VNG

Energy. On the move.

VNG AT A GLANCE

Energy in Motion

Key performance indicators of VNG [1]

1,939
Number of employees at end of year [2]

5
European countries with VNG holdings

64
Group companies and holdings

€16,099 million
Revenue

352 billion kWh
Gas sales

€321 million
Adj. EBIT

€232 million
Consolidated profit or loss

€329 million
Investments

7,700 km
Pipeline network

31 TWh
Storage capacity

42
Biogas facilities

1 As of: 31/12/2024.
2 Total employees of all fully consolidated companies

Energy in Motion

Energy means change, progress and responsibility. For over 65 years, VNG has stood for security of energy supply. But in a world that is subject to constant change, energy is necessarily also always in motion. And it is exactly this that drives us on.

With our VNG 2030+ strategy, we are actively helping shape the future: We are investing in renewable and decarbonised gases, forging ahead with the hydrogen economy, and strengthening regional energy supplies. We are flexible and adaptable – characteristics that have been constants throughout our long company history.

“Energy in motion” is more than a slogan for us – it is how we define ourselves. It means responding to the needs of our customers and the challenges inherent in the energy transition. It means taking responsibility – for our region, our environment and our people.

This brochure introduces us and gives you insights into our commitment, our projects and our vision.

Our financial year 2024

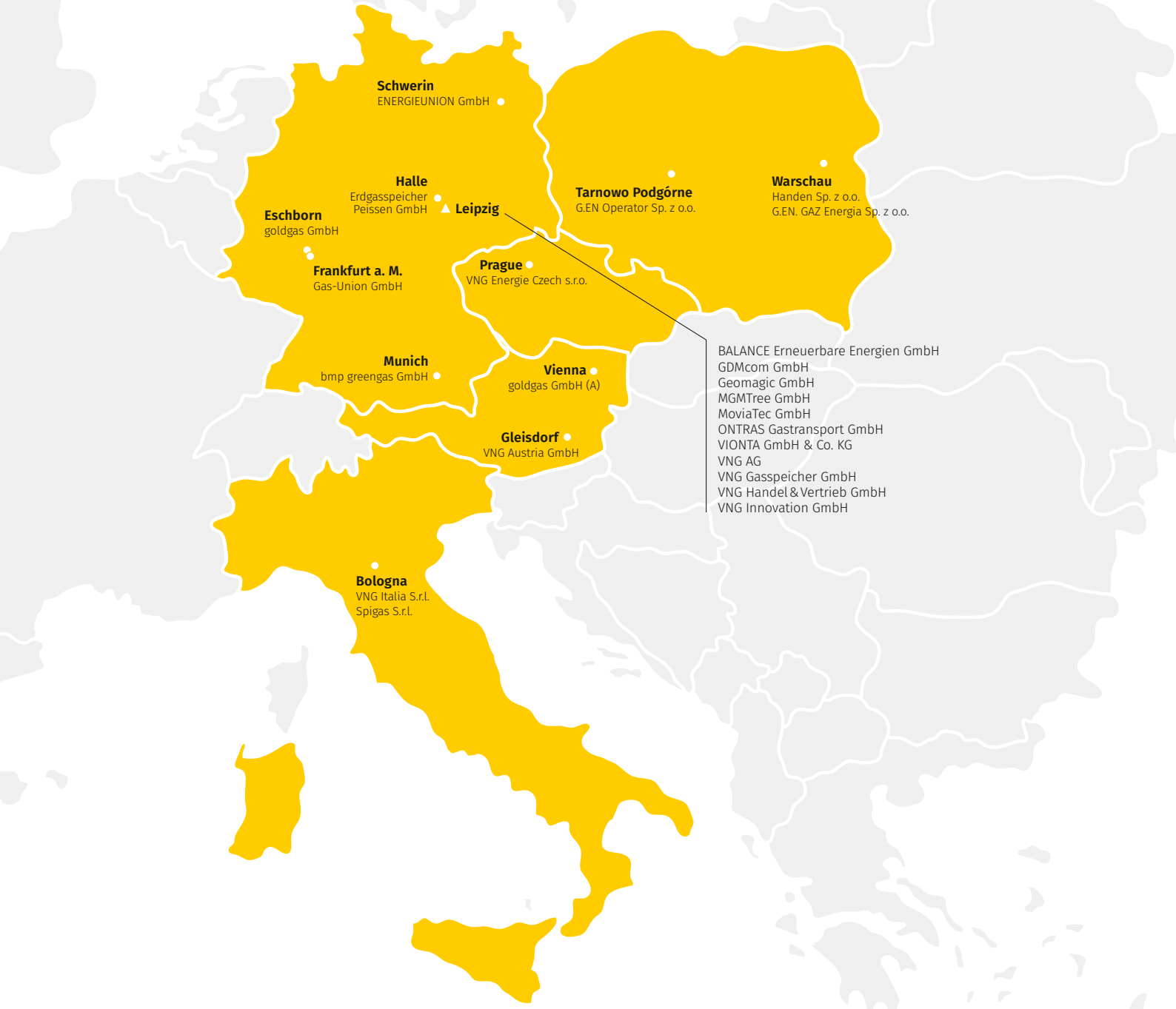
VNG can look back on a very successful year that significantly exceeded expectations: With an adjusted EBIT of €321 million and a consolidated result of €232 million, we were able to stabilise our economic performance in the face of major challenges. The strong results achieved in 2023 and 2024 form a solid foundation for the future, strengthening our established business areas and enabling further investments in our biogas and hydrogen activities, particularly in the infrastructure sector.

All financial information for the business year:
https://www.vng.de/en/investor-relations

Contents

Present in five countries

From its headquarters in Leipzig, VNG operates an extensive Group network with subsidiaries and equity holdings in Germany, Poland, the Czech Republic, Austria and Italy.



Our business areas

TRADING & SALE

As a gas importer and trader, **VNG Handel & Vertrieb GmbH (VNG H&V)** offers a wide range of products and services to more than 400 municipal utilities and industrial companies. VNG H&V has a deep regional structure and has holdings in Germany and abroad.

TRANSPORT

The independent transmission system operator **ONTRAS Gastransport GmbH (ONTRAS)** operates the 7,700-kilometre high-pressure pipeline system in Eastern Germany and is responsible for the reliable and efficient transport of gas. ONTRAS supports the European gas market and makes an important contribution to security of supply.

STORAGE

Underground storage facilities are an integral part of the gas infrastructure and essential for security of supply. Our Group subsidiary **VNG Gasspeicher GmbH (VGS)** – the third-largest gas storage operator in Germany – efficiently, safely and reliably stores its customers' gas, successfully markets storage capacities and offers innovative storage products.

BIOGAS

BALANCE Erneuerbare Energien GmbH (BALANCE) operates 42 biogas facilities in Eastern and Northern Germany. The production of green energy is just as much a focus as is the intensification of value creation and the development of new products related to biogas and biomethane.

DIGITAL INFRASTRUCTURE

The Digital Infrastructure division, which was only established in 2022, bundles the activities of several subsidiaries and joint ventures under the **GDMcom Group (GDMcom)**. Its activities range from the fibre optic backbone and the fibre optic distribution network to services in connection with digital infrastructure.

Energy for today, tomorrow and the day after tomorrow

ALWAYS IN MOTION

Our mission: security of supply and helping shape the future

In recent years, we in the energy sector have seen how geopolitical changes, international developments and crises have repeatedly redefined the foundations of our activities. For this reason, corporate strategies can no longer be expected to maintain their validity for many years, but must be adapted and aligned more frequently and in shorter time cycles to new, dynamically changing political and social developments, regulatory requirements and market conditions. Our guiding framework for the longer-term development of the Group is the VNG 2030⁺ strategy. It sets out the basic direction of travel, but also offers scope for flexible adaptation to current requirements.

REALISTICALLY INTO THE FUTURE

In line with this VNG 2030⁺ strategy, in addition to optimising our core business – the trading, storage and transport of natural gas – we have set ourselves ambitious growth targets in the area of renewable and decarbonised gases, and are investing in a climate-friendly transformation of our business areas. We are pioneers in some areas, but are closely monitoring the overall pace of change and rate of progress. These depend on many factors and market players. As a responsible energy supplier, we are faced with the daily task of developing practical and sustainable solutions in the energy industry in the three-way

tug-of-war between security of supply, economic efficiency and environmental compatibility.

SUSTAINABLE MISSION STATEMENT

Our corporate purpose from the VNG mission statement provides us with overarching guidance: “We provide energy when and where it is needed.” This statement takes two key aspects into account: securing the energy supply and focusing on the needs of our stakeholders. We follow this guiding principle both in our established natural gas business and in our investments in the business areas of tomorrow, particularly in the areas of hydrogen and biogas.

With determination and innovative strength on the one hand, and a sense of proportion and responsibility on the other, we are pursuing our own independent path. We consistently focus on the needs of our customers and the requirements of the energy transition. In doing so, we are making targeted investments to secure our future viability. In the coming years €200 to 300 million will be invested annually in further securing the supply and in the development of the ONTRAS H_2 start-up grid as part of the Germany- wide hydrogen core network as well as in the further development of our future projects.

GAS EXPERTISE FROM A SINGLE SOURCE

Our stability and sense of perspective affords VNG a broad, yet in-depth expertise in gas-based energy sources. As a B2B partner, we cover the entire gas value chain through our various business divisions, from import, transport and storage to trading. We offer municipal utilities and industrial companies reliable access to energy. Our transmission grids and underground storage facilities guarantee a high level of supply security. Furthermore, we are already one of the largest biogas producers in Germany.

