather, particularly in the first quarter of 2020. The proportions of the various different energy sources in the national energy mix have shifted towards renewable sources, and away from natural gas. Consumption of hard coal and brown coal fell 2 percent year-on-year to 15.7 percent. Renewable energy consumption, on the other hand, rose to 16.8 percent.

**Position of natural gas in the energy market:** Natural gas consumption fell 3.4 percent in comparison to 2019. This was mainly due to weaker demand for natural gas in the industrial, commercial, trade and service sectors as a result of the coronavirus pandemic. Conversely, there was an increase in the use of natural gas to generate electricity and heat. Consumption by private households is expected to have increased slightly, despite the relatively mild temperatures at the start of 2020.

**Price trends:** VNG's business activities are influenced by a variety of market-related factors such as changes in the prices for raw materials, exchange rates, and interest rates. These can influence both the performance of business and the valuation of key assets. Storage levels in Europe were historically high at the end of winter 2019/2020 on account of the mild weather and substantial imports of LNG. These high storage fill levels, the coronavirus pandemic (falling demand) and substantial imports of LNG up to May caused gas prices to fall to historic new lows (TTF day-ahead of €3.1/MWh). From June onwards, spot prices on the gas market trended higher, trading at over €18/MWh at the end of the year. The price was

supported by a sharp decline in LNG imports from June onwards, as well as a year-on-year decline in Russian gas supplies to Europe. (Day-ahead) gas prices on the Dutch trading point averaged TTF €9.4/MWh in 2020, which was much lower than the figure of €13.5/MWh recorded in the prior year. The average Brent price for 2020 of USD 43/barrel was below the average of USD 64/barrel for 2019. The seasonal summer-winter spread (SWS), which is important for the management and evaluation of storage capacities, rose and fell over the course of the year.

At the end of March in the past storage year (2019/2020), the spread was well above €4/MWh. In the next storage year, the SWS rose from €2.5/kWh to €3/kWh in the first half of 2020, but was unable to maintain this level in the second half of the year and fell below €1.5/kWh by the end of the year. Interest rates remained very low. The euro steadily gained value in relation to the US dollar in 2020, and ended the year at USD 1.22 after trading at a low of USD 1.08 in April. The average exchange rate for 2020 was USD 1.14/€ (prior year: USD 1.12/€).

## 2. Energy policy

Energy and climate policy was frequently at the centre of the general political agenda this year, despite the handling of the coronavirus pandemic dominating the political discourse. Ambitious strategies and laws aimed at reducing CO<sub>2</sub> emissions and building up a sustainable energy economy were discussed and ratified at the European and national levels. It is generally agreed that demand for natural gas will increase in the years ahead as a result of the shift

away from coal and nuclear power. The main focus of political attention in 2020 was on the market ramp-up of renewable and decarbonised gases. The use of hydrogen in particular is being discussed as a crucial component for the decarbonisation of sectors in which the direct use of electricity would only be possible with significant technical adaptations and the associated economic barriers (i.e., much higher costs).

At the national level, the fast pace of energy policy as part of the Climate Protection Programme 2030 was maintained. The Act on the Phase-out of Coal-fired Power Plants [‘Kohleausstiegsgesetz’], for example, was ratified, which prescribes the end of coal-generated electricity by 2038 at the latest. This has made the switch from coal to gas in order to ensure a stable supply of electricity even more important. With the Fuel Emissions Trading Act [‘Brennstoffemissionshandelsgesetz’: BEHG], a national CO<sub>2</sub> pricing system has been developed for fossil fuels in the building and transportation sectors that will take effect at the start of 2021. The German government presented the national hydrogen strategy for the priority issue of hydrogen – a comprehensive plan for ramping up the use of the fuel in Germany. The strategy provides for the creation of five gigawatts (GW) of installed capacity for the generation of green hydrogen by 2030. It lists 38 measures for rapidly ramping up the hydrogen economy in the various different consuming sectors, for infrastructure/supply, for research and development, and for European and international collaboration. In order to resolve questions relating to the establishment of hydrogen infrastructure in Germany, the Federal Network Agency also carried out a consultation, which

VNG also contributed to with a comprehensive opinion. Achieving the targets for the hydrogen market ramp-up set by the German government requires rapid regulatory adjustments, and the prompt and urgent implementation of European legal acts into national law. The ratification of the Energy and Buildings Act [‘Gebäudeenergiegesetz’: GEG] in 2020 resulted in the consolidation of the former Act on the Promotion of Renewable Energies [‘Erneuerbare-Energie-Wärme-gesetz’: EEWärmeG], the Energy Conservation Act [‘Energieeinspar-gesetz’: EnEG] and the Energy Conservation Regulation [‘Energieeinspar-verordnung’: EnEV]. This gives renewable and decarbonised gases better prospects on the heating market, as the obligation to use biomethane and biogas, among other things, benefits from the improved positioning of the primary energy factor.

At a European level, the issue of hydrogen also came under the spotlight of legislation with the publication of a European hydrogen strategy. The European Commission envisages creating 40 GW of installed capacity for green hydrogen in Europe by 2030. The hydrogen ramp-up is also to be supported by blue and turquoise hydrogen. In order to achieve these goals, the EU’s hydrogen strategy provides, among other things, for the ratification of hydrogen terminology, and the development of proofs of sustainability and origin. The importance of hydrogen as a fuel is also emphasised in the strategy for the integration of the energy system.

Beyond the priority issue of hydrogen, energy policy legislation was also pushed forwards at the level of the European Union. As part of the Green Deal, the European Commission announced in September that it wants to increase the CO<sub>2</sub> reduction target of

55 percent for 2030 compared to 1990 (from 40 percent previously). Summer 2020 also saw the entry into force of the Taxonomy Regulation, which will classify economic activity according to its contribution to combating or adapting to climate change. These developments may impact the use of natural gas in the future energy system, and potentially affect the granting of loans for gas projects and technologies in particular. The corresponding delegated legal acts, which are to define the thresholds for sustainable activities in the future, were also presented in November.

## D. HUMAN RESSOURCES AND ORGANISATION

### 1. Employees

**VNG has set itself the goal of being an important and appealing employer:** The VNG Group had a total of 1,305 employees as at 31 December 2020. This is an increase of 150 in relation to 2019, mainly as a result of the numerous acquisitions carried out to build up the Biogas business area. The increase is also due to the acquisition of Gas-Union. The primary goal of VNG's HR work is to find and retain the right talented people, and to develop employees' skills in order to achieve the Company's targets with them in the long term. VNG's success in this regard in 2020 is reflected, among other things, by its kununu score of 4.1. This qualifies VNG for classification as a Top Company in the rankings of the kununu evaluation platform.

**Diversity:** Diversity and equal opportunities are the central drivers of VNG's corporate culture of respect and appreciation. This not only plays a role with respect to a balanced age and gender structure, but also with respect to different nationalities. The Group's companies employ people from 17 different countries. Our balanced gender structure (60.6 percent men and 39.4 percent women) is also reflected by the management positions held by women. At the VNG Group, women hold 24.5 percent of management positions in the first and second levels below the Executive Board. The Company attaches great value to the ability to balance a career and family, not least with respect to its appeal as an employer. Even before temporary part-time work was enshrined in law, VNG was already making similar arrangements using flexible part-time employment contracts. As at the reporting date of 31 December 2020, 8.6 percent of employees were working part-time.

**Sustainability of human resources policy:** As an employer, it is important to VNG to establish recruitment channels that allow group companies to attract and retain junior talents at an early stage and support their development. VNG has, for example, been working closely with universities and colleges in the region for many years, including through internships, student internships, and supporting theses and student project work. VNG has also offered BA study places since 2019, and works with Staatliche Studienakademie Sachsen in the subjects of controlling and the SME sector. Three new students on cooperative courses of study came to the Company in the 2020 training year. A trainee programme also offers graduates a way to get started at the Group's companies. All three trainee places were successfully filled in financial year 2020.

**Digital transformation:** Unlike in previous years, when digitisation set the tone, identified opportunities and focused activities, in the reporting year it acted as a catalyst that accelerated the trends and developments of past years against the backdrop of the coronavirus pandemic. In 2020, the digital transformation was characterised by flexible responses to the many challenges presented by the pandemic. This played out in the conflict between urgent, short-term measures on the one hand and long-term needs and change processes on the other.

In the spring of 2020, the extensive digitisation activities of past years provided the foundation for the largely seamless transition of almost all employees to working remotely and from home within a very short space of time. The success factors in this respect were a modern IT infrastructure that was already in place, state-of-the-art applications, collaborative tools, and an open corporate culture. By entering 'pandemic mode', all parts of the organisation were able to achieve high standards of security and protection, while also maintaining regular operations through virtual working conditions. Accompanying initiatives were launched at an early stage in order to identify the positive aspects of the developments for the Company, to retain them, and to proactively capitalise on them for a time after the coronavirus pandemic. The main focus of digital transformation activities in financial year 2020 was also on areas such as agile cooperation and digital process optimisation.

