



**We are shaping the green future.  
Where climate protection takes  
centre stage.**

# Green gases at VNG Handel & Vertrieb

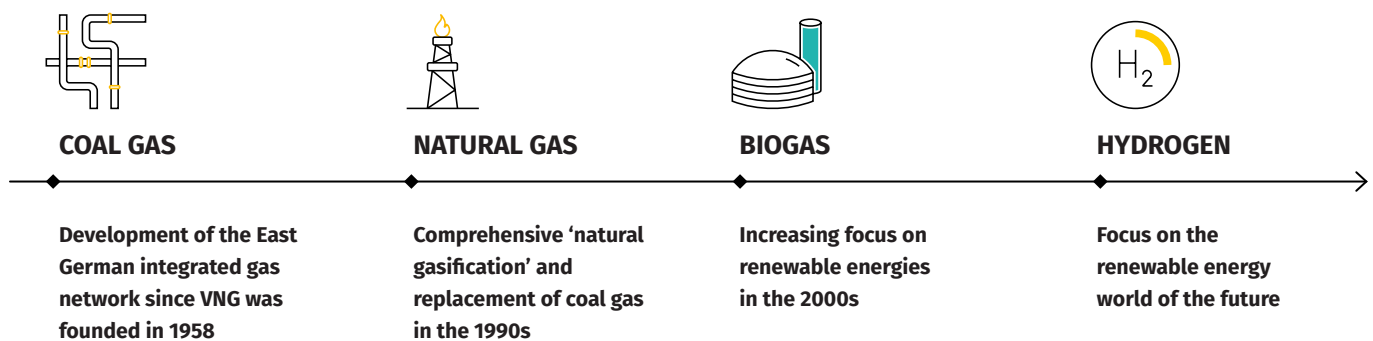
In order to successfully shape the fundamental transition to a decarbonised, climate-neutral energy industry and thus contribute to the fulfilment of the European climate protection goals, we as an organisation must drive the transformation towards new business segments.

We want to develop solutions for a future-proof, sustainable energy system. That's why our focus is shifting to gas alternatives in order to support the

German government's goals for a successful energy transition and guarantee a reliable supply of energy. As gas experts, we need to broaden our position and diversify into new areas in order to pave the way to a green future. Against this backdrop, our parent company VNG AG launched the Group-wide strategy process VNG 2030+ in 2017, which shows how we intend to play a key role in shaping the energy transition.

## Our mission:

**We are actively shaping the transformation of the energy industry and will support you as our strategic partner on the path to a green, sustainable future.**



“Only by working together will we be successful in the long term, because the path to a green future is a joint task. If this succeeds, we will all benefit. The end goal of all of our projects is to find innovative and sustainable solutions together with our customers in order to drive the transformation towards a decarbonised society and make our energy supply more climate-neutral and therefore more sustainable.”