With our eyes on the future, we have been actively involved in helping to shape the future hydrogen economy for many years, helping to create both the commercial and technical prerequisites. We want to play an active role in shaping the future – and we are demonstrating this with our innovative projects. At the Bad Lauchstädt Energy Park, we are doing pioneering work in the commercial application of hydrogen gas. In Lutherstadt Wittenberg, we are working on the

GreenRoot project to help secure the future of local value creation in the industrial sector. We want to support the port of Rostock in its development into a regional energy hub and create prospects for further industrial clusters in Eastern Germany. Our expertise and our networks mean that we are a vital intermediary in the regional economy in Eastern Germany.

CORE COMPETENCES: WILLINGNESS TO CHANGE AND ADAPTABILITY

We combine technological expertise with a pragmatic focus on solutions – as we have been doing for many decades. Thanks to our great flexibility, we are able to react quickly to developments in the energy sector.

We have acquired this degree of agility because change is not a problem for us, but a challenge to be overcome. In the more than 65 years of our company history, we have seen various economic systems come and go, and have constantly evolved. This also applies to the technology for handling gaseous energy sources: first town gas, then natural gas – and now also biogas and hydrogen. Those who have experienced so much change and have continuously developed despite sometimes major upheavals not only become more resilient, but are also structurally better prepared to ride the pressure for change.

RESPONSIBILITY FOR EASTERN GERMANY

Our history and our headquarters in Leipzig connect us closely with our home region. That is why we are particularly committed to Eastern Germany. Our infrastructure plays a key role in supporting important regional industries such as chemicals, glass and steel and the energy supply of our fellow citizens and enabling further development.

In addition to energy supply, the Group's commitment also includes the promotion of public welfare projects, scientific projects, educational initiatives and the start-up scene via the VNG Foundation and the Central Germany Foundation for Science and Education.

In this way, we are positioning ourselves for today, tomorrow and the day after tomorrow as a firm anchor of the gas-based energy industry and as a strong, dependable factor in the economy and society of Eastern Germany.

Moving to the heart of Leipzig

VNG plans to relocate its corporate headquarters from Leipzig-Schönefeld to Leipzig city centre in 2027. A modern, networked working environment is to be created at the new headquarters, a place for dialogue, creativity and concentrated work.

The building in the historical Graphisches Viertel at Johannisplatz will provide space for 650 employees on four floors and will bring together several VNG subsidiaries under one roof. With this move, VNG is underscoring its commitment to Leipzig.

The goals of the VNG 2030⁺ strategy

As part of its strategy, VNG is pursuing the goal of playing a significant role in the value chain for climate-neutral gases, particularly in the area of infrastructure. The prerequisite for this and at the same time our central corporate mission is and remains the guarantee of a secure gas supply.

The VNG 2030⁺ strategy defines the focus of our activities:

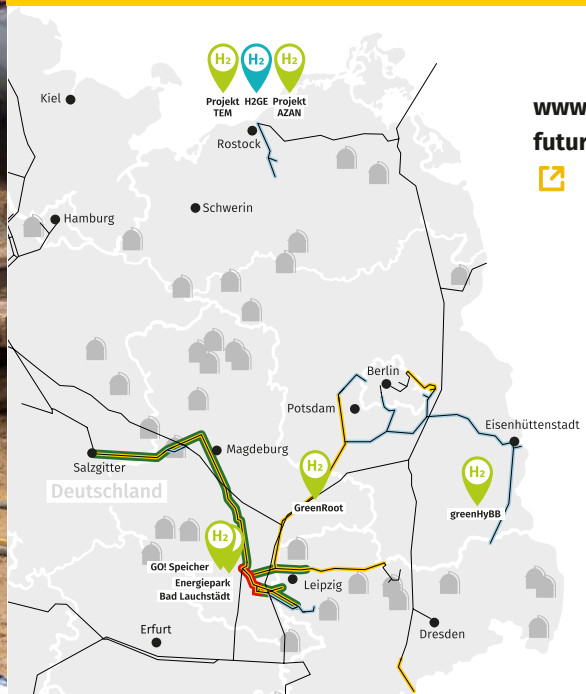
- **Optimisation and consistent further development** of our current business activities in the trading, transport and storage of natural gas
- **Supporting the roll-out of the hydrogen economy** in Eastern Germany by expanding the gas infrastructure, preparing the way for international hydrogen imports and participating in local hydrogen production projects
- **Selective expansion of the biogas business** for substantial growth and optimisation of plant operation

VNG is currently conducting

10

research,

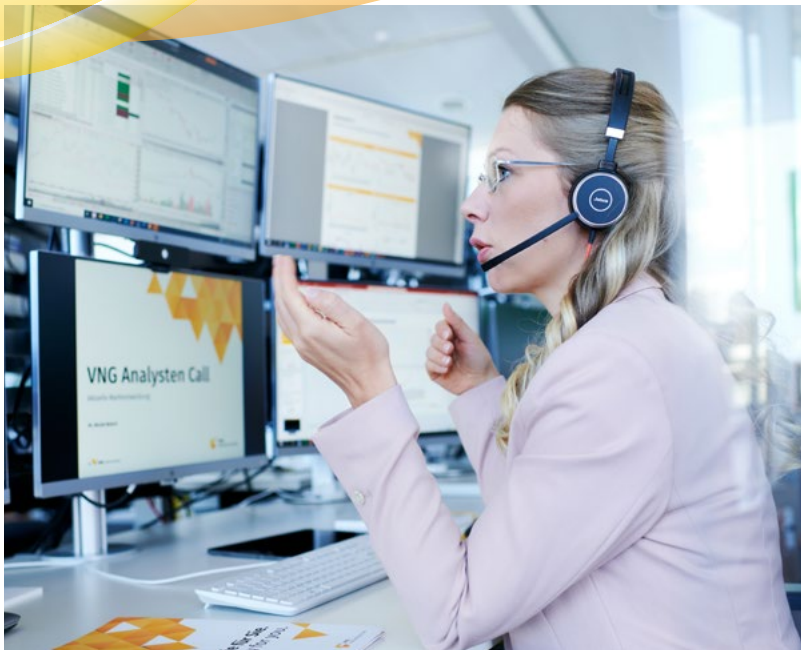
development and cooperation projects along the entire value chain of renewable and decarbonised gases.



www.vng.de/en/future-projects

“We stay the course even in turbulent times.”

Alexander Lück is Head of Sales at VNG H&V and Managing Director of the foreign subsidiary VNG Energie Czech s. r. o.



Challenges in the gas market

THE NEW NORMAL

An interview with Alexander Lück, Head of Sales at VNG Handel & Vertrieb

Even two years after the energy crisis, anyone trading in gas has to keep adapting to new conditions. Although the gas market in Germany has further stabilised and partially recovered, flexibility is still required. We asked Alexander Lück what his "new normal" looks like.

SUDDENLY DIFFERENT

The year 2022 was a turning point, including for the natural gas industry. The war in Ukraine and the resulting discontinuation of Russian gas supplies presented the market with major challenges. The market changed abruptly, particularly in terms of gas imports and suppliers.

STRATEGIC ADJUSTMENTS AND OPPORTUNITIES

Since the end of 2023, the calm has increasingly returned to the market and wholesale prices for natural gas have fallen significantly. "Supply and demand are converging again," reports Lück. On the supply side, alternative sources of supply and import routes in Germany have been expanded by means of LNG terminals. VNG itself benefits from a diversified trading portfolio. Thanks to long-term supply agreements with Norway and Algeria, and our trading activities on the spot and futures market, we can guarantee a reliable gas supply for municipal utilities, distributors, industrial customers and electrical power generators. "And we are now able to reactivate more flexible products and services that were suspended during the crisis." The decentralised structure of the sales team brings the products and services directly to the customer. "We have a presence on the ground – at municipal utilities and industrial customers in Germany, Austria, the Czech Republic and Poland," explains Lück.

FINDING SOLUTIONS: RENEWABLE ENERGIES AND GREEN GASES

In the face of advancing climate change, pressure is increasing globally and in Europe, in particular on industry, to accelerate decarbonisation. VNG is therefore focusing its trading and sales activities on renewable and decarbonised gases in the long term. "However, climate-friendly, green gases such as

VNG H&V supplies more than

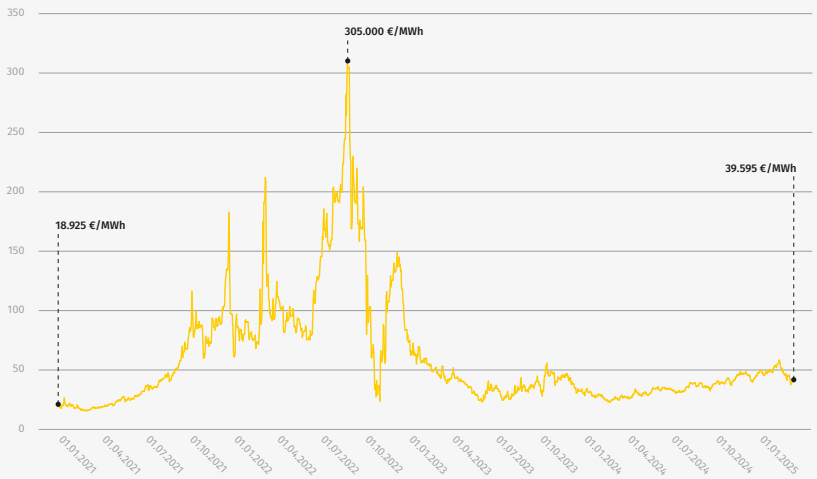
400

municipal utilities and industrial companies.

Price trends on the gas market

The chart shows the price trend on the gas market from 2021 to 2024. While prices were around €18.925/MWh at the beginning of 2021, they reached an extreme €305/MWh at the height of the gas crisis in 2022. In the 2024 financial year, the average price of €39.595/MWh is above the pre-crisis level, but well below the peak values – "the new normal" on the gas market.

in €/MWh



bmp greengas acquired by VNG

The management of VNG H&V and bmp greengas: from left to right Konstantin von Oldenburg (Managing Director of VNG H&V), Stefan Schneider (Managing Director of bmp), Sven Kraus (Managing Director of bmp) and Stephan Haupt (Managing Director of VNG H&V).