## 2. Non-financial performance indicators

**Employees:** In addition to the confidence of customers and business partners, and compliance with safety, environmental and quality standards, the satisfaction of the Group's employees is a key foundation for its economic success. This is promoted and regularly assessed by means of measures aimed at improving the work environment, working hours, the system of compensation, health and safety, and work/life balance. Regular surveys of employee commitment and motivation are conducted as a tool to measure employee identification with the Company. A response rate of 71 percent across all of the surveyed VNG group companies reflects a constant, high level of acceptance for the employee survey as a feedback tool. The results can be used to develop corresponding measures in order to maintain the Group's strong appeal as an employer in the long term. Particular attention is also given to maintaining an HR policy that considers family life and different phases of life in order to fulfil the Group's corporate and social responsibility in full. Last but not least, healthcare is an important addition in order to create an appealing work environment.

The health and safety of employees are crucial to a company's success. With one accident in the workplace, the LTIF (Lost Time Injury Frequency) for 2020 was up slightly on the prior year (prior year: zero). This shows that ongoing and intensive work is still required in order to maintain a high level of workplace safety. In order to raise awareness of health issues among employees throughout the Group, the occupational healthcare function offers an enhanced care service with respect to heart, circulatory, metabolic and skeletal conditions. It also offers numerous services in areas including, for example, stress prevention and flu vaccinations.



On account of the coronavirus pandemic, one priority for occupational health and safety in 2020 was establishing and optimising corresponding measures to protect employees against a coronavirus infection. Corresponding concepts involving hygiene and distancing rules, restrictions/controls on third-party access to VNG's business premises, and rules for business trips were established in this context.

Thanks to IT solutions, most employees have been working from home since mid-March. When schools and nurseries were closed, VNG faced particular pressure as an employer to introduce flexibility measures, particularly with respect to the balancing of work and family life, in order to offer the best possible support to parents with dependent children. A large number of measures were established in addition to expanded working hours frameworks and accounts, ten additional days of leave for employees with children under the age of twelve, and flexible part-time work solutions. Improved technical equipment for working from home was also a priority topic, which has now been included in the corporate regulations and will be kept by VNG in a new, post-coronavirus, hybrid world of work.

In 2020, acceptance of and participation in the internal ideas management system as a tool for promoting employees' entrepreneurial involvement were expanded and developed by maintaining the digital 'VNG SEED' ideas and innovation platform. In addition to its existing product development processes, VNG's ideas management system promotes a workplace atmosphere that supports initiative and responsibility on the part of employees. The ideas

management system mainly focuses on ideas for improving internal procedures and processes, and is aimed at cutting costs and improving efficiency. As the result of an environmental campaign initiated by employees, four environmental teams formed in the past financial year that work on the implementation of their ideas.

An organisational update was carried out in the reporting year in order to further consolidate the priorities of the 'VNG 2030+' strategy and boost business throughout the Group. With this restructuring, VNG hopes to leverage synergies between the established, group-wide functions of procurement and building management, IT management and organisational development. As an extension of VNG's agile mindset, a transformation and innovation campus was also established as a platform for elaborating employees' ideas in cross-functional, cross-unit and cross-company teams.

**Corporate affairs:** In keeping with its regional focus, VNG's involvement in society is mainly aimed at the core areas of social issues, regional grass-roots sport, education, art and culture. Additional measures aimed at alleviating the impact of the coronavirus also played an important role in financial year 2020. VNG's involvement in society centres around the 'Verbundnetz der Wärme' initiative, which was founded in 2001 with the support of the VNG Foundation. 'Verbundnetz der Wärme' and its roughly 250 members are committed to supporting volunteering in its many forms, and in addition to directly supporting volunteers, sees itself as a megaphone for

the interests of the volunteer sector in the public sphere. 'Verbundnetz der Wärme' also offers active members and supporters a platform for networking. The impact of the coronavirus pandemic imposed restrictions on the work of charitable organisations. With its 'Help the helpers' portal, 'Verbundnetz der Wärme' offered charitable organisations practical support in order to overcome the new challenges. Another centrepiece of VNG's activities aimed at alleviating the effects of the coronavirus pandemic was the 'RE-START' aid initiative, which was founded in partnership with the Leipzig Smart Infrastructure Hub with the aim of preserving economic diversity in central Germany. The initiative offered another source of immediate financial aid in summer 2020 to small companies, the self-employed and start-ups in the media, education, retail, hospitality, event, leisure, mobility and healthcare sectors that suffered losses as a result of the coronavirus crisis. 15 companies and self-employed workers were helped in this way.

In the field of education and research, VNG has been working for many years with universities and colleges in the region to offer practical lectures, part-time courses of study and financial support for student excursions or workshops. The VNG Foundation also once again sponsored young students at Leipzig University and Leipzig University of Applied Sciences with a 'Deutschlandstipendium' scholarship. In 2020, the VNG Foundation also awarded a partial women's scholarship for the first time to enable four talented young women to study at the HHL Leipzig Graduate School of Management.

**Customers:** As an energy company with a long-distance grid and storage, VNG is responsible for ensuring that its customers are supplied with gas. As part of its investment and maintenance measures, VNG expands its networks as required and maintains them through its Gas Transport business area. VGS ensures the same for the Gas Storage business area. Against the backdrop of the coronavirus pandemic, ONTRAS and VGS have carried out risk evaluations in accordance with statutory requirements, which they used as a basis for developing measures and specifications for maintaining the operating business. The networks and storage facilities were 100 percent ready for operation at all times. All measures were and are regularly adapted to changing conditions. Key business processes were safeguarded in the course of financial year 2020 and during the lockdown using flexible working from home solutions and a modern IT architecture.

Since customers increasingly value sustainability in their suppliers, in March 2020, VNG H&V underwent an extensive evaluation process on the EcoVadis sustainability platform. As a first step, VNG H&V achieved bronze status, putting it among the top 50 of the companies that had been evaluated up to that point.

**Environmental issues:** As part of the Group's 'VNG 2030+' strategy, VNG has set itself the target of contributing to the success of the energy revolution and its climate policy objective with the climate-friendly fuel of gas. In addition to the ongoing expansion of the biogas portfolio in the past financial year, various different projects were initiated in

this context in the field of green gases, such as synthetic gases and hydrogen. The focus of ONTRAS' sustainability programme in 2020 was once again on action in the fields of climate and energy, and in particular on reducing CO<sub>2</sub> emissions, and therefore activities aimed at achieving a gas supply that is entirely climate-neutral by the year 2050. By signing a memorandum of understanding for the voluntary Oil & Gas Methane Partnership 2.0 initiative, ONTRAS, VGS and BALANCE have undertaken to measure their methane emissions much more accurately and extensively than before, and to measurably reduce them.

During the reporting year, VNG was also involved in organising a convention of the Russian-German Commodity Forum entitled 'The Global Energy Economy: Hydrogen as a Future Driving Factor?', where the focus was on the establishment of a hydrogen economy between Russian and German actors, as well as the climate-friendly transformation of energy systems. In financial year 2020, VNG also maintained a 133-strong fleet of vehicles with alternative propulsion systems.

## E. PERFORMANCE OF VNG'S BUSINESS AREAS

### 1. Gas Transport

**Economic development:** In the past financial year 2020, ONTRAS and its subsidiaries were able to make a significant contribution in the low hundreds of millions of euros to adjusted EBIT, and were at a similar level as in the prior year. Compared to the prior year, increased transportation income from the commissioning of the first section of the EUGAL pipeline led to rising revenue. As an independent transmission network operator, ONTRAS has been subject to incentive regulations since 2010. The current, third regulation period (2018 to 2022) has been characterised by a large number of regulatory developments. Particular mention should be made of the REGENT 2021 and AMELIE 2021 resolutions in 2020, according to which the same capacity fee is to be levied at all points in the market area, even after the common Trading Hub Europe market area has been introduced ('fee stamp'). The Trading Hub Europe market area will simplify and intensify gas transport throughout Germany from October 2021. Under the GIBY brand, through GDMcom and its subsidiary Schneider GmbH, the planning and expansion of the optical fibre network in the Leipzig region was pushed forwards down to the end consumer business for the first time.

**Projects for a climate-friendly gas supply:** On account of the changing framework conditions in the energy sector, ONTRAS is preparing the infrastructure for sporadic increases in demand for natural gas

between now and 2030. This is being done with consideration for the transformation that is then anticipated, in order to cover the transportation of climate-friendly gases, and hydrogen in particular, in the future. As part of the Gas 2021 to 2030 grid development plan, and as a member of the Gas for Climate group, ONTRAS was involved in the development of a national and European hydrogen network. The results of studies conducted in previous years as part of the Commit to Connect 2050 project, which was initiated by ONTRAS, indicate that a self-contained, completely decarbonised and secure energy system in eastern Germany could be set up and operated cost-effectively. In terms of decarbonisation strategies, the project's findings underscore the future importance of hydrogen and methane within the gas infrastructure.

