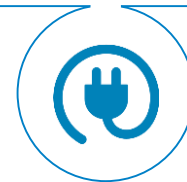




Driving the clean energy transition.

March 2021



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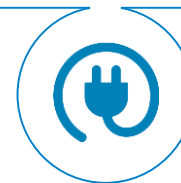
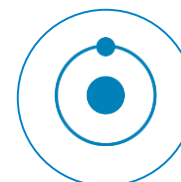
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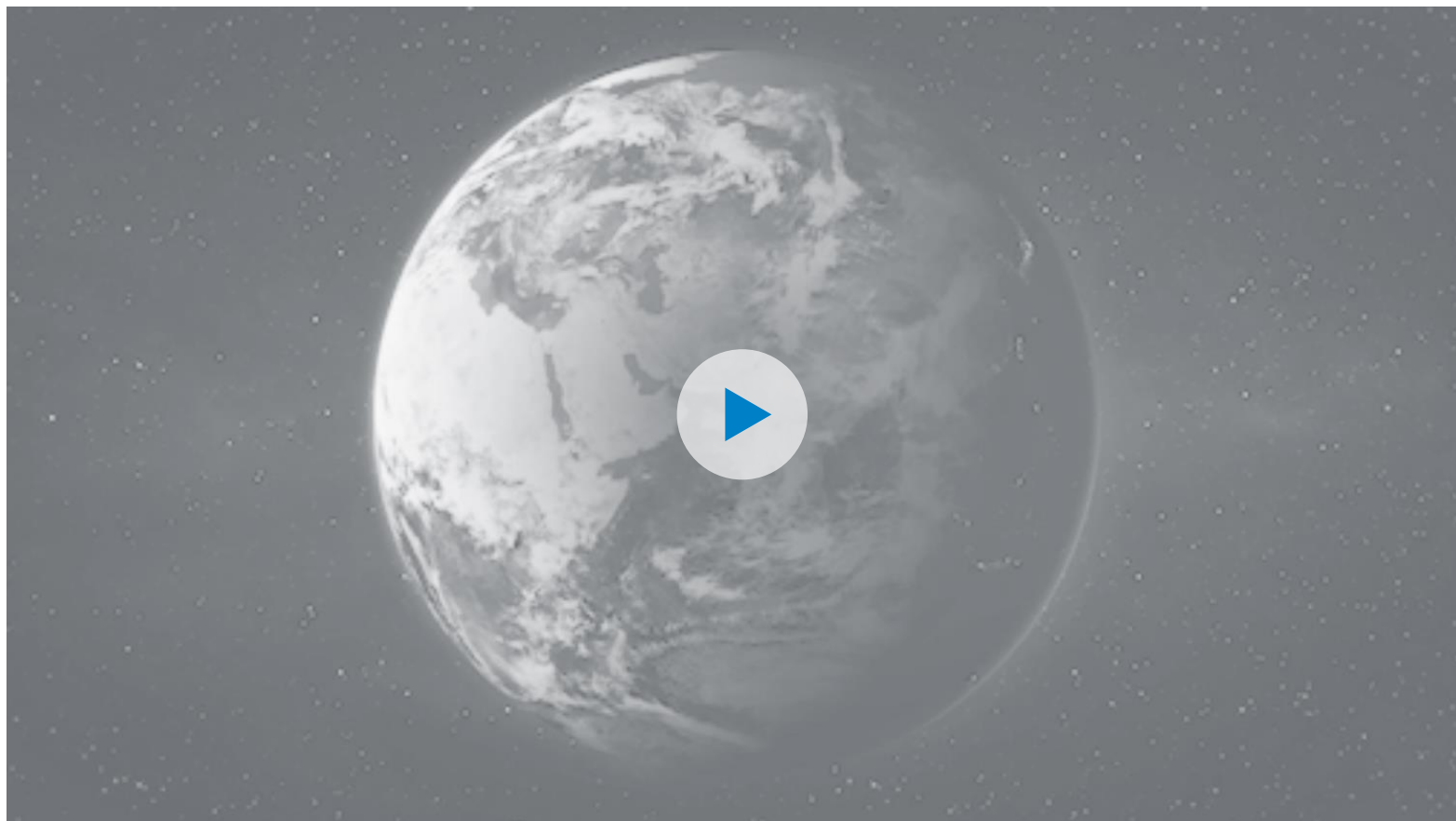
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Introduction