The biomethane trader bmp greengas has been part of VNG H&V since 2024. With this acquisition, VNG has expanded its green gas portfolio and strengthened its position in the renewable energy trading sector.

COMMITMENT TO RENEWABLE ENERGIES

The acquisition of bmp greengas is in line with the VNG 2030+ Group strategy, which focuses on the expansion of the biogas business and the transformation towards green gases. As one of the largest gas traders in Germany, VNG H&V has the necessary expertise to effectively manage an expanded biomethane portfolio and thus make a significant contribution to the energy transition.

More information about the company on the internet:
www.bmp-greengas.com

hydrogen are still not commercially viable in some cases," concedes Alexander Lück. "As VNG Handel & Vertrieb, our stance is nonetheless proactive: as a consortium partner in the Bad Lauchstädt Energy Park, we concluded the first German supply contract for green hydrogen with the joint venture Elektrolyse Mitteldeutschland GmbH as early as 2023." Letters of intent have also been signed with Norwegian partners for the import of green or decarbonised ammonia. And with its acquisition of bmp greengas GmbH, VNG H&V can also significantly expand biomethane trading. "In the coming years, we want to offer our customers a broad portfolio of green gases."

CUSTOMER LOYALTY IN UNCERTAIN TIMES

In a volatile market environment, customer loyalty is essential for companies. VNG H&V focuses on transparency, reliability, equitable partnership and carefully conceived products and services. By exploiting modern technologies and a strong sales network, we are able to retain our customers in the long term and open up new market segments. Alexander Lück emphasises that the company's success is due in no small part to the outstanding performance of a highly motivated team. "We stay the course even in stormy times, we get our customers on board and keep them secure, and we do this with a crew that enjoys their work and is there for our customers and projects," is how he expresses his respect for each and every one of his colleagues. "What our team is achieving is phenomenal."

OUTLOOK AND CHALLENGES 2025

The year 2025 will be characterised by consolidation. The focus is on stabilising market share, particularly through expansion in international markets. The experience of recent years has shown that VNG H&V can master even extreme challenges by means of strategic adaptation and a strong team. Of one thing Alexander Lück is certain: "The future of the market will depend on the ability of all players to adapt to new circumstances and successfully integrate sustainable energy solutions."

More information about this topic on the internet:
www.vng-handel.de

The highlights of the VNG H&V portfolio in 2024

Diversified procurement portfolio

February
Contract signed with Sonatrach for the first pipeline gas from Algeria to Germany.

June
Supply contract with Vår Energi (Norway) extended by 12 years.

November
Portfolio expansion in green gases through acquisition of biomethane trader bmp greengas.

December
Signing with Aker Horizons (Norway) of a letter of intent for the supply of green ammonia.

4
storage facilities

are operated by VNG Gasspeicher GmbH and Erdgasspeicher Peißen GmbH (EPG).

Our gas storage facilities

THE INVISIBLE GUARDIANS OF ENERGY SECURITY

As we have all been acutely aware since the 2022 energy crisis, gas storage facilities are extremely important for a reliable gas supply. Our subsidiary, VNG Gasspeicher GmbH (VGS), together with EPG, provides the necessary infrastructure with four underground gas storage facilities and up to 2.7 billion cubic metres of storage capacity so that sufficient energy is always available when it is needed.

PROTECTED SPACE FOR THE GAS SUPPLY

Gas storage facilities play a central role in the German gas market. They serve as a physical source of natural gas, and ensure grid stability and security of supply by balancing out seasonal fluctuations and providing a buffer for short-term market changes – be these due to extreme weather conditions or geopolitical crises.

In addition, they enable traders to store purchased gas for later sale. In this way, they contribute to price stability and market flexibility.

With the increasing integration of renewable energies into the energy system, storage systems are also gaining in importance. Cavern storage facilities in particular could be used as the hydrogen storage facilities in future and in this way support the transition to a climate-neutral energy supply. They therefore remain a central component of the energy transition and an energy supply of the future, as well as an indispensable instrument in gas trading.

HUGE ENERGY STORAGE CAPACITIES

With 45 underground storage facilities, Germany has the largest total gas storage capacity in Europe. The facilities have a storage capacity of 23.3 billion cubic metres – a quarter of Germany's annual consumption. In a mild winter, completely filled gas storage facilities would cover demand for around two to three months. VGS is one of the largest storage operators in Germany. In the VNG Group, we have over 50 years of experience in reliable, flexible and efficient gas storage. Today, VGS offers storage capacities and customised services, from dispatching to metrological services.

GAS STORAGE: THE KEY TO THE ENERGY TRANSITION

In contrast to electricity, gas can be stored easily in large quantities over long periods of time. Gas storage facilities can thus serve as a bridge between sun, wind and energy consumption. For example, electricity from renewable energy sources such as wind power or photovoltaics can be used in electrolysers to produce hydrogen. This hydrogen can be stored in suitable gas storage facilities and accessed flexibly; for example, to generate CO_2-neutral electricity again. The gas storage facilities can therefore act as huge batteries for electricity generated from renewables. Our storage systems provide a constant supply of energy even at times when neither the sun shines nor the wind blows.

We are testing this value chain at production scale in the Bad Lauchstädt Energy Park. Hydrogen generated with wind power is to be stored there in appropriately adapted storage facilities.

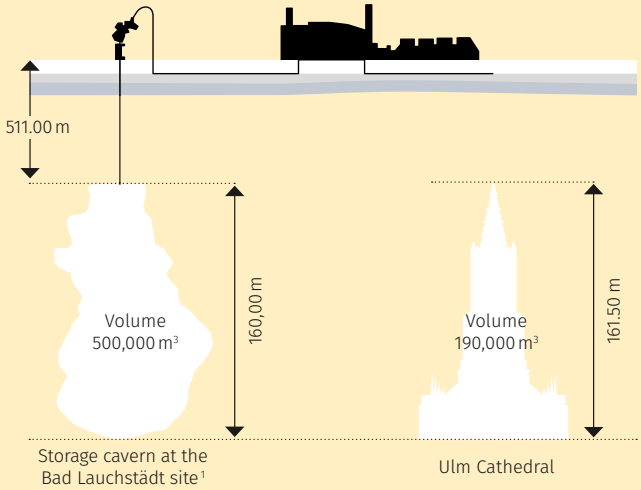
ENERGY FOR TODAY AND TOMORROW

Gas storage facilities are more than just reserves – they are indispensable for a secure energy future. With VGS as a partner, we provide the infrastructure that will create grid stability, security of supply, scope for gas trading and a sustainable energy supply.

More information about this topic on the internet:
www.vng-gasspeicher.de

31 TWh
is the storage capacity of the VGS storage facilities.

Comparison of the dimensions of an H_2 cavern at the Bad Lauchstädt underground gas storage facility



¹ The overpressure enables a storage capacity of around 50 million cubic metres of hydrogen.

Hydrogen storage in Bad Lauchstädt

With the GO! Storage Project, a sub-project of Green Octopus Central Germany, the plan is to adapt one of a total of 17 existing natural gas caverns in Bad Lauchstädt for hydrogen storage. The cavern, which has a storage capacity of up to 50 million cubic metres of hydrogen, will later also be connected to the Germany-wide core network.

The project received funding from the IPCEI programme (Important Projects of Common European Interest) in 2024. This EU initiative supports key projects that are of particular importance for Europe's economic and technological development.

Storage infrastructure for the future

VGS contributes decades of experience with underground storage facilities. Managing Director Bernd Protze emphasises: "The storage infrastructure in Central Germany plays a key role for the German gas supply. Today, natural gas is stored in our storage facilities; in the medium to long term, it is likely to be hydrogen."

Transport

NETWORK WITH A FUTURE

Transmission system operator and co-creator of the German hydrogen economy

Leipzig-based ONTRAS Gastransport GmbH is one of the major players in the German energy system. As an independent transmission system operator, ONTRAS is responsible for a network with a pipeline length of 7,700 kilometres. It forms the backbone of the gas supply in Eastern Germany and guarantees reliable energy transport for industry, commerce and households – today natural gas and biomethane, in future increasingly green gases, all the way to a completely climate-neutral energy future.

INFRASTRUCTURE IN EASTERN GERMANY – ENERGY HUB FOR EUROPE

ONTRAS ensures a sustainably secure energy supply. The network connects large gas storage facilities, power plants, industrial consumers, regional network operators and municipal utilities with import points and biogas producers – a hub for the energy supply of Eastern Germany. The pipeline network extends across the federal states of Berlin, Brandenburg, Mecklenburg-Vorpommern, Saxony, Saxony-Anhalt and Thuringia. It has numerous interconnection points to other network operators, assuring a flexible and efficient gas supply. At the same time, it is a mainstay of European gas transport with border crossing points to Poland and the Czech Republic.

> We have to set the course for a sustainable energy future today – and that is exactly what we are doing."
>
> – Hans-Joachim Polk,
> Member of the Executive Board, Infrastructure & Technical Affairs

ONTRAS MASTERS THE GAS TRANSITION

In recent years, the “security of supply” has mostly been focused on ensuring that sufficient natural gas will reach Germany after Russian natural gas supplies were cut off in 2022. ONTRAS has optimised its network for this purpose. Today, this is history. In the ONTRAS network, gas flows from the north and west – regasified from LNG or pipeline gas, including from the Netherlands and Norway.