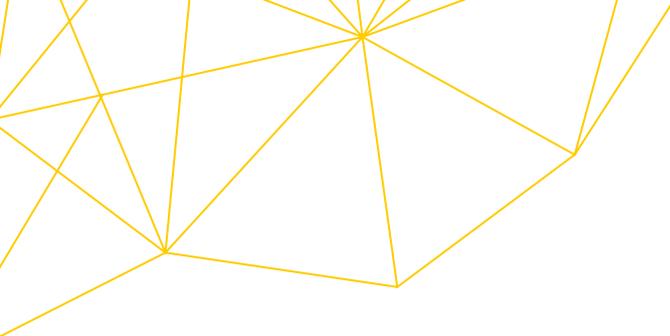
## 2. Gas Storage

**Economic development:** The seasonal difference in gas prices, which is above all reflected in the SWS, is the authoritative indicator of storage capacity prices for the Gas Storage business area. The SWS is influenced by a variety of factors. The transit dispute between Ukraine and Russia played a particularly crucial role in 2020. As a result of the associated uncertainties, the fill levels of German storage facilities stood at nearly 97 percent at the start of the year. The settlement of the transit dispute shortly before the end of 2019, the delivery of substantial

volumes of LNG to Europe and very mild temperatures in winter 2019/2020 meant that storage fill levels were still at 71 percent on 1 April 2020. With some fluctuations in the first quarter, this caused the SWS to soar above €4/MWh for the 2020/2021 storage year, which VGS was able to benefit from with a substantial share of capacity.

Even after the start of the 2020/2021 storage year, the coronavirus pandemic and the continuation of substantial LNG delivery volumes kept summer prices even lower than in the prior year. The day-ahead gas price dipped below €4/MWh at times, resulting in a further, significant increase in the spreads of relevance for pricing. As in the prior year, VGS was also able to market interruptible products at attractive prices, even after the start of the storage year, in addition to 'Rest of Storage Year' (RoSY) capacities. Capacities with a range of terms were also marketed for later storage years by means of multiple tender processes.

Despite the continued positive trend on the market in the last two financial years, VGS is consistently sticking to achieving its cost targets in order to ensure that it can remain competitive in the long term in a turbulent market. The Gas Storage business area generated adjusted EBIT in the low tens of millions of euros from its business operations in the reporting year. The business area also generated a positive contribution to earnings from its investment in EPG.



**Development of storage capacities:** With its underground storage facilities in central and eastern Germany, VGS has a marketable process gas volume of around 2.2 billion m<sup>3</sup> in the current financial year. The capacity of the underground storage facilities was utilised in full in the storage year. Investment activities are still characterised by focused capital expenditure on existing assets, with the aim of maintaining and optimising the asset structure in the long term. The contractually agreed expansion projects have been completed. A regular profitability analysis of all storage facilities is carried out, which takes the current changes in the market situation into account. These results have a significant influence on strategic decisions at VGS.

Dismantling and decommissioning work at the Buchholz facility is ongoing. Work on dismantling the wells started on schedule in May 2020. Two out of a total of 25 wells have been secured so far, with construction work on the sites for the next wells running in parallel. The project is within budget with respect to costs and also on schedule. Once all mining law permits have been submitted, the demolition of all surface and underground facilities is scheduled to be completed by 2023. Dismantling work at the Kirchheilingen site commenced on schedule in May 2020 with the demolition of the overground structure. Planning work for securing the facility is in progress. The possibility of facilities being taken over by third parties is constantly being assessed and implemented in order to optimise the restoration costs. A contract has also been concluded with a third party concerning the subsequent use of the mining field. Through EPG, VGS is also involved in the development and operation of the Katharina underground gas storage facility in partnership with Gazprom export LLC.

Another chamber and collecting chamber pipeline 23 were commissioned on schedule in 2020. The underground development activities are expected to last until 2024.

**Sustainable business:** As a company operating in the energy sector, VGS is committed to constantly improve as part of its sustainability strategy launched in 2020 in order to conduct its business with net zero CO<sub>2</sub> emissions in the medium term. The Company has already been researching energy-efficient storage methods, developing green gas storage products, renaturing dismantled facilities and working to protect nature and biodiversity for many years. In 2020, VGS also introduced climate-neutral storage. By voluntarily buying Verified Emission Reduction certificates, the Company offsets all of its CO<sub>2</sub> emissions generated through the use of electricity and gas for the management of its storage facilities.

### 3. Trading & Sales

**Economic development:** The wholesale and B2B business lines are still crucial to the commercial success of the Trading & Sales business areas. As part of its portfolio management activities, the segment was once again able to achieve a solid result with flexible gas supply contracts, storage and transport capacities, and the continued growth of business with large customers. Work on expanding trading and sales channels, and implementing new business cases, continued in financial year 2020. Innovation in the trading segment centres around the development of products with a focus on the market and customers, as well as adjusting the IT landscape and organisational structure to boost efficiency. The sales performance in the persistently competitive B2B business

improved again despite the restrictions on activity imposed by the coronavirus pandemic. With a contribution to earnings in the mid-range tens of millions, the Trading & Sales business area made a positive contribution to the performance of VNG's business.

In addition to the wholesale business, the business with end customers is another important source of earnings. Alongside trading companies in other countries, this section of the business area mainly consists of goldgas GmbH, which is based in Eschborn. The company was able to grow its customer base by 13 percent in comparison to the prior year. In a challenging competitive environment, and with customers potentially willing to switch providers, the end supplier achieved a positive result in the past financial year that was in the high single-digit millions of euros, and can above all be attributed to the ongoing improvement of efficiency and greater transparency. In a ranking published by Focus Money in 2020, goldgas once again performed very well, and was named as one of Germany's fairest gas suppliers. With this year's top placement, goldgas achieved 'evergreen' status for the first time. This is used to refer to gas suppliers who receive a very good evaluation in at least three years during a five-year period. In a ranking of Germany's best service providers published by Handelsblatt, goldgas was named 'GERMANY'S BEST energy service provider' in the energy category in its capacity as a gas supplier. The Austrian and Italian entities responsible for the end customer business once again made a positive contribution to earnings, with a total figure in the mid-range single-digit millions of euros.

In the end customer business in Austria and Italy, VNG's equity investments were therefore able to build on the commercial success of the prior year. In addition to the domestic business, VNG's gas sales in other countries also continue to play an important role. Outside Germany, unit sales are above all generated in Italy, Luxembourg, Austria, Poland and the Czech Republic. The business with large customers in the Czech Republic and Austria was restructured in 2020. Sales activities were bundled in the local entities. Gas procurement and portfolio management are now carried out centrally from the central VNG H&V office in Leipzig. This has already led to some improvements in results. Gas-Union's grid and storage operations were sold as part of the integration of that company. The sales business and other activities have been kept within the VNG Group. Since its acquisition, Gas-Union has contributed adjusted EBIT in the low single-digit millions to earnings.

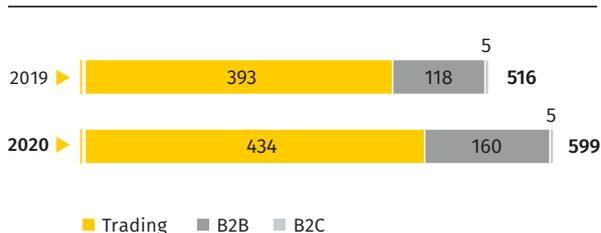
The gas distribution network in Poland, which is an important market for VNG, was expanded further. However, the Polish sales business in the B2B sector has come under pressure in connection with unit sales and pricing. That is why gas sales in Poland will have a new structure in the future. The necessary measures were already initiated in the reporting year. Since 2018, HANDEN Sp. z o.o. (HANDEN) has been undergoing a regular tax field audit looking at the correctness of the company's VAT returns for past financial years. In a draft report, the tax administration came to the conclusion that HANDEN's input tax deductions with respect to individual trading transactions will not be accepted. The Polish tax administration has yet to issue a final ruling. There is a special influence on the consolidated profit for financial year 2020 in order to lessen the financial impact of this matter.

### Development of unit sales and procurement volumes:

In the past financial year 2020, VNG's unit sales of gas amounted to 599 billion kWh, which was once again up year-on-year (prior year: around 516 billion kWh). This increase can mainly be attributed to an increase in the volume sold in the B2B sector. Gas output in the B2C customer segment (private households and industry/retail/services) was roughly on a par with the prior year. Unit sales in the B2B business rose in comparison to the prior year, mainly as a result of the acquisition of Gas-Union, the addition of new industrial customers, and the expansion of additional sales channels in Germany.

The VNG Group procured around 588 billion kWh of gas (prior year: around 519 billion kWh). The volumes procured from Russian partners in connection with long-term supply agreements were roughly stable at around 57 billion kWh (prior year: around 59 billion kWh). The volume of natural gas procured from Norway was also on a par with the prior year (around 10 billion kWh). The remaining volumes of gas were procured either via short-term and medium-term supply agreements, or in the course of trading activities on the European spot and futures markets. Medium-term and long-term procurement is mainly used to cover demand for the sales customer portfolio.

**Volume of gas sold by VNG** in billion kWh\*



\* Excluding short-term arbitrage transactions

Long-term relationships on the procurement side were built up, and flexibilities in supply agreements were exploited. Following intensive negotiations, a direct procurement agreement for the delivery of supplies to VNG H&V's customers in Italy was concluded for the first time. Solutions are constantly being sought in cooperation with long-standing suppliers in Russia and Norway in order to further expand partnerships in the European gas sector.