Konstantin von Oldenburg  
Managing Director of VNG Handel & Vertrieb GmbH

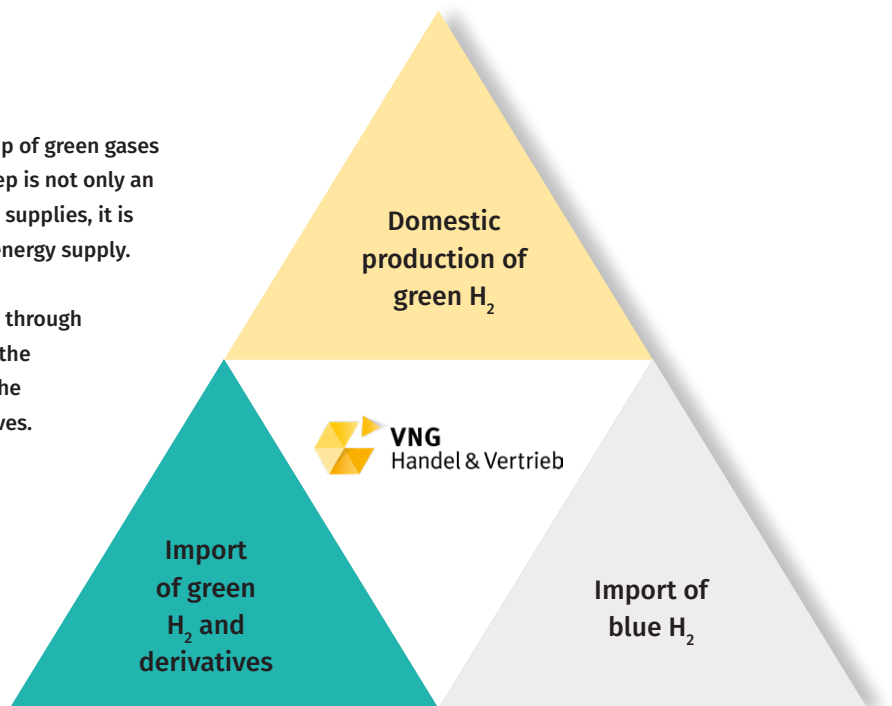
# VNG – Your strategic partner

The energy transition is one of the greatest challenges of our time. In order to make it a successful endeavour, it is crucial to look ahead and focus on accelerating the transformation process. VNG is an important driving force in this regard, particularly when it comes to molecules such as hydrogen, biogas, biomethane and ammonia. We are convinced that using an appropriate mix of energy sources will play a key role in the success of the energy transition.

For this reason, we are committed to the ramp-up of green gases and the hydrogen economy in particular. This step is not only an important contribution to the security of energy supplies, it is also a decisive step towards a climate-friendly energy supply.

A sustainable energy future can only be realised through close cooperation between all players – both in the domestic production of green hydrogen and in the import of blue and green hydrogen and derivatives.

We cordially invite you to accompany us on this journey and be part of this forward-looking development.



“Decarbonising the molecular side of the energy and materials transition will be an immense challenge. We need to use all of the technical solutions at our disposal to establish the necessary mix of green and blue hydrogen. By developing hydrogen infrastructure and collaboratively establishing the necessary framework conditions, we stand by as a strategic partner, enabling investments at every stage of the value chain.”

Clemens Lange  
Head of Business Development & Green Transformation

# Our green project portfolio

In recent years, VNG has been involved in a variety of projects and has created a robust project landscape. Continuous expansion in this area is essential for a successful transformation. Some of our projects are already in the initial implementation phase.

We support new technologies and processes which allow green energy to be supplied, stored and transported. To ensure security of supply and decarbonisation, Germany must rely on imports. This is why VNG AG and VNG Handel & Vertrieb GmbH are constantly expanding their business activities towards the import and production of green energy sources. Read on to learn about some of the projects in our portfolio.



**Algeria**  
Green H<sub>2</sub> imports into Germany

## Chile project Import project in cooperation with Total Eren



**The project:** In the Magallanes region of Chile, 800,000 tonnes of hydrogen are to be produced annually by specially constructed wind turbines, some of which will be imported to Germany by ship in the form of green ammonia. A planned H<sub>2</sub> and CO<sub>2</sub> hub in the Rostock area is being considered for this purpose (see H2GE project).

**Project benefits:** In order to meet the future demand for green and decarbonised hydrogen in Germany, significant volumes will have to be imported from international sources in addition to national production projects. The Chile project is therefore laying the foundations for the development of a climate-neutral, sustainable energy supply in Germany and Europe.

## H2GE Rostock project German-Norwegian hydrogen project in cooperation with Equinor

**The project:** The plan is to import, produce and distribute blue, low-CO<sub>2</sub> hydrogen in the Rostock region and to capture, utilise and store CO<sub>2</sub> offshore.

**Project benefits:** The H2GE project will provide a framework for supplying industries with low-carbon hydrogen, thereby reducing the carbon footprint by more than 95 per cent. The project will make Rostock a central hub of the future hydrogen economy, driving local and regional value creation in eastern Germany.