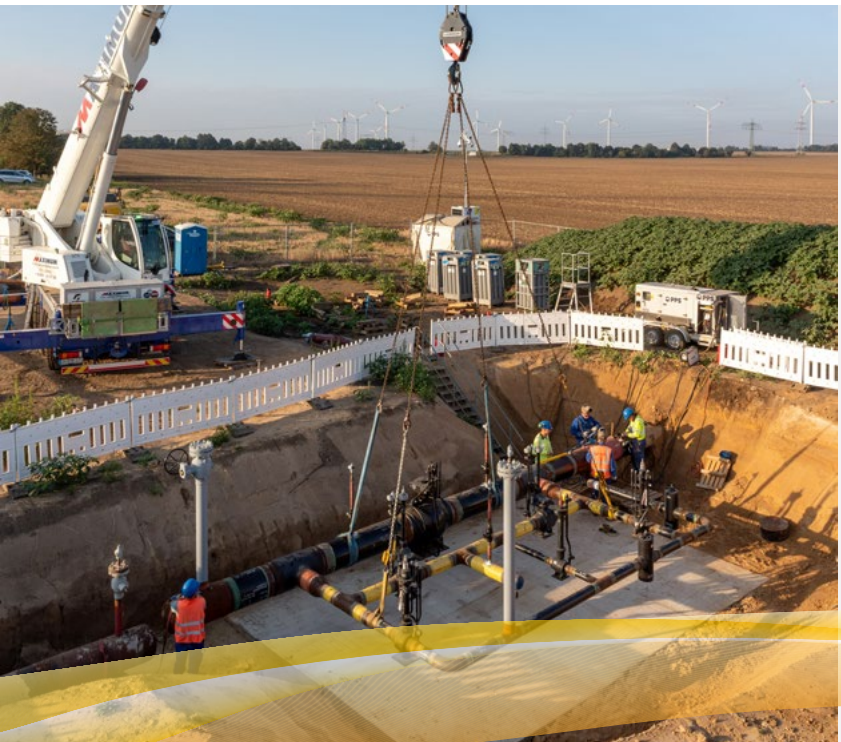
RETHINKING THE INFRASTRUCTURE

Gas pipelines are never purely one-way streets. But simply reversing the flow is not easy. Existing plants had to be adapted for the new flow direction following the cutting off of Russian gas supplies from the East. Today, the ONTRAS network transports almost the same quantities of gas as before the Ukraine crisis, and just as safely and reliably.

CRISIS-PROOF INTO THE FUTURE

The reversal of direction in the network has been achieved and can secure the supply of gas via pipelines in the long term, a joint effort by the German transmission system operators. The ONTRAS grid has proven that it is crisis-proof. And on it goes: since October 2024 – with the approval of the hydrogen core network by the Federal Network Agency (“BNetzA”) – ONTRAS has been building the East German hydrogen start-up grid. ONTRAS is making itself “H_2-ready”. Power-to-gas plants have been using green hydrogen for several years as an admixture to natural gas. A Germany-wide hydrogen core network is now being created. ONTRAS connects consumers and producers in Eastern and Central Germany with import points and storage facilities, thus creating essential prerequisites for the market roll-out of the hydrogen economy in Eastern Germany.

In 2024, the application for the Germany-wide hydrogen core network was approved by the Federal Network Agency. “This will enable Eastern Germany to expand its role as an energy hub; today for natural gas and biomethane, and for the climate- neutral future increasingly



7,700
kilometres
of transmission network are operated by ONTRAS.

also with hydrogen," says Ralph Bahke, ONTRAS Managing Director of Control and Development. The ONTRAS H_2 start-up grid is the largest single investment in VNG's corporate history: around 600 km of H_2 transport pipelines will connect industrial centres, storage facilities, producers and consumers in Eastern and Central Germany. Over 80 percent will be created by converting existing gas pipelines, while just under 20 percent will be newly built.

A YEAR OF MILESTONES

Thanks to ONTRAS, another of our future-oriented projects has also taken great strides forward: the Bad Lauchstädt Energy Park, in which ONTRAS is one of seven consortium partners. A new branch valve was installed here in September, which will soon be used to transport green hydrogen to the TotalEnergies refinery in Central Germany. With this installation, we are connecting the first industrial consumer to the new hydrogen core network. In connection with this regulatory sandbox for the energy transition project, ONTRAS is converting 25 kilometres of former natural gas pipelines to transport hydrogen, making it a leader in Germany: in April 2025, the pipeline will be one of the first in the hydrogen core network to come on stream. The project as a whole is a milestone on the way to the future supply of hydrogen – and proof that the transformation of the gas infrastructure is no longer a vision for the future, but a reality.

ONTRAS ACTS SUSTAINABLY

In addition to the hydrogen core network, ONTRAS is active in other future-oriented projects: the development of new hydrogen technologies and the conversion of measurement and control technology to hydrogen are just some of the current challenges. "The ONTRAS H_2 start-up grid is an important step. Over the next few years, we will make other systems in our network more sustainable and efficient, and make our contribution to reducing overall emissions," comments Gunar Schmidt, Managing Director of Operations and Safety.

ONTRAS is intensively involved in the development of innovative solutions for more sustainability in gas transport. Two pilot projects, whose technologies can be transferred to other systems, serve as models:

- **Climate-neutral gas pressure regulator station in Potsdam-Nesselgrund**
  ONTRAS operates Germany's first almost emission-free gas pressure measurement and control system in Potsdam-Nesselgrund. With its combination of innovative technologies, including integrated heat exchangers and a photovoltaic system on the roof, the system operates without gas consumption and requires only ten percent of the electricity compared to conventional systems. This project is considered groundbreaking for the gas industry.

> "This will enable Eastern Germany to build on its role as an energy hub: today for natural gas and biomethane, in the climate-neutral future increasingly also with hydrogen."
>
> – Ralph Bahke, ONTRAS Managing Director Control and Development

Network of the future: ONTRAS is expanding its infrastructure for the transport of natural gas, biogas and hydrogen.

- **Gas preheating with solar thermal energy in Kienbaum**
  At the Kienbaum site near Berlin, ONTRAS relies on solar thermal energy to preheat gas in the gas pressure control and measuring station. By using its own solar thermal system, a large proportion of the energy required is generated on site, resulting in considerable savings in gas and CO_2.

- **Nordic-Baltic Hydrogen Corridor**
  Together with other European transmission system operators, ONTRAS is planning the Nordic-Baltic Hydrogen Corridor (NBHC). This project aims to connect the green energy production regions in North-Eastern Europe with the most important consumption centres in Central Europe. By 2040, the corridor is expected to transport up to 2.7 million tonnes of renewable hydrogen per year and thus make a significant contribution to the decarbonisation of Europe.

- **European Hydrogen Backbone**
  ONTRAS is part of the European Hydrogen Backbone (EHB), an initiative supported by 31 gas transmission companies from 28 countries. The aim is to build a 53,000-kilometre European hydrogen transport network by 2040. This network is intended to increase the security of supply for renewable energy sources and promote their integration in Europe.

More information about ONTRAS on the internet:
www.ontras.com

TOGETHER WITH THE MARKET AND POLITICS INTO A SECURE FUTURE

ONTRAS stands for a reliable, secure gas supply and for the transformation to a climate-friendly energy future. Whether green hydrogen for refineries or for a growing H_2 transport network, ONTRAS is at the forefront. "However, we will not be able to expand the hydrogen core network beyond our first 600 kilometres alone. On the one hand, we need market participants to generate further capacity requirements and make binding commitments. On the other, our investors need stable framework conditions that are attractive for the capital markets," says Ralph Bahke.

600
kilometres will comprise the ONTRAS H_2 grid.

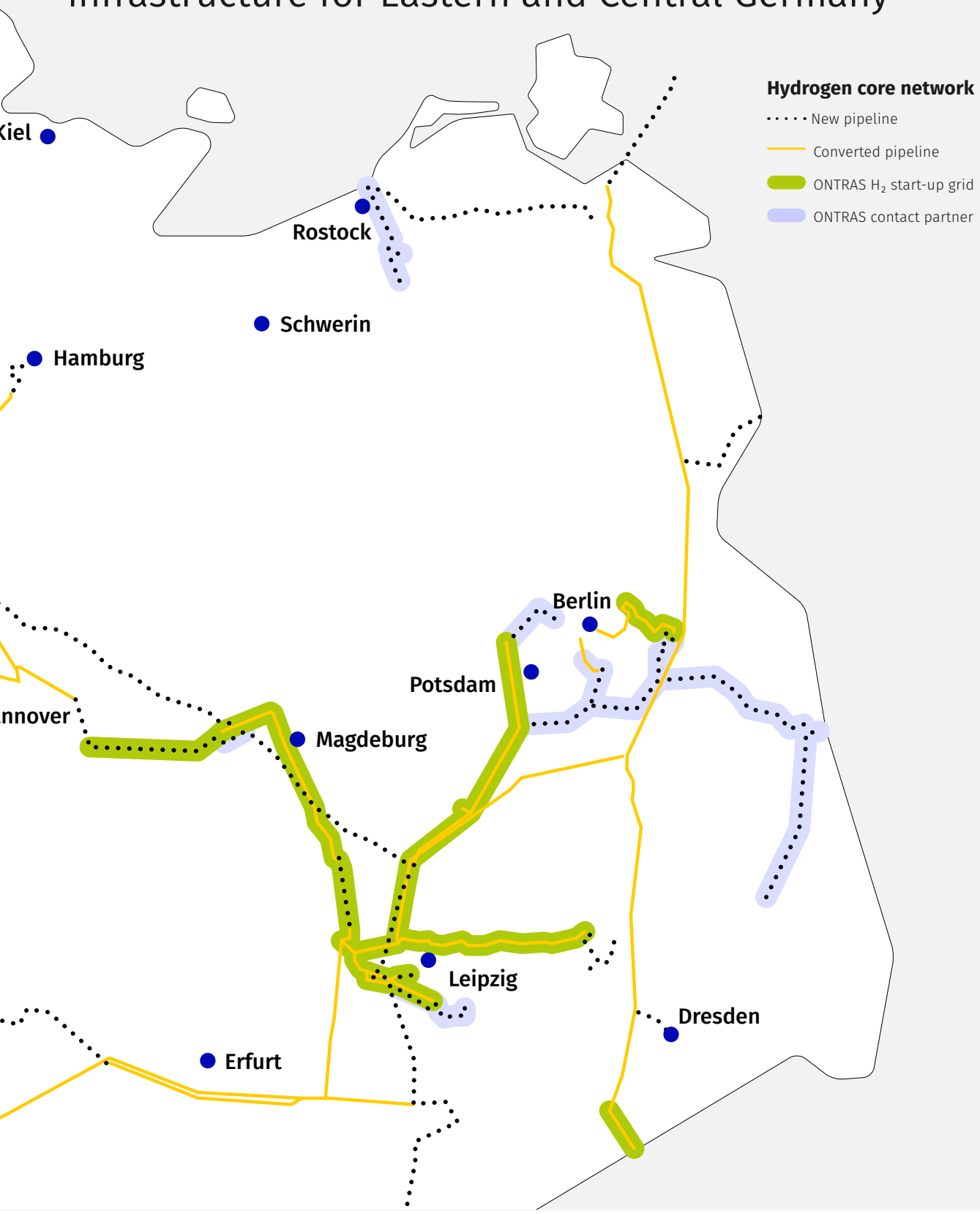
492
employees work at ONTRAS to ensure reliable gas transport.