## 4. Biogas

**Portfolio expansion:** The Biogas business area once again underwent substantial expansion in 2020 thanks to BALANCE and its subsidiaries. BALANCE pursued its strategy of growth, and in so doing contributed to the consistent implementation of the Group's 'VNG 2030+' strategy, by acquiring multiple biogas facility portfolios and individual facilities, and by constructing a biomethane feed-in facility.

The total number of biogas facilities operated by BALANCE rose sharply during the reporting year, from 26 with 95 MWFTC to 35 with 136 MWFTC. At the same time, the organisation required to operate the facilities in Leipzig and in the regional clusters in eastern and northern Germany continued to be expanded. The integration of the acquired biogas facilities has gone according to plan thus far. The anticipated

commissioning of the biomethane feed-in facility with 8 MWFTC is scheduled for the start of 2021.

**Economic development:** The Biogas business area mainly generates revenue by feeding processed biomethane into the natural gas grid, as well as receiving EEG ['Erneuerbare-Energien-Gesetz': German Renewable Energy Act] remuneration for converting the generated biogas into electricity. The operating business in the Biogas business area has been heavily influenced by reduced harvest income as a result of droughts in previous years. The resulting shortage of substrate was largely offset using stocks, as well as portfolio effects between individual sites. Only certain facilities were forced to also make additional purchases of spot volumes. Most of the newly acquired and already integrated biogas facilities were able to make a positive contribution to earnings in financial year 2020 thanks to the substantial utilisation of their capacity. This was reduced by certain idle periods due to conversion work. The Biogas business area generated adjusted EBIT in the low single-digit millions of euros. This can mainly be attributed to delayed acquisition processes, consolidation effects, and unplanned conversion and expansion work. On the whole, BALANCE continued its efforts to convert and optimise individual facilities, with delays in some cases due to the need to coordinate with authorities as well as longer delivery lead times. Taking aspects of sustainable business activity into consideration, the focus in the reporting year was on diversifying substrate procurement, and reducing internal electricity consumption as part of the energy management system/internal usage by building photovoltaic facilities.

## F. FINANCIAL POSITION, FINANCIAL PERFORMANCE AND CASH FLOWS

### 1. Overall assessment

With the implementation of the 'VNG 2030+' strategy, further steps were taken towards achieving a portfolio that is diversified in the long term in financial year 2020. With adjusted EBIT of €179 million (prior year: €133 million), the operating business performed better than expected. In addition to Gas Transport and Trading & Sales, this positive development was owed in particular to the Gas Storage business area, which was able to improve its result in relation to the prior year by means of add-on marketing with substantial spreads. At the same time, the financial year was heavily influenced by the organisational and operational consequences of the coronavirus pandemic, as well as the acquisition and integration of Gas-Union. The non-adjusted EBIT of €82 million was much lower than in the prior year (prior year: €172 million). This is mainly due to an effect in the tens of millions of euros from ongoing proceedings at HANDEN with the tax administration. EBIT for the prior year had been boosted by the sale of the shares in EMB and VNG Slovakia. Although operating performance improved 35 percent in the financial year, extraordinary effects resulted in consolidated profit of €46 million (prior year: €117 million). This meant that consolidated profit fell short of expectations.

**FFO** rose thanks to an improvement in operating performance. Investment activity increased again year-on-year in financial year 2020. This is reflected in increased cash outflows, particularly as a result of activities in the Biogas business area, and the acquisition of Gas-Union.

Investment in the Gas Transport business area decreased year-on-year.

This caused net debt to increase by €110 million to €847 million. Although the result for the period fell short of expectations, it still provided a boost to equity. Total assets decreased slightly in comparison to the prior year, mainly as the result of a reduction in current liabilities. The equity ratio (20 percent) did not change compared to the prior year. VNG still has a stable financial position and cash flows in order to continue implementing its strategy.

VNG's individual **performance indicators** changed as follows:

in € million	2020	2019
Billed revenue <sup>1</sup>	9,827	10,550
Adj. EBIT <sup>2</sup>	179	133
Consolidated profit	46	117
FFO <sup>3</sup>	192	120
Gross investment	392	345
Net cash investment	314	215
Net non-current debt <sup>4</sup>	847	737
Equity ratio (%)	20	20

1 Prior to the application of the IFRIC Agenda Decision regarding IFRS 9.

2 EBIT adjusted for extraordinary and non-recurring effects on income.

3 Funds from operations, i.e., consolidated profit adjusted for non-cash expenses and income as well as gains/losses from the disposal of fixed assets.

4 Net financial liabilities plus pension and restoration provisions, less readily marketable inventories.

## 2. Financial performance

The volume of revenue billed in financial year 2020 is around €9,827 million, which is €723 million less than in the prior year. The unit sales volume, however, rose to 599 billion kWh. Much of the income still stems from sales of gas and electricity in the Trading & Sales business area. The trend for billed revenue and the cost of materials\*, despite an increase in the volume of gas sold, can be attributed to a lower average gas price than in the prior year. The revenue and cost of materials include revenue generated by Gas-Union for the gas business in the period from 1 October to 31 December 2020, amounting to €600 million, as well as corresponding expenses amounting to €588 million.

The IFRIC Agenda Decision on the 'Physical Settlement of Contracts to Buy or Sell a Non-financial Item (IFRS 9)' stipulates that purchase and supply contracts measured at fair value through profit and loss be recognised at their current spot price on the date of settlement. That is why the billed revenue and cost of materials are stated in the consolidated statement of comprehensive income\*. Adjustments are netted against the other operating result. The application of the Agenda Decision merely leads to a change in reporting, and therefore has no impact on the volume of EBIT.

Income and expenses from short-term arbitration transactions were netted against each other.

\* Prior to the application of the IFRIC Agenda Decision regarding IFRS 9.

**Other operating income** (€202 million) fell in comparison to the prior year (€275 million), mainly due to effects from the valuation of derivative financial instruments and the implementation of the IFRS 9 Agenda Decision.

**Personnel expenses** (€100 million) were up on the prior year (€90 million) due to an increase in the headcount.

**Depreciation and amortisation** (€88 million) rose by €14 million in comparison to the prior year. This increase is mainly due to depreciation of the commissioned EUGAL pipeline in the Gas Transport division, as well as supplementary facility acquisitions in the Biogas business area.

**Other operating expenses** of €329 million are up significantly year-on-year (prior year: €130 million). Among other things, the expenses from derivative financial instruments for the valuation of gas contracts contributed to this. They also include expenses in the high tens of millions of euros relating to risk provisions for ongoing tax administration proceedings at HANDEN.

The **investment result** (€12 million) has deteriorated significantly in comparison to the prior year. Net income from companies valued at equity improved during the reporting period, and is €10 million higher than the figure for the prior year. The impairment loss on one other investment had a negative impact of €-7 million. The investment result for the prior year was boosted by the proceeds from the sale of shares in EMB and VNG Slovakia.

The **financial result** (€-21 million; prior year: €-16 million) is mainly due to interest expenses in connection with the ongoing tax administration proceedings at HANDEN. Increased ongoing costs of financing caused the financial result to deteriorate in comparison to the prior year. At the same time, the completion of the EUGAL pipeline meant that fewer borrowing costs needed to be recognised. This also had affected the financial result. Despite substantial financial liabilities, VNG was able to continue benefiting from the favourable general market interest rates.

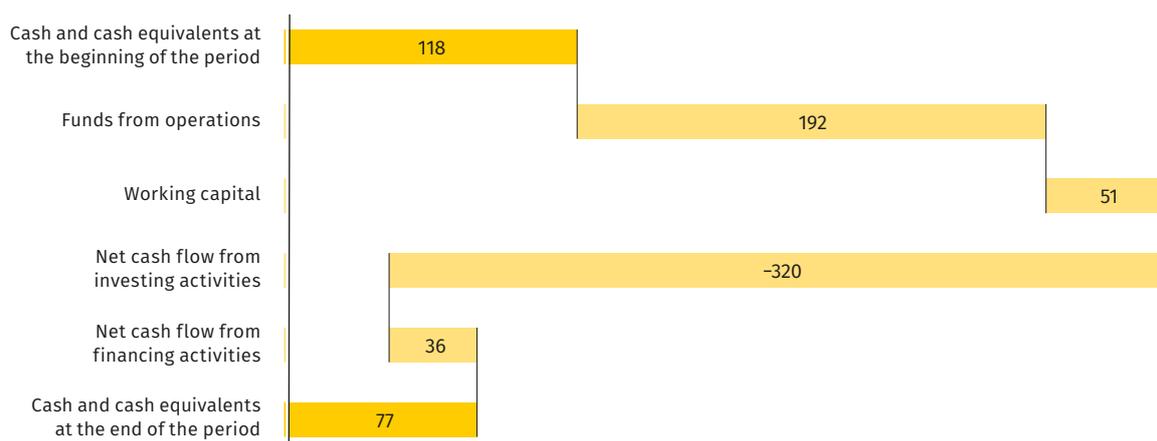
**Tax expenses** (€16 million) consist of ongoing tax expenses of €32 million and expenses from deferred taxes of €16 million. The significant change in the total tax expense in comparison to the prior year (€41 million) stems mainly from the capitalisation of deferred taxes.