**Location**  
Magallanes (Chile)



**Project partners**  
Total Eren, VNG Gasspeicher, ONTRAS



**Volume**  
100,000 t H<sub>2</sub> per year



**Location**  
Rostock



**Project partners**  
Equinor ASA, VNG AG, VNG Gasspeicher, ONTRAS



**Volume**  
230,000 t H<sub>2</sub> per year, approx. 8 to 9 TWh

## GreenHyBB project

### Sustainable hydrogen supply for the state of Brandenburg

**The project:** GreenHyBB is a forward-looking project with the aim of establishing a regional value chain for green hydrogen in Brandenburg, particularly in Lusatia.

**Project benefits:** With renewable energies being the key to hydrogen production, GreenHyBB will make a contribution to the energy transition, support the hydrogen strategy goals of the federal government and the state of Brandenburg and safeguard local jobs in the industrial sector.



**Location**  
Lusatia region  
(Brandenburg)



**Project partners**  
EnBW AG, VNG AG,  
ONTRAS



**Volume**  
9,000 t H<sub>2</sub>  
per year

## Bad Lauchstädt Energy Park

### The regulatory sandbox for the energy transition – intelligent generation of green hydrogen from wind power

**The project:** The innovation project is piloting the intelligent, large-scale production of green hydrogen from wind power for the first time in central Germany.

**Project benefits:** Together with our project partners, we will trial the production, storage, transport and economic use of green hydrogen under real-world conditions and on an industrial scale. In this way, the project will help us research the future technology of green hydrogen and bring it to market maturity – for a technologically strong and future-proof energy and hydrogen economy.



**Location**  
Bad Lauchstädt  
(Saxony-Anhalt)



**Project partners**  
Terrawatt, Uniper  
Hydrogen, DBI, VNG  
AG, VNG Gasspeicher,  
ONTRAS



**Volume**  
2000 - 4000 t H<sub>2</sub>  
per year, approx.  
60 - 120 GWh

## Project Flow –

### making hydrogen happen Pipeline system for hydrogen ramp-up

**The project:** By converting the existing natural gas infrastructure, a high-performance pipeline system will be created through which it will be possible to transport climate-neutral green hydrogen on a large scale from as early as 2025.

**Project benefits:** By linking international hydrogen markets, Flow – making hydrogen happen is accelerating the European H<sub>2</sub> ramp-up and paving the way for hydrogen as a central component of a diversified, decarbonised energy economy.



**Sites**  
Lubmin –  
Stuttgart  
(9 sites)



**Project partners**  
Gascade, ONTRAS,  
terranets bw, VNG AG  
and others



**Volume**  
1,100 km line, feed-in  
capacity up to 20 GW

## GreenRoot project

### Green hydrogen for an emission-free future in central Germany

**The project:** The aim is to produce green hydrogen on an industrial scale in the greater central German region using electrolysis.

**Project benefits:** GreenRoot supports and drives the decarbonisation of industry in central Germany. This pioneering hydrogen project is essential for the region to continue as a competitive industrial location over the long term.



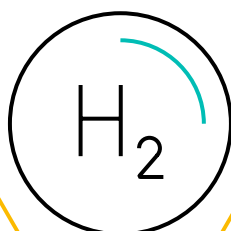
**Location**  
Central  
Germany



**Project partners**  
HyCC, VNG AG



**Volume**  
> 50,000  
t H<sub>2</sub> per year,  
> 1.6 TWh



## Putting all our energy to work for you.

The Handel & Vertrieb part of our company name means 'trading & sales' and that's what we're all about: From our base in Leipzig, we operate as a wholesaler for natural gas and as an energy service provider in Germany and abroad. We supply industrial and commercial companies, municipal utilities and distributors, and we also provide energy-related services. Partnerships based on mutual trust, flexibility and closeness to our customers and markets have always formed the basis of our success.

For more than 60 years, we have built up expertise in all aspects of trading and selling natural gas. Emerging as a separate company from VNG AG in 2018, we are now the lead company responsible for the VNG Group's trading segment. As specialists, we make our contribution to implementing gas-based concepts for the environmentally friendly energy mix of tomorrow.

We would be happy to provide you with detailed and personalised information about our services. Talk to your key account manager or write to us at:  
**[kontakt@vng-handel.de](mailto:kontakt@vng-handel.de)**

We look forward to engaging in meaningful dialogue with you.

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