130
downstream network operators purchase gas from ONTRAS pipelines.

Secure gas infrastructure: ONTRAS employees monitor and maintain systems to ensure a reliable energy supply.

Efficient gas distribution: state-of-the-art technology and expertise ensure a sustainable and efficient infrastructure

Hydrogen core network: a section of the hydrogen infrastructure for Eastern and Central Germany[1]



1 © ONTRAS | As of 11/2024

The pipelines for the future

ONTRAS is one of the pioneers in the development of the hydrogen core network. Over the next few years, ONTRAS will be realising a hydrogen transport network for Central and Eastern Germany with a total length of around 600 kilometres. **This ONTRAS H_2 start-up grid is part of the Germany-wide hydrogen core network.**

The ONTRAS H_2 start-up grid is intended to supply Eastern and Central Germany with sustainably produced hydrogen, help decarbonise industries and open up import corridors for H_2. The first section will go into operation in 2025, with the entire system due to be completed by 2032. More than 80 percent of the network will consist of existing gas pipelines that are being converted to hydrogen. Just under 20 percent will be newly built.

OLD PIPES, NEW ENERGY

Converting steel natural gas pipelines to the transport of hydrogen requires careful prior testing, detailed assessments, including by independent experts, and, if necessary, localised upgrades and technical adjustments:

- **Material check**
  Hydrogen is the smallest molecule in the universe – it can slip through the smallest of cracks. The steel pipes, if they are to be converted, must therefore be meticulously inspected: are they leak-proof, do they tend to crack, do they have weak zones? Are all installed components and materials hydrogen-compatible? Or are there places that need to be upgraded before conversion? The good news is that most of the ONTRAS lines, including of course all those for the ONTRAS H_2 start-up grid, are in good technical condition and therefore ready for the change.

- **Precautionary replacement**
  As a precautionary measure, ONTRAS replaces system components with moving parts for hydrogen operation, even if the components are classified as hydrogen-compatible in principle. This applies in particular to shut-off and branch valves. The measurement technology must also be adapted for hydrogen so that it is always clear just how pure and how much hydrogen is underway and where.

SAFETY FIRST

As has been the case for decades with natural gas, ONTRAS also applies this rule to the handling of hydrogen: safety first. Plants and pipeline system are designed to be H_2-ready. All relevant regulations and standards as well as applicable documents will be expanded to make allowance for hydrogen and adapted accordingly.

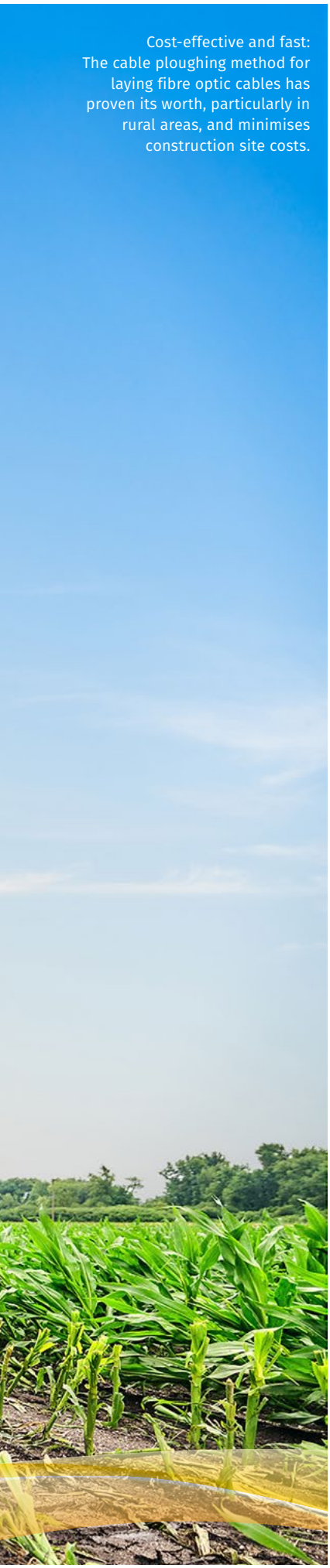
“The ONTRAS H_2 start-up grid is an important step. Over the next few years, we will make other systems in our network more sustainable and efficient and do our bit to reduce overall emissions.”

Gunar Schmidt, Managing Director Operations and Security

Digital Infrastructure

COMING TOGETHER SO THAT TOGETHER WE GROW MORE

The new GDMcom Group



Cost-effective and fast: The cable ploughing method for laying fibre optic cables has proven its worth, particularly in rural areas, and minimises construction site costs.

Since 1 January 2024, there has been a new force on the telecommunications market: the GDMcom Group. It provides the entire range of services in VNG's Digital Infrastructure division, from planning and installation to support and documentation of customised telecommunications solutions for customers in the B2B and B2C sectors.

FROM SERVICE PROVIDER TO FULL-SERVICE PROVIDER

GDMcom has been leveraging its extensive experience in critical infrastructure for 25 years now. The documentation of gas networks and pipeline rights was once the core business. Today, this know-how as well as expertise in network security and communication technology brings considerable advantages in the expansion of fibre optics. "With this mix of services, we deliver significant added value for the Group and for our customers," says Managing Director Dirk Pohle. "Especially as the GDMcom Group now covers the entire value chain in the digital infrastructure sector – from planning to construction, operations management, documentation and end customer business."

The bundling of all players under one organisational roof at the start of 2024 has created the structures for more efficient collaboration. "We are a full-service provider – for a wide variety of infrastructures," says Dirk Pohle. "Whether gas, electricity, chemicals or telecommunications, we offer a comprehensive portfolio." And Pohle emphasises another advantage of forming the group: while other providers have to form consortia, bidding and joint ventures for major projects, the GDMcom Group can offer all the required expertise from a single source. "This is quite unique, especially in the telecommunications market."

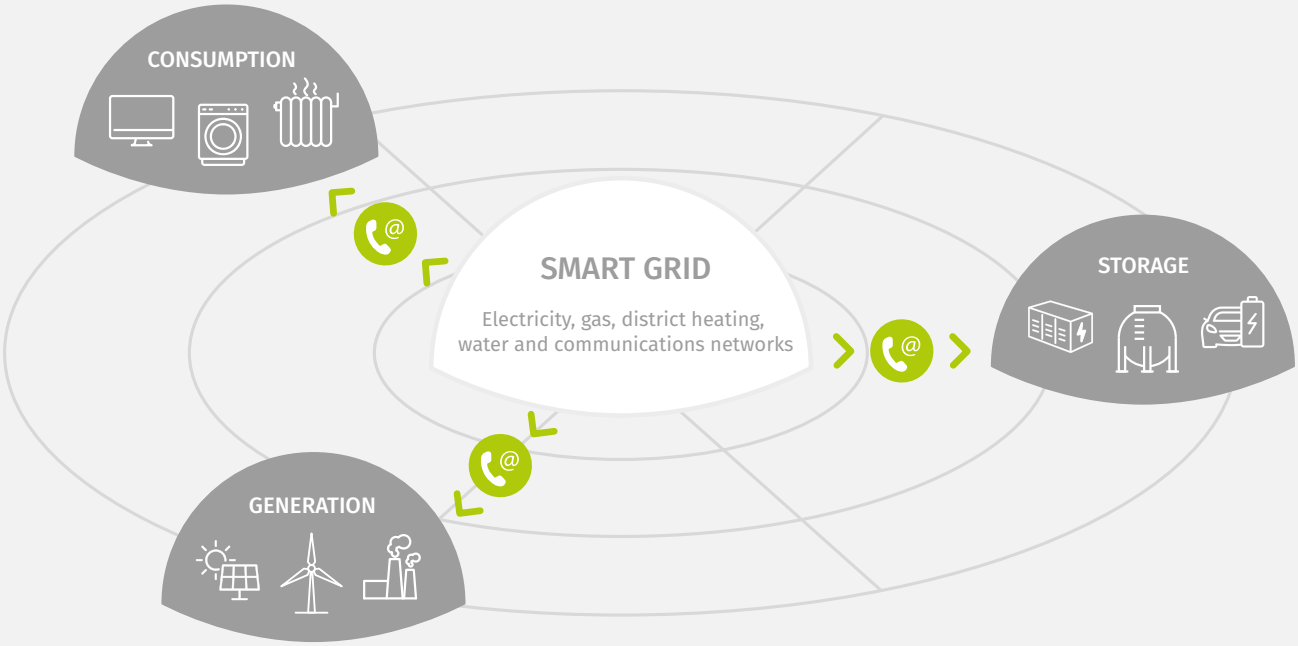
"We are a full-service provider for a wide variety of infrastructures.