The **result of the discontinued business area** E&P is disclosed separately in the statement of profit or loss. In the reporting year, this result (€-7 million; prior year: €-19 million) is a consequence of the measurement of an agreed contingent purchase price payment. This originally related to two exploration fields where the volume and timing-related development of the fields is important. The measurement takes changes in the oil price into account. One exploration field was sold in the financial year as the result of a contractual addendum. This produced a positive contribution of €2 million.

### 3. Cash flows

#### Development of cash flows at VNG in 2020

in € million



**FFO** (€192 million) improved in relation to the prior year (€120 million). This is mainly due to an increased operating result with an effect on cash, which is reflected in an improved **adjusted EBIT**. The **changes in working capital** (€51 million) as at the reporting date had a positive impact on net cash flows from operating activities.

The net cash flows from **investing activities** amount to €-320 million. The spending on investment that this includes, amounting to €375 million, remained virtually unchanged compared to the prior year (€379 million). Increased investments in the Biogas business area were counterbalanced by reduced investments in both Gas Transport and Gas Storage. The significantly increased spending on acquisitions in comparison to the prior year is due to the expansion of the biogas portfolio and the acquisition of Gas-Union. This is offset by cash inflows of €36 million from divestments, which were lower in the reporting year than in 2019. Lower dividend income than in the prior year (€15 million; prior year: €25 million)

also had a negative effect on the net cash flows from investing activities. The sale of EMB and VNG Slovakia had a positive effect in financial year 2019.

The reported net cash flows from investing activities consist of interest received (€4 million; prior year: €6 million).

**Financing activities** resulted in a net inflow of €36 million in the financial year (prior year: €219 million). Entering into financial liabilities with respect to external financing partners and the issuance of a green promissory note resulted in a net inflow of cash and cash equivalents amounting to €81 million. On the other hand, the net cash flows from financing activities were impacted by the repayment of leasing liabilities amounting to €13 million (prior year: €12 million). Interest payments amounting to €12 million (prior year: €14 million) were made. A dividend of €20 million was paid out to VNG AG's shareholders for financial year 2019.

Taking changes due to exchange rates (€1 million) into account, cash and cash equivalents fell from €118 million to €77 million. VNG was solvent at all times. Lines of credit amounting to €795 million had not been utilised as at 31 December 2020 (prior year: €634 million).

## 4. Financial position

VNG's **financial ratios** changed as follows in comparison to the prior year:

### Financial ratios

#### Assets



#### Equity and liabilities



Total assets fell slightly by €96 million in comparison to 31 December 2019. The volume of **non-current assets** increased, mainly as a result of investment in the gas infrastructure as well as acquisitions in the Biogas area. **Current assets** and **liabilities** were lower on the reporting date as a result of lower market values for purchase and sale agreements due to higher prices than in the prior year.

**Non-current liabilities** rose in comparison to the prior year as a result of taking out long-term financing loans, particularly with external financing partners. This was slightly offset by a fall in lease liabilities as a result of repayments. **Current liabilities** fell in relation to the prior year as a result of the market valuation of purchase agreements.

The fall in **current liabilities** more than offsets the increase in **non-current liabilities**, which is the reason for the reduction in the balance sheet total and the change in the capital structure. The **equity ratio** of 20 percent is on a par with the prior year. The absolute volume of equity was reinforced by the consolidated profit.

## G. OPPORTUNITIES AND RISK REPORT

### 1. Risk management system

VNG operates an integrated risk management system that incorporates all of the Group's business areas and group entities. This ensures that VNG always maintains a balance between risks and opportunities. In addition to constantly measuring and monitoring risks, a comprehensive annual risk inventory is carried out in which the relevant risks and opportunities of all group entities are systematically recorded and assessed as deviations from the corresponding forecasts. Significant opportunities and risks are also updated every year. In addition to the regular risk assessment methods, an ad hoc risk reporting system based on defined thresholds is in place that identifies significant deviations from plans at an early stage and in so doing highlights changes in the opportunity/risk portfolio.

### 2. Operating opportunities and risks

VNG has put itself on a broad footing with its core business areas relating to natural gas as a product, and is also exploiting new potential unrelated to natural gas as part of its 'VNG 2030+' strategy, including through acquisitions. This positioning diversifies the Group's risks, and also allows it take advantage

of opportunities in a dynamic market. Based on the forecast results, the opportunity/risk profile for 2021 is slightly risk-heavy.

The main opportunities and risks are primarily driven by market prices. This mainly concerns changes in the SWS and price fluctuations in the commodities markets in the trading area. Opportunities and risks also arise in the medium term and long term from the regulatory environment. Apart from the general risks of business, there are currently no apparent risks with the potential to lastingly and significantly impact VNG's financial position, performance and cash flows.

The risks faced by VNG this year were also affected by the coronavirus pandemic. Given the potential economic consequences for companies, there is still an increased risk of defaults on receivables as a result of insolvencies. The escalation of the coronavirus crisis could also delay the completion of planned projects in all of VNG's business areas. Reduced energy consumption as a result of the crisis combined with lower energy prices could also reduce the Group's earning power. Extreme scenarios considered in connection with the coronavirus crisis indicate increased risks for the Trading & Sales business area in particular.

VNG faces the prospect of increased risks in the event of further significant waves of infection, and substantial delays to the recovery of the economy as a whole. Additional lockdown measures and absences due to illness can hinder operating processes. Measures such as repeated nursery and school closures can also place an increased physical and mental strain on employees.

The risks resulting from the coronavirus crisis are already being addressed by means of suitable measures (protection of employees, stabilisation of the operating business, ensuring the security of supply and critical processes, and averting economic harm). Similarly, most employees are working from home in order to reduce the risk of an outbreak as much as possible. The technical requirements for this have been built up considerably. Teams of employees whose work cannot be carried out at home have, for example, been divided into independent sub-teams in order to minimise the risk of infection in this respect as well.

**Gas Transport business area:** The economic performance of ONTRAS depends to a significant extent on the regulatory framework and the permissible income caps associated with it. The Federal Network Agency, for example, sets the equity interest rate for new facilities in each regulation period based on historical rates. That is why, in a European comparison, the incentives to invest in the German electricity and gas networks will also deteriorate considerably on account of persistently low market interest rates. Falling interest rates in the regulated business of ONTRAS will reduce the company's contributions in the future.

ONTRAS also continues to take advantage of the opportunities presented by the regulated transportation market. Investing in EUGAL allows ONTRAS to diversify the marketing of capacities and rejuvenate its own asset structure. ONTRAS faces typical project-related risks, such as construction delays and budget increases. As a result, ONTRAS has implemented measures to mitigate these risks as much as possible. ONTRAS is also paying close attention to the current

sanctions policy of the US as it relates to infrastructure projects in the European energy sector. ONTRAS does not currently consider the level of risk for EUGAL to be raised, however.

ONTRAS also takes advantage of opportunities to provide services in the non-regulated energy infrastructure sector. With respect to the energy policy challenge of a CO<sub>2</sub>-neutral future for energy, there is also an opportunity for the continued use of Germany's gas infrastructure as part of a gradual transition from natural gas to renewable gases. The coupling of the electricity, heating market, mobility and industrial sectors makes it possible to develop an economically viable and cost-effective solution that involves the gas infrastructure. As a result, ONTRAS is actively working to achieve a climate-neutral gas supply by 2050. As part of this, ONTRAS is constantly carrying out necessary renovation and modernisation work on its technical facilities in order to ensure that the network is as reliable as possible, and in so doing safeguard the contractually agreed supply of gas to downstream networks and end consumers. The transmission network and its corresponding facilities were once again technically secure and available at all times in financial year 2020. The risks for 2021 are mainly limited to the operation of technical facilities.

**Gas Storage business area:** The intensity of competition with other flexibility products means that the proportion of storage bookings at short notice remains high. Substantial demand for storage capacity is anticipated in connection with the challenge of a CO<sub>2</sub>-neutral future for energy. Under certain circumstances, the existing infrastructure may also be used to store renewable energy in the form of green gases.

This is to be investigated and tested with project partners for green hydrogen as part of the 'Energiepark Bad Lauchstädt' living laboratory.

The volatility of market prices creates uncertainty for the future marketing of storage capacity and the income that can be generated from it. Opportunities relate in particular to further increases in marketing prices. VGS also aims to tackle the competition with innovative products, targeted investment decisions, the decommissioning of inefficient and unprofitable storage facilities such as those in Buchholz and Kirchheilingen, and measures to improve efficiency and promote automation. Cost structures have already been optimised, the organisation has been aligned more closely with the market, and additional income has been generated from the services business in response to the situation to date with respect to demand. Ongoing maintenance and the monitoring of underground gas storage facilities on the basis of technical regulations and internal provisions, and regular assessment of the condition of all surface and underground facilities, ensure that high standards of safety are maintained from a technical perspective and in accordance with mining law. High standards of quality are also ensured by annual training plans for the ongoing qualification of VGS's employees and service providers, as well as regular internal and external audits.

**Trading & Sales business area:** VNG H&V's trading activities present opportunities and risks relating to price fluctuations on the commodity markets in particular. In addition to changes in market prices, price differences between European gas trading points and price spreads between seasonal futures products

represent important risk factors. Trading performance can also be affected by temperatures, particularly in the winter period. The positions in purchase and sale agreements are combined to form an overall portfolio, and constantly monitored and managed. In addition to the portfolio's natural hedging effects, specific hedging strategies are used to limit the effects of negative changes in earnings that take the relevant risk factors into consideration and may also include derivative financial instruments. Trading activities are carried out in accordance with specific risk and loss limits for the operating business. Based on the forecast results, opportunities and risks should be almost balanced in 2021. The maximum total deviation in earnings as a result of the risk factors already mentioned is in the low tens of millions of euros.

VNG H&V has a structurally diversified procurement portfolio that is aligned with the market. The existing contracts mainly serve to cover the sales position. With respect to unit sales, VNG H&V is constantly developing new products and exploiting additional sales channels in the traditional wholesale business. It also takes the opportunities presented by the market and by spot and futures trading to optimise its overall portfolio.

The main credit risks stem from natural gas supply and trading agreements with national and international business partners. There are also credit risks associated with financial instruments that are entered into in order to hedge currency and commodity price risk positions. The credit ratings of business partners (customers, suppliers, trading partners and financial institutions) are evaluated and continuously

monitored on the basis of the information available as well as procedures that are customary for the market as part of the Group's established credit risk management system. The usual hedging instruments (including guarantees) are used to manage credit risks. The customer portfolio is also covered against default by loan default insurance.

VNG is subject to energy and financial market regulation. Suitable IT systems have been installed in order to meet the requirements of MiFID II (Markets in Financial Instruments Directive), MAR (Market Abuse Regulation) and REMIT (Regulation on Energy Market Integrity and Transparency).

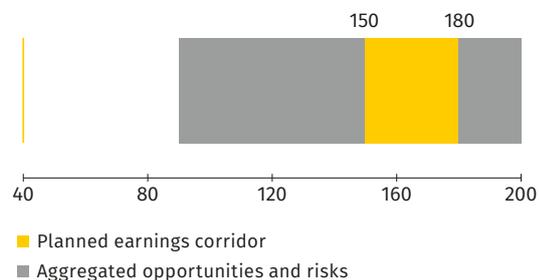
The end consumer supplier goldgas operates in a challenging competitive environment with low margins and the potential willingness of customers to switch providers. This could have a negative impact on the customer base and unit sales. goldgas also sees opportunities in connection with new distribution channels, the ongoing optimisation of processes and services relating to the energy sector. The Company is therefore pursuing the creation of an innovation management system, as well as systematic product development.

**Biogas business area:** This area's risk profile is influenced, among other things, by the decentralised nature of the investment portfolio. Regional, weather-related risks are managed centrally by the professional substrate management function.

The strong growth of BALANCE and parallel development place significant demands on the organisation. The Biogas area is also subject to regulatory requirements (including the EEG and the Ordinance on Gas Network Access ['Gasnetzzugangsverordnung': GasNZV]), which give rise to both risks and opportunities. Additional opportunities stem from the potential role of Biogas as part of the energy revolution, and the associated goal of decarbonisation.

VNG's performance indicators may be influenced by opportunities and risks. The figure below shows the effects on adjusted EBIT for financial year 2021 (figures stated in millions of euros).

**Adjusted EBIT 2021** in € million



**Ongoing development of IT systems:** The Group's operating business and the constantly changing framework conditions place significant demands on the stability, reliability and adaptability of business processes. By constantly monitoring its processes and developing its business IT systems, the Group ensures a high degree of process reliability and is constantly working on additional improvements.

### 3. Compliance management system

Conduct in compliance with regulations that is also ethically unobjectionable provides the foundation for lasting business growth. The group-wide compliance management system (CMS) is aimed at ensuring that all employees act in accordance with the law and with integrity in order to avoid jeopardising the confidence of customers, business partners, shareholders and the general public. In addition to organisational precautions and policies, there is an extensive reporting system in place and both general and targeted, subject-specific training is provided to employees. The adequacy of the CMS has been assessed and certified by auditors. This means that the principles and measures of the CMS are suitable both for promptly identifying risks of material violations of the law and internal rules in the fields of preventing corruption, anti-trust law and the regulation of trade, and for preventing such violations, with sufficient certainty. In addition to the existing CMS, VNG has implemented a Tax CMS for income tax and VAT, which it uses to identify risks of material violations of tax regulations at the Company in good time, and prevent them using targeted measures. The adequacy of the system was assessed and certified by an auditor in February 2020.

### 4. Financial risk management

VNG is above all exposed to risks relating to changes in the prices of raw materials, exchange rates and interest rates, as well as credit risks. The Group's fundamentally conservative orientation is reflected in its systematic financial risk management. Front-office and back-office functions, and financial risk management, are kept organisationally separate from each other.

The derivative standard financial instruments used for financial risk management are only used to hedge the existing risks associated with the underlying transactions. Commodity future transactions conducted by the trading entities are used to manage price risks relating to gas purchase and sale agreements, as well as for the purposes of the Group's own trading activities. Statistical risk parameters are used to measure and monitor these risks every day, and the potential changes in the present value of the trading portfolio are limited. All of the Group's currency exposures are concentrated with the parent company and hedged in full, if possible. Contracts with group entities based outside the euro zone are only ever concluded in the domestic currencies of those entities. Forward exchange transactions and natural portfolio hedging effects are primarily considered as hedging instruments. VNG practices active interest risk management involving the regular evaluation of all interest rate risks, which are also managed using derivative financial instruments. Solvency is guaranteed at all times by maintaining sufficient reserves of cash and cash equivalents in the form of guaranteed lines of credit, and also by optimising the allocation of liquidity within the Group. The core elements of the Group's financing are committed lines of credit and promissory note loans with various financing partners. The rolling liquidity planning over periods of several years regularly determines the peak financing requirements in future. As at the reporting date, these were always covered by sufficient sources of financing, even in the risk scenarios.

## H. OUTLOOK

The coronavirus pandemic will still be with us in 2021. This applies equally to our social and private environment as individuals, general political and economic developments, and the specific economic field of activity of the energy sector and VNG. In terms of its business activity, VNG has fared relatively well during the pandemic. It is therefore important to build on the important parameters in this respect: Ensuring security of supply, keeping business processes stable and improving operating performance, protecting the health of the VNG Group's employees, and taking further important steps towards transformation as part of the Group's 'VNG 2030+' strategy.

In the context of energy policy, clear, landmark decisions were made in the past year with the results of the Gas 2030 dialogue process, the national and European hydrogen strategies, and the European Green Deal. Natural gas, but above all renewable and decarbonised gases, as well as the gas infrastructure consisting of grids and storage facilities, are still highly relevant for the planning of the energy revolution and the energy supply of the future in the vast majority of energy policy and energy sector programmes and concepts. With a total of six state parliament elections, and a federal parliamentary election in the autumn, 2021 is a 'super election year'. Far-reaching decisions are anticipated at the national and international levels with respect to energy and climate issues, particularly for the gas infrastructure and its role within the energy system of the future. One interesting thing in this respect, for example, is how the EU's new climate target for 2030 will affect national

policy. The issues of hydrogen and expanding renewable energy will also continue to influence the political agenda. Despite the state and national elections this year, it is important to pick up the pace of the ongoing framework setting and above all implementation. VNG is willing to play its part, and will continue to be closely involved.

Generally speaking, it can be stated that business activity that is sustainable, and based on ecology and protecting the climate, will continue to become more relevant. VNG is willing to play its part, and will continue to be closely involved in the future. VNG continues to see an important role for itself and for gas as a fuel in the German/European gas and energy sector's process of transformation.

Also, with respect to the subject of sustainability, for some time VNG has been faced with further questions regarding the exact added value that the Group provides its customers, society, the environment and other stakeholders with its business activities and its strategic direction. In this context, VNG sees its role as contributing to a secure, affordable and environmentally friendly energy supply, today and in the future. This relates in part to the ongoing 'greenification' of the core product of natural gas into biogas and hydrogen. The Group has its own 'Green Gases' unit dedicated to this. At the same time, the potential offered by the gas infrastructure, consisting of grids and storage facilities, needs to be leveraged, highlighted, and developed with a view to a CO<sub>2</sub>-free future energy supply.



But the subject of sustainability has other, important aspects. Examples include the promotion and use of sustainable technologies, internal resource consumption, promoting sustainable conduct on the part of employees, and above all also sustainable financing. In addition to securing financing in the long term, this increasingly relates to borrowing that also takes aspects of sustainability into account. In 2020, VNG was able to take additional important steps with the successful issuance of the first green promissory note, and the creation of a group function responsible for sustainability issues. VNG will build on this in 2021, and reinforce its position in the field of sustainability.