Dirk Pohle, Managing Director GDMcom

More information about GDMcom on the internet: www.gdmcom-gruppe.de

Broadband for the energy transition

Broadband expansion is essential for the energy transition. This is because the efficient balancing of energy generation and consumption requires the exchange of large volumes of data. Smart grids digitally link energy producers, grid operators and consumers in order to balance supply and demand in real time. Without high-performance data communication, they are neither practical nor economical. Smart home and smart metering solutions that optimise energy consumption in buildings also require reliable broadband connections



370
employees
work for the GDMcom Group.

REGIONAL ROOTS AS A SUCCESS FACTOR

With 13 locations in Eastern Germany, the GDMcom Group is firmly rooted in its home region. “Our employees work and live here. They pay taxes and are members of local organisations,” says Pohle. “That’s why we are also so present here locally.” An expression of this local commitment is the offer of a wide range of traineeships, particularly in the fields of telecommunications, civil engineering and IT.

EXTENDED USE OF NETWORK EXPERTISE

The telecommunications market will change over the next few years. Broadband expansion should be largely completed by 2030. “Based on our expertise in this field, we definitely see growth potential in other areas such as electricity and heating networks,” says Dirk Pohle in relation to the future potential for GDMcom.

Coming together so that together we grow more – for the GDMcom Group, this is not just a slogan, but a strategic step into the future.

15
locations
in Eastern Germany.

Critical infrastructure – secure!

The physical proximity and cooperation within the VNG Group results in valuable synergies in the area of fibre optic expansion. The IT supporting the gas infrastructure comes with high-security technology. What we know from secure firewall protection is also used for the fibre optic network.

And sometimes the literal proximity to the gas grid business is an advantage: the super-fast data highways of the fibre optic backbone network are often laid by GDMcom along gas pipes. With great advantages – the routes are well documented and are located in areas monitored for security. And where there is a gas pipeline, there is little risk that an excavator will accidentally cut through a data line.

Biogas

THE UNDER-ESTIMATED ENGERY SOURCE

Green power from the region

Biomass as an energy source makes a vital contribution to the security of supply. The biogas generated from biomass is an important component in decentralised energy systems. In contrast to wind and solar energy, biogas offers controllable capacity for electricity production. In other words, it can be stored and is able to flexibly meet demand for an electrical-based load[1]. Processed into biomethane and fed into the natural gas grid, it contributes to defossilisation. As part of our VNG 2030+ strategy, we are therefore focusing our investments on the biogas business.

CONTRIBUTION TO THE SECURITY OF SUPPLIES

Biogas is playing an increasingly important role in the current energy landscape and is already an important pillar of a secure energy supply from renewable energies. Biogas in Germany today comes from almost 10,000 biogas facilities.

The total volume of electricity generated from biogas amounts to 28 TWh, representing around six per cent of Germany's total electricity demand (570 TWh). Around one percent of current natural gas consumption in Germany is already being replaced by biogas and biomethane. And as a heat supplier, biogas and biomethane generate around two per cent of Germany's heat production from natural gas.

The biogas facilities contribute to a secure energy supply because they supply gas and therefore energy independently of wind or sun. For example, for controllable gas-fired power plants that have a stabilising effect on the electricity grid and can also be operated in a climate-friendly manner using green gas. In addition, unlike electricity from wind and solar energy, biogas and biomethane are easily storable. Biogas therefore flexibly supplements the energy from other renewable sources and can also be made available as required when the sun doesn't shine and the wind doesn't blow.

1 In-demand electrical power minus the feed-in from volatile generators such as wind or solar energy

BALANCE operates

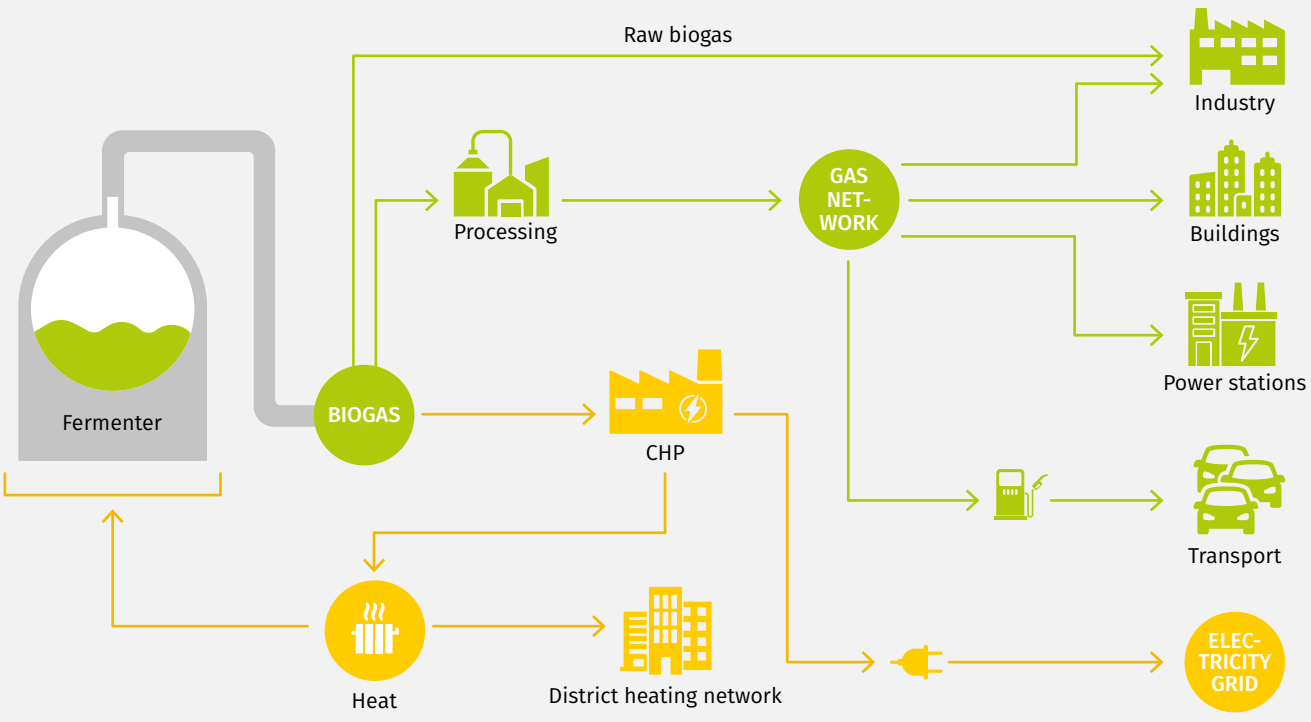
42

biogas facilities

in Eastern and Northern Germany.

From the system to the end user

Biogas is climate-friendly, renewable, regionally available and can be used in a variety of ways for electricity and heating applications. Unlike wind and solar energy, biogas can be stored and is therefore an important component of a climate-friendly energy supply.



GROWTH IN BIOGAS

It is therefore hardly surprising that the biogas business is one of VNG's most important growth areas. The subsidiary BALANCE Erneuerbare Energien GmbH bundles the Group's activities in the areas of alternative energies and energy efficiency technologies. BALANCE operates biogas facilities and generates energy from renewable resources and agricultural residues. With 42 facilities in Northern and Eastern Germany, BALANCE is one of the leading biogas facility operators in Germany. This means that around 180,000 households can be supplied with green energy every year.

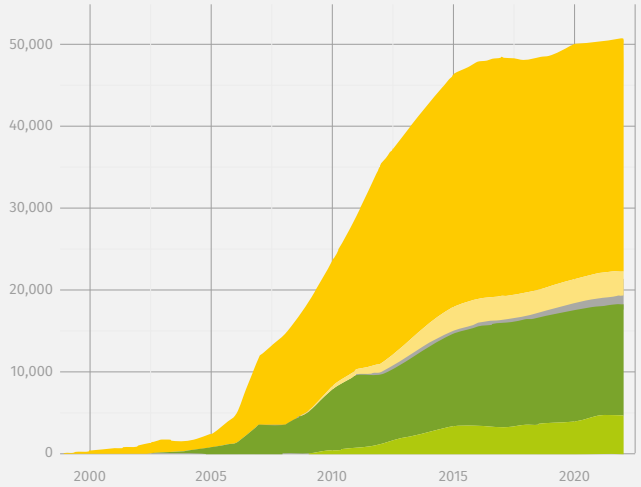
More information about the company on the internet:
www.balance-vng.de

LOCAL VALUE CREATION

In addition to operating the facilities, BALANCE invests in existing and new system concepts and develops them further. "We support local agriculture. Local farms supply the facilities with biomass," says BALANCE Managing Director Thomas Fritsch, describing the company's regional ties. "We operate a genuine circular economy. The fermentation products left over after production are used locally as fertiliser to grow new renewable biomass . In this way, we contribute directly to value creation in regional economic cycles."

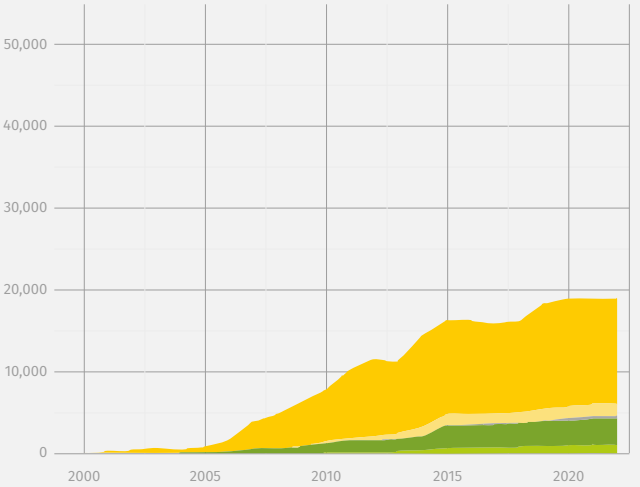
What biogas does today ...