**Reinforcement and improvement of operating performance as the basis for the ongoing implementation of the Group's strategy:**

Improved conditions on the market, particularly for storage capacities, provide a good framework for a strong operating performance and the consistent implementation of the strategy moving forwards. VNG is planning to achieve a lower adjusted EBIT of between €150 million and €180 million in 2021, as well as a consolidated profit of between €91 million and €111 million. The Gas Transport business area is expected to once again achieve results that are slightly higher than in the reporting year in 2021, but reduced slightly due to regulatory factors. In the Gas Storage business area, the slightly higher SWS at present is reinforcing the improved financial performance. These wholesale markets, which are currently volatile, also offer opportunities for the integrated approach of the Trading&Sales business area, although these need to be exploited anew every year and depend on market conditions. Competition in the sales market also remains strong. The retail consumer business is still an important source of income in the German, Polish,

Austrian and Italian target markets. With the implementation of the Group's 'VNG 2030+' strategy, the Biogas business area is expected to increase its adjusted EBIT in comparison to the current financial year.

Due to increasing investment activities, the Gas Transport and Biogas business areas in particular are expected to see a reasonable increase in debt in 2021. As in the past, changes in working capital in the trading business and its measurement on the reporting date may be subject to severe fluctuation, and also have a significant impact on group debt, total assets and therefore also the equity ratio. FFO will decrease compared to 2020, in line with earnings. All in all, VNG considers itself to be in a good position for the current financial year. The Group's operating performance is expected to be on a par with the past financial year. The consolidated profit for 2021 is not expected to be impacted by extraordinary effects.

**Non-financial performance indicators:** VNG is aware that its activities as an employer must focus on employee motivation and commitment, as well as social aspects, in order to achieve strong operating performance. The past months, and working under the conditions imposed by coronavirus, have shown that VNG has a good foundation that it is important to maintain. Measures are planned for the next financial year in order to gain an impression of employee satisfaction. The central goal is to receive confirmation of how strongly employees identify with VNG. The goal for workplace safety in 2021 is to improve LTIF in comparison to the reporting year. Irrespective of the coronavirus pandemic, a wide range of activities aimed at further improving our standards with respect to workplace safety will be carried out within the VNG Group in the next financial year.

**Responsibility towards society:** Another important issue for VNG in 2021 is the Company's own regional and social roots in central and eastern Germany. As a result of its history, and its deep regional and communal roots as an eastern German group of companies, VNG considers itself to be under an obligation to play a part in shaping the social and economic conditions at its locations. For 2021, the Group plans to intensify its cooperation with universities and research institutions through institutional grants, joint projects, and the ongoing granting of scholarships to young students. With respect to the Group's involvement in society, the 'Verbundnetz der Wärme' is celebrating its 20-year anniversary this year. Since 2001, the 'Verbundnetz der Wärme' has been supporting and advancing the issue of volunteering, in eastern Germany in particular. This is an issue that has by no means become any less relevant, either regionally or in terms of its general significance. On the contrary: The need for and importance within society of volunteering has been rising since before the coronavirus pandemic and associated, special requirements of volunteers. Even beyond the 20th anniversary of 'Verbundnetz der Wärme', which is supported by the VNG Foundation, VNG will continue to draw attention to this importance for society, generate appreciation, and offer advice and support to members of the initiative. As before, these activities are focused on the regions in which VNG mainly operates.

The year 2020 also saw the 30th anniversary of German reunification in 1990. At the same time, on 29 June 2020, VNG celebrated the 30th anniversary of becoming a stock corporation as part of a free-market economy. The Peaceful Revolution of 1989/1990 set a process in motion for VNG that included transforming

from a nationally owned company into a stock corporation, learning a completely new economic framework, and building up an almost entirely new company. Since then, VNG has faced a large number of challenges that have required it to be constantly willing to adapt and change. In summary, these include getting started in the free-market economy, jointly building up the natural gas supply in eastern Germany with municipal partners, the liberalisation of markets and growth of the Company, dealing with and adapting to regulation from the mid-2000s, adapting to increased competition and new market trends from 2008 to 2016, involvement in the energy revolution, and developing and implementing the 'VNG 2030+' strategy since 2016/2017. This is against the backdrop of constant change on the basis of strong expertise in the field of gas, with achievements and setbacks, but very often a pioneering spirit and drive, and today a very experienced company that is aware of and fulfils its responsibility towards the region in which it is based. In this respect, VNG is also equipped to tackle the approaching challenges and tasks that must be addressed in light of the continued success of the energy revolution and the development of society towards a CO<sub>2</sub>-free and digital future that is worth living in.

# CONSOLIDATED FINANCIAL STATEMENTS\*

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\* The annual report contains the following excerpt from the complete consolidated financial statements of VNG, which have been submitted electronically to the operator of the German Federal Gazette and can be accessed via the company register ([www.unternehmensregister.de](http://www.unternehmensregister.de)).



For over 60 years, VNG has been synonymous with comprehensive gas expertise and a well-developed gas infrastructure.

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS

for the period from 1 January to 31 December 2020

€ million	01.01. to 31.12.2020	01.01. to 31.12.2019
<b>Revenue billed</b>	<b>9,827.0</b>	<b>10,549.8</b>
Restatement due to IFRIC Agenda Decision on IFRS 9	-2,765.8	-2,382.0
<b>Revenue pursuant to IFRS</b>	<b>7,061.2</b>	<b>8,167.8</b>
Changes in inventories	0.2	-0.2
Other own work capitalised	3.0	2.7
Other operating income	201.6	275.1
<b>Cost of materials billed</b>	<b>-9,301.7</b>	<b>-10,350.3</b>
Restatement due to IFRIC Agenda Decision on IFRS 9	2,630.0	2,324.1
<b>Cost of materials pursuant to IFRS 9</b>	<b>-6,671.7</b>	<b>-8,026.2</b>
Personnel expenses	-100.3	-90.0
Depreciation and amortisation	-87.6	-73.6
Other operating expenses	-329.0	-130.3
Investment result	12.3	67.5
Financial result	-20.8	-15.5
Income taxes	-15.7	-40.9
<b>Profit after tax from continuing operations</b>	<b>53.2</b>	<b>136.4</b>
<b>Loss after tax of the discontinued operation</b>	<b>-7.0</b>	<b>-19.2</b>
<b>Consolidated profit for the year</b>	<b>46.2</b>	<b>117.2</b>
a) attributable to non-controlling interests	0.3	0.1
b) attributable to shareholders of VNG AG	45.9	117.1

# CONSOLIDATED BALANCE SHEET

as at 31 December 2020

## Assets

€ million	31.12.2020	31.12.2019
<b>Non-current assets</b>	<b>2,682.6</b>	<b>2,292.9</b>
Intangible assets	13.9	9.1
Property, plant and equipment	1,904.2	1,699.2
Entities accounted for using the equity method and other financial assets	369.5	333.4
Derivative financial instruments	379.6	229.5
Other non-current assets	8.3	19.0
Deferred taxes	7.1	2.7
<b>Current assets</b>	<b>3,907.4</b>	<b>4,392.7</b>
Inventories	291.7	299.1
Financial assets	9.0	0.5
Trade receivables	1,548.1	1,518.1
Derivative financial instruments	1,831.1	2,346.6
Other current assets	150.3	110.4
Cash and cash equivalents	77.2	118.0
<b>Total assets</b>	<b>6,590.0</b>	<b>6,685.6</b>

**Equity and liabilities**

€ million	<b>31.12.2020</b>	31.12.2019
<b>Equity</b>	<b>1,320.7</b>	<b>1,305.2</b>
Issued capital	328.0	328.0
Retained earnings	953.4	856.3
Consolidated profit for the year after non-controlling interests	45.9	117.1
Cumulative changes in other comprehensive income	-12.5	-3.6
Non-controlling interests	5.9	7.4
<b>Non-current liabilities</b>	<b>1,315.0</b>	<b>980.1</b>
Provisions	450.6	453.4
Deferred taxes	44.8	41.9
Financial liabilities	402.6	264.2
Trade payables	0.0	0.1
Derivative financial instruments	405.9	212.9
Other liabilities and subsidies	11.1	7.6
<b>Current liabilities</b>	<b>3,954.3</b>	<b>4,400.3</b>
Provisions	91.2	83.7
Financial liabilities	339.0	392.3
Trade payables	1,528.0	1,562.8
Derivative financial instruments	1,803.3	2,250.3
Other liabilities and subsidies	192.8	111.2
<b>Total equity and liabilities</b>	<b>6,590.0</b>	<b>6,685.6</b>

# OTHER DISCLOSURES

## COMPOSITION OF VNG AG'S EXECUTIVE BOARD

Ulf Heitmüller	Chief Executive Officer
Hans-Joachim Polk	Chief Infrastructure & Technology Officer
Bodo Rodestock	Chief Financial & Human Resources Officer

## COMPOSITION OF THE SUPERVISORY BOARD OF VNG AG

Thomas Kusterer	<b>Chairperson</b> Member of the Executive Board of EnBW Energie Baden-Württemberg AG
Hans-Joachim Herrmann	<b>1<sup>st</sup> Vice Chairperson</b> Managing Director of Stadtwerke Lutherstadt Wittenberg GmbH
Christina Ledong	<b>2<sup>nd</sup> Vice Chairperson</b> Chairperson of the Works Council of VNG AG, ONTRAS Gastransport GmbH, VNG Gasspeicher GmbH and VNG Handel & Vertrieb GmbH
Markus Baumgärtner	Head of Value Chain Natural Gas of EnBW Energie Baden-Württemberg AG
Josefine Bormann	Main Consultant of Business Regulation of ONTRAS Gastransport GmbH
Dr. Frank Brinkmann	Managing Director of DREWAG – Stadtwerke Dresden GmbH
Sascha Enderle	Head of Digital Finance & Transformation at EnBW Energy Baden-Württemberg AG
Barbara Endriss	Managing Director of OEW Energie-Beteiligungs GmbH

Christina Fenin	Head of Technical Cooperations of VNG Gasspeicher GmbH
Dr. Martin Fleckenstein	Independent Consultant
Hans-Peter Floren	Entrepreneur
Monty Heßler	System Technology Office of GDMcom GmbH
Dr. Martin Konermann	Managing Director Technology of Netze BW GmbH
Peter Leisebein	Vice Chairperson of the Works Council of VNG AG, ONTRAS Gastransport GmbH, VNG Gasspeicher GmbH and VNG Handel & Vertrieb GmbH
Michael Raida	Management Consultant
Gunda Röstel	Managing Director of Stadtentwässerung Dresden GmbH
Dr. Benno Seebach	Head of Capacity Planning at ONTRAS Gastransport GmbH
Michael M. Theis	Chairperson of the Managing Directors of LVV Leipziger Versorgungs- und Verkehrsgesellschaft mbH
Stefanie Thiele	Project Manager at ONTRAS Gastransport GmbH
Dr. Jochen Weise	Senior Advisor of Allianz Capital Partners GmbH
Dr. Bernd-Michael Zinow	Head of Function Unit Legal, Audit, Compliance and Regulatory of EnBW Energie Baden-Württemberg AG

## OVERVIEW OF THE FULLY CONSOLIDATED COMPANIES

Shareholding in %	Name and registered office of the company
<b>Holding</b>	
100.00	VNG AG, Leipzig, Germany
<b>Gas Transport</b>	
100.00	ONTRAS Gastransport GmbH, Leipzig, Germany
<b>Gas Storage</b>	
100.00	VNG Gasspeicher GmbH, Leipzig, Germany
<b>Trading</b>	
100.00	ENERGIEUNION GmbH, Schwerin, Germany
100.00	Gas-Union GmbH, Frankfurt am Main, Germany <sup>1</sup>
100.00	G.EN. Gaz Energia Sp. z o.o., Tarnowo Podgórze, Republic of Poland
100.00	goldgas GmbH, Eschborn, Germany
100.00	goldgas GmbH, Vienna, Austria
100.00	HANDEN Sp. z o.o., Warsaw, Republic of Poland
80.00	SPIGAS S.r.l., Milan, Italy
100.00	VNG Austria GmbH, Gleisdorf, Austria
100.00	VNG Energie Czech s.r.o., Prague, Czech Republic
100.00	VNG-Erdgascommerz GmbH, Leipzig, Germany
100.00	VNG Handel & Vertrieb GmbH, Leipzig, Germany
100.00	VNG Italia S.r.l., Bologna, Italy
<b>Biogas</b>	
100.00	BALANCE Erneuerbare Energien GmbH, Leipzig, Germany
100.00	Biogas Produktion Altmark GmbH, Hohenberg-Krusemark, Germany
100.00	Leipziger Biogasgesellschaft mbH, Leipzig, Germany

<sup>1</sup> Gas-Union GmbH holds treasury shares of 1.85 percent.

# AUDITOR'S REPORT

We issued the following auditor's report on the complete consolidated financial statements, which comprise the consolidated balance sheet as at 31 December 2020, the consolidated statement of profit and loss, the consolidated statement of other comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the financial year from 1 January to 31 December 2020, and notes to the consolidated financial statements, including a summary of significant accounting policies that comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) of the HGB, and the group management report for the financial year from 1 January to 31 December 2020.

To VNG AG

## REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

### Opinions

We have audited the consolidated financial statements of VNG AG, Leipzig, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2020, the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the financial year from 1 January 2020 to 31 December 2020, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we

have audited the group management report of VNG for the financial year from 1 January 2020 to 31 December 2020.

In our opinion, on the basis of the knowledge obtained in the audit,

- ▶ the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) of the German Commercial Code [Handelsgesetzbuch, HGB] and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2020 and of its financial performance for the financial year from 1 January 2020 to 31 December 2020, and
- ▶ the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Section 322 (3) Sentence 1 of the HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

## BASIS FOR THE OPINIONS

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 of the HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements, principles and standards are further described in the 'Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report' section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

## RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1)

of the HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

## AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 of the HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional scepticism throughout the audit.

We also

- ▶ Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ▶ Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- ▶ Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- ▶ Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial

statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- ▶ Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) of the HGB.
- ▶ Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- ▶ Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

- ▶ Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Leipzig, 26 February 2021

Ernst & Young GmbH  
Wirtschaftsprüfungsgesellschaft

**Boelsems**

WIRTSCHAFTSPRÜFER  
[GERMAN PUBLIC AUDITOR]

**Bätz**

WIRTSCHAFTSPRÜFER  
[GERMAN PUBLIC AUDITOR]

# GLOSSARY

**Biogas:** Gas resulting from the fermentation of biomass. It can be used in CHP plants for on-site power generation or can be upgraded to natural gas quality. The resulting biomethane can then be fed into the natural gas grid.

**Biomethane, also known as renewable natural gas (RNG):** Renewable biogas with a methane content high enough that it is suitable to be fed into the natural gas grid.

**Blue hydrogen:** Hydrogen, whose production from methane does not release CO<sub>2</sub> into the atmosphere. The CO<sub>2</sub> emitted during the reforming of conventional natural gas can be captured and stored in geological structures (so-called CO<sub>2</sub> storage) or in turn used to produce synthetic methane.

**Carbon Capture, Utilisation and Storage (CCUS):** Refers to technologies and processes that involve the capture, transport and permanent storage of CO<sub>2</sub> or its further processing into industrial products such as carbon-based fuels, carbonated water and/or chemicals.

**Erneuerbare-Energien-Gesetz (abbreviated EEG):** Germany's Renewable Energy Sources Act, which governs the preferential feeding of power from renewable sources into the country's electrical grid.

**EUGAL:** The European Gas Link (EUGAL) is a pipeline project carried out by GASCADE Gastransport GmbH. VNG's subsidiary ONTRAS is one of the company's minority shareholders.

**Green hydrogen:** Carbon-neutral gas produced via power-to-gas technology or the electrolysis process. This gas is produced by splitting hydrogen and oxygen using electricity. The hydrogen produced in this way is referred to as green depending on the percentage of renewable electricity used.

**Grey hydrogen:** Hydrogen obtained from natural gas via methane reforming, the production of which emits CO<sub>2</sub> into the atmosphere.

**Integrated energy:** The term used to describe the goal of interconnecting the energy and industrial sectors within the scope of the energy revolution.

**LNG, liquefied natural gas:** Natural gas cooled down to liquid form so that it can be used as fuel, e.g. for shipping and heavy goods vehicles.

**Power-to-gas:** An innovative technology that uses electricity to produce gas by means of water electrolysis and, if necessary, downstream methanisation.

**Pyrolysis** refers to a thermochemical conversion process in which methane is split into (turquoise) hydrogen and solid carbon at high temperatures.

**Spot and futures markets:** The spot market is the international financial market in which commodities are traded for immediate payment and prompt delivery. On a futures market, futures contracts are traded that will be fulfilled at some point in the future.



**Steam reforming:** Short version: Steam reforming is a cost-effective and energy-efficient method of producing hydrogen from carbon-based energy sources such as natural gas, light gasoline, methanol, biogas, or biomass through the addition of steam.

**Summer-winter spread:** The difference between the price of natural gas in the summer compared to the price in the winter.

**Synthetic methane:** Synthetic methane is a gaseous form of power storage that is produced via the power-to-gas process. After hydrogen has been produced through electrolysis, it is converted into synthetic methane by adding carbon dioxide through methanisation.

**Thermal firing capacity:** The thermal firing capacity is the maximum fuel energy that can be delivered simultaneously to a combustion unit, based on the lower heating value. The type of fuel used is irrelevant.

**Turquoise hydrogen:** Hydrogen produced from natural gas via methane pyrolysis. Instead of CO<sub>2</sub>, the production process generates solid carbon, which can be used in various industries.

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With the exception of the following photos:

EnBW AG (Page 9)

Bernd Geller (Page 16)

Ines Escherich (Page 30, 31)

Anika Dollmeyer (Page 31)

SpinLab – The HHL Accelerator (Page 34)

Tom Thiele (Page 35)



VNG remains committed to a sustainable, modern energy system – one that is green, digital and gas-based.



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