... for the energy transition



Gross electricity and final energy consumption
GWh

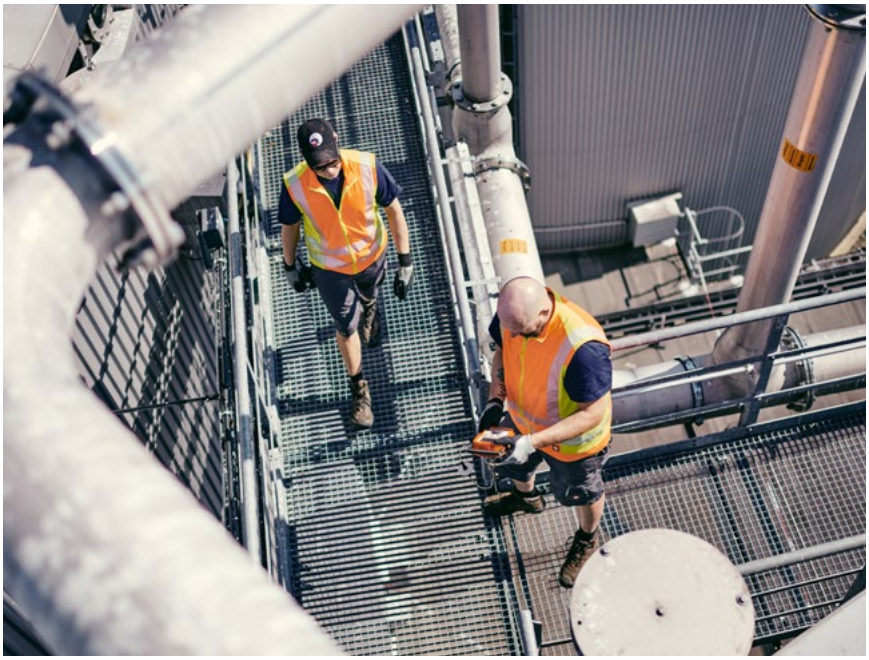
and for climate protection



Greenhouse gas reduction
kt CO_2 equiv.

- Electricity generated from biogas
- Electricity generated from biomethane
- Biomethane for transport
- Biogas for heat
- Biomethane for heat

Source: AGEEStat (2023)



We procure the substrates for biogas production from within a

25

kilometre

radius of our biogas facilities.

180,000

households

can be supplied with green energy from our biogas facilities every year.

BALANCE set for further growth with new partner CVC DIF

At the start of April 2025, VNG AG sold 49 percent of the equity in BALANCE to CVC DIF – the infrastructure division of the leading global asset manager CVC. Together with AW1, we can reinforce the growth and competitiveness of BALANCE, with the goal of creating Germany's leading biogas platform. In line with the VNG 2030⁺ corporate strategy, the transaction underlines our ambitions in the field of green gases, and makes an important contribution to the supply of renewable and sustainable energy.

BALANCE fed

835

GWh of biomethane

into the grid last year.

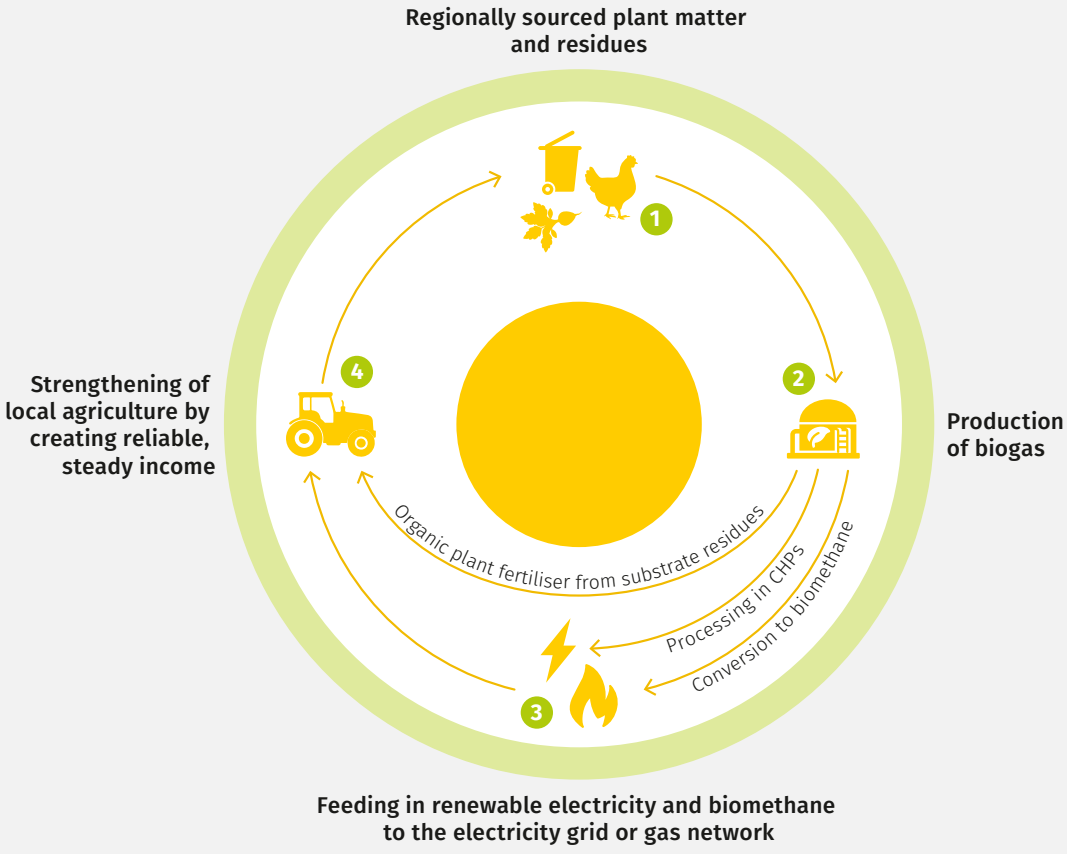
HEAT FROM THE LAND

And biogas facilities are also ideal as the basis for combined heat and power plants, which feed heat into small, regional grids in addition to producing electricity. In combination with wind and photovoltaics, many places, especially in rural areas, can be self-sufficient and supply themselves directly with energy. Also smaller communities are therefore able to realise their own heating concepts with sustainable energy. “There is growing interest in our solutions for district heating systems in smaller rural communities,” says VNG board member Hans-Joachim Polk. “This is because smaller communities in rural areas will not be prioritised for connection to district heating networks.”

THE VERSATILITY OF BIOGAS FACILITIES PAYS OFF

The state-of-the-art biogas and biomethane facility in Kodersdorf not only feeds biomethane into the gas grid and generates electricity from biogas, it also supplies heat to companies in the nearby industrial estate. The offer of a local heating supply from biogas facilities is well received; we are seeing an increasing number of enquiries.

Sustainable material and commercial cycle of our biogas facilities



Our product is well received

An interview with Thomas Fritsch, Managing Director of BALANCE, on the strategic importance of biogas.

Biogas is a sustainable alternative to fossil fuels that contributes to security of supply, domestic value creation and greenhouse gas reduction. What is needed to further expand this relevant segment?

We need a fundamental political commitment to biogas as an important building block for climate neutrality and security of supply. This is because there is a lack of legal and planning certainty. In addition, we have a lot of documentation and reporting obligations, a burdensome bureaucracy. I would also like to see greater harmonisation of regulations between the federal ministries relevant to biogas. And more fairness: cheap imports of supposedly green fuels and measures to avoid emissions are not scrutinised in the same way as our domestic products.

How important is biogas for agriculture?

The production of biogas offers a sustainable alternative source of income in agriculture and creates jobs in rural areas. It also creates added value at the regional level. We generally procure our substrates from within a 25 kilometre radius of the facilities. In addition, biogas production can be ideally integrated into agricultural cycles. We are increasingly utilising residual materials such as liquid manure and plant residues. The fermentation residue is a nutrient-rich fertiliser. Alternative substrate plants increase biodiversity and soil quality.

How much potential does biogas have in Germany?

A very high one. With biogas, we have a domestic and secure energy source that fits perfectly into the future energy system with flexible demands for electricity and heat. Biogas is a cost-effective solution for the defossilisation of electricity, transport, buildings and industry. The quality and sustainability certifications assure transparent traceability and ensure compliance with greenhouse gas reductions compared to fossil fuels.

What developments do you see in the coming years?

Biogas facilities will develop into veritable biorefineries that provide other products in addition to biomethane. Furthermore, the production and feed-in of hydrogen at biogas facilities is also being researched and may become relevant in the future.

Thomas Fritsch
Managing Director
BALANCE

Photos of the Bad Lauchstädt Energy Park from February 2025 show the progress of the construction site.

The consortium partners of the EBL:

- Terrawatt Planungsgesellschaft mbH
- Uniper
- VNG Handel & Vertrieb GmbH
- VNG Gasspeicher GmbH
- ONTRAS Gastransport GmbH
- DBI – Gastechnologisches Institut gGmbH Freiberg
- VNG AG

More about this topic on the internet:
www.energiepark-bad-lauchstaedt.de

Bad Lauchstädt Energy Park

THE PROOF

Regulatory sandbox for the hydrogen economy

In the very middle of Central Germany, a flagship project is being established that is leading the way for the energy transition: the Bad Lauchstädt Energy Park ("EBL"). For the first time, the entire value chain of green hydrogen is being tested on a production scale, from production and storage to transport and utilisation. The ambitious project is supported by a strong consortium of six companies and a scientific institute. "With this project, we are doing pioneering work in many areas and want to prove that the hydrogen economy is not just a vision, but actually works," emphasises Cornelia Müller-Pagel, Overall Project Manager at EBL and Head of Green Gases at VNG AG.

GREEN HYDROGEN FROM WIND TO ENERGY

The combination of production, transport, storage, marketing and utilisation of green hydrogen implemented in the Energy Park begins with wind power. A nearby wind farm with eight modern wind turbines generates renewable electricity, which is used to operate a large-scale electrolysis plant. In this process, water is broken down into its components, producing climate-neutral hydrogen. "This direct coupling of wind farm and large-scale electrolysis is currently still unique," explains Müller-Pagel.

LAUNCH OF THE CORE NETWORK IN CENTRAL GERMANY

An existing natural gas pipeline was converted into a hydrogen pipeline for hydrogen gas transport, sustainably utilising existing infrastructure. This 25-kilometre long transport pipeline is also the nucleus of the ONTRAS Central German hydrogen start-up grid. In addition, a new connection line was laid to the anchor customer, TOTAL Raffinerie Mitteldeutschland in the Leuna Chemical Park.

In a later stage of the project, the green hydrogen is to be stored in a specially repurposed underground salt cavern. This method not only enables the efficient and safe storage of large quantities of gas, but also the continuous supply of gas to customers independently of fluctuations in production. “We are killing two birds with one stone here: sustainable transport and, in the long term, secure storage,” explains Overall Project Manager Müller-Pagel.

INDUSTRY IN FOCUS

“Hydrogen is a real all-rounder, from industry to mobility,” explains Müller-Pagel. In the first instance, the chemical industry based in Central Germany will be supplied, which will use hydrogen to make its processes more sustainable. In addition, applications in the mobility sector are possible in the future, for example for fuel cell vehicles.

REGIONAL VALUE CREATION A WIN FOR THE CENTRAL GERMANY REGION

In addition to technological innovation, the project creates economic impetus for the region. Local companies and skilled workers benefit from new orders and jobs. At the same time, the Bad Lauchstädt Energy Park strengthens Central Germany as an energy location and provides local solutions for the necessary reduction of CO_2 emissions in industry. The project partners are investing a total of €210 million. This includes funding for the “Real-life Laboratory for the Energy Transition” of €34 million from the 7th Energy Research Programme funding initiative of the Federal Ministry of Economics and Climate Protection (“BMWK”).

“We want to show how a climate-friendly energy system of the future can work with hydrogen and thus also provide a future perspective for the energy and chemical region in the south of Saxony-Anhalt,” says Müller-Pagel.

“In Bad Lauchstädt, we are gaining valuable experience along the entire value chain for green hydrogen, which will provide us with important insights and expertise for scaling up further hydrogen projects.

Cornelia Müller-Pagel, overall Project Manager of EBL and Head of Green Gases at VNG AG

Project schedule

Since the start of the project in September 2021, many milestones have been successfully passed. On the basis of a research project, a location has been created in Bad Lauchstädt to demonstrate that hydrogen can be renewably produced on an industrial scale. Another milestone will be passed with the technical commissioning in the course of this year.

September 2021

RELEASE OF STATE FUNDING

Start: Preparation of research and development work and site preparation

Start: Preparation of the licensing procedures, in particular for the construction of the large-scale electrolysis plant and the rededication of the natural gas pipeline as a hydrogen transport pipeline

October 2021

1ST CITIZENS' INFORMATION EVENT

January 2023

CONCLUSION OF BIMSCHV (FEDERAL IMMISSION CONTROL ORDINANCE) PROCEDURE

Authorisation for wind farm and electrolysis

by April 2023

SITE PREPARATION

Site preparations for electrolysis and storage (above-ground plant)

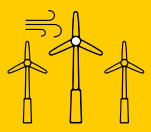
50 MW

rated output

from June 2023

START OF CONSTRUCTION WORK

Construction of transformer station



June 2024

OFFICIAL COMMISSIONING OF WIND FARM

from July 2023

START OF WIND FARM CONSTRUCTION

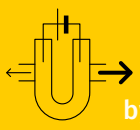
by Q4 2024

CONVERSION OF NATURAL GAS PIPELINE

Conversion and upgrading of the natural gas pipeline to hydrogen transport

100,000 m³

per hour



by Q2 2025

COMMISSIONING

of the converted hydrogen pipeline

Construction of large-scale electrolysis with subsequent pilot operation

Construction of a gas scrubbing system

30 MW

Leistung

from Q3 2025

COMMISSIONING

Electrolysis

Gas scrubbing and gas volume measurement during pilot operation

August 2026

COMPLETION OF HYDROGEN PRODUCTION PILOT OPERATION

30
megawatts
of power from the electrolysis plant for hydrogen production.

ON COURSE FOR THE FUTURE

Construction work has been progressing rapidly since the ground-breaking ceremony in June 2023. The wind turbines officially went into operation in June 2024. Structural and civil engineering work has largely been completed; the focus is now on the technical plant construction. The construction of the electrolyser and the completion of the transport pipeline are currently in progress. The technical commissioning of the entire facility is planned for 2025. “We are right on schedule and are looking forward to being able to feed green hydrogen into the grid soon,” says Müller-Pagel optimistically.

Alliance for clean energy

The **Hydrogen Germany** business alliance positions Germany as a leading hydrogen-using nation, supported by leading companies and organisations along the entire value chain of the hydrogen economy. VNG is involved with activities relating to the EBL and the hydrogen core network, which serves as an anchor point for a European infrastructure and enables European partner connections.

Partner von

Hydrogen Germany

More on the Internet:
www.hydrogen-germany.de

2,700
tonnes
of hydrogen will be produced per year.

25
kilometres
of converted pipeline for hydrogen transport.

GreenRoot: Green hydrogen for the industry of tomorrow

Innovative hydrogen project in Lutherstadt Wittenberg

In order to defossilise the energy requirements of numerous industrial companies in Central Germany, we want to build an industrial-scale electrolysis plant in Lutherstadt Wittenberg together with the Dutch company HyCC to supply companies in the region with green hydrogen.

From 2029, around 50,000 tonnes of green hydrogen are to be produced annually. The electrolyser with a capacity of up to 500 megawatts is being realised by VNG AG, VNG Handel & Vertrieb and HyCC. The planned hydrogen volume corresponds to around five percent of the production capacity in Germany envisaged under the national hydrogen strategy. The plant is being built opposite the Agro-Chemie Park Piesteritz and thus in the direct neighbourhood of SKW Stickstoffwerke Piesteritz. Hydrogen is intended to replace natural gas in the future and reduce CO_2 emissions.

Socially committed

COMMITMENT TO THE FUTURE

For a stronge region

VNG AG has been actively involved in society and the region since it was founded. This is particularly evident in the two foundations set up by Group: the VNG Foundation and the Central Germany Foundation for Science and Education ("MSWB"). The VNG Foundation celebrated its 15th anniversary in 2024. At the anniversary celebration, social engagement awards were presented to five Eastern German associations.

Every year, the VNG Foundation awards a volunteering prize to Eastern German volunteering initiatives as part of its "Verbundnetz der Wärme" social engagement platform.

PROMOTION OF THE COMMON GOOD

The VNG Foundation, established in 2009, specifically supports charitable projects in Eastern Germany. Its focus is on civil society & the common good, democracy & cohesion, art & culture and popular sport & health. A centrepiece of its work is the "Verbundnetz der Wärme" (Network of Warmth), which has been supporting voluntary work since 2001. Every year, the foundation awards the Social Engagement Prize, which is endowed with 5,000 euros each, to five associations or initiatives. "We want to recognise and reward voluntary work in Eastern Germany," emphasises director of the Foundation, Mandy Baum.

More information about the VNG Foundation on the Internet:
www.vng-stiftung.de

VNG-STIFTUNG

Watch the film about the VNG Foundation here

Five times
€5,000
for volunteering projects in Eastern Germany.

A BRIDGE BETWEEN ACADEMIA AND SOCIETY

With the revamped Central German Foundation for Science and Education "MSWB"), we are promoting exchanges between academia, business and civil society in the region. It is thus taking over the existing partnerships with nine universities in Central and Eastern Germany, where, for example, Germany Scholarships are awarded to outstanding students. In addition, the MSWB promotes scientific studies, particularly in the areas of energy transition and climate protection, and participates in working groups that focus on knowledge transfer between business and science. For example, projects to promote the regional start-up scene are also supported.

Further information on the MSWB on the Internet:
www.mitteldeutsche-stiftung.de

MITTELDEUTSCHE STIFTUNG
WISSENSCHAFT · BILDUNG

NINE
UNIVERSITIES
in the Central and Eastern German region are partners of the MSWB.

Anniversary celebration "15 years of the VNG Foundation".

Market of opportunities for clubs and volunteers.

THREE QUESTIONS FOR

15 YEARS OF THE VNG FOUNDATION: WHAT HAS BEEN THE HIGHLIGHT OF THE FOUNDATION'S WORK FOR YOU SO FAR?

We have had so many inspiring encounters with associations, foundations and volunteers from the region in recent years. I find it difficult to choose one particular highlight. That's the best thing about the Foundation's work - every day, we have the opportunity to come into contact with a wide variety of people who volunteer for others in all areas of life.

AND NOW VNG IS SUPPORTING A SECOND FOUNDATION?

Exactly. The 15th anniversary of the VNG Foundation was the perfect occasion to rethink and strategically develop our areas of support. Through the Central Germany Foundation for Science and Education (MSWB for short), we want to concentrate and selectively expand existing initiatives to promote education, science and the start-up scene.

WHAT DO YOU WANT FOR THE FUTURE?

More togetherness, co-operation and exchange. It is a great source of satisfaction for us to be able to nurture our proximity to society and to contribute to the common good in the region through the foundations.

Mandy Baum
Foundation manager

VNG initiative “Thank you, fire service”

Thank you for your commitment!

As a company operating in the gas industry, VNG knows how crucial the fire service is for everyone’s safety. Wherever gas is used, care must be taken – and when it comes down to it, it is the firefighters who save lives and avert danger with courage, determination and tireless commitment.

With our “Thank you, fire service” initiative, we are actively expressing our appreciation for the heroes and heroines in the fire services. We support the fire services at the VNG Gasspeicher and BALANCE Erneuerbare Energien sites financially, with practical training and, in future, finding new recruits.

Watch the film here

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