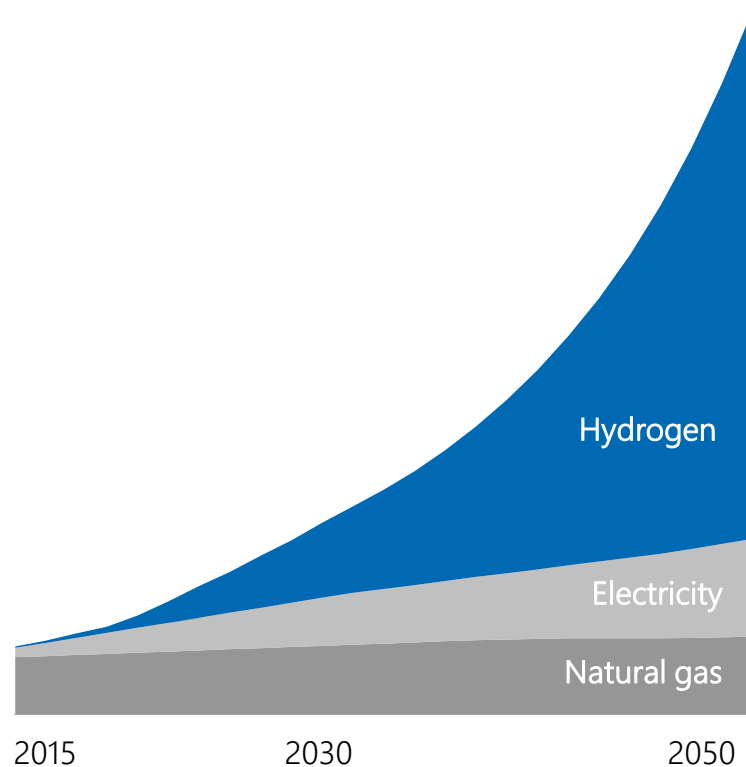


VORWERK is driving the clean energy transition



Clean energy transition requires significant energy infrastructure investments

Planned energy infrastructure investments¹



Key catalysts



Natural gas grid expansion

Expansion of natural gas infrastructure to compensate for coal and nuclear phase-out



Electricity highways

Realization of electricity highways to enable distribution of renewable wind and solar energy from the point of production to consumers



Green hydrogen ramp-up

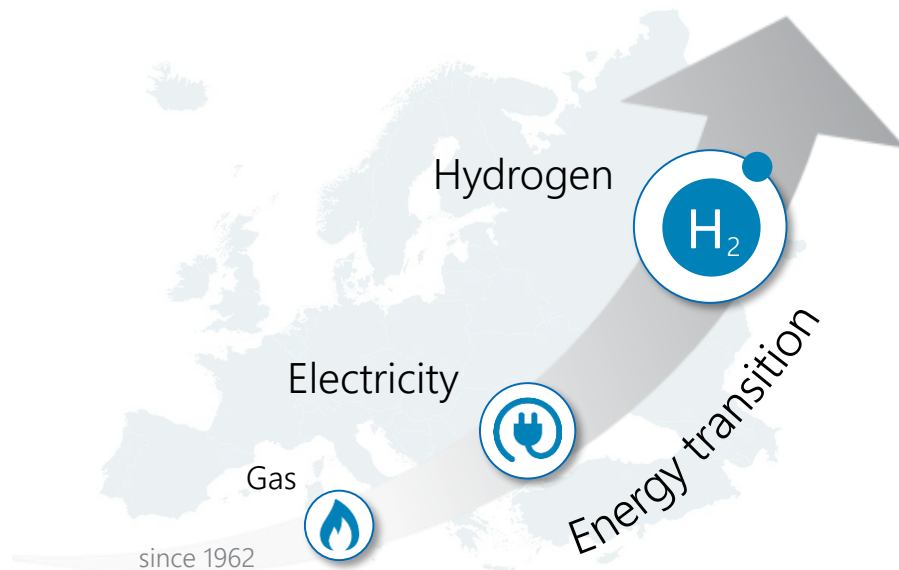
The only long-term clean molecule that can replace the fossil molecule fuels needed in industry, mobility and heating

¹) Schematic representation
Source: Management estimate based on Network Development Plan (NDP) Gas and electricity, Fraunhofer Institute;

VORWERK plans, realizes and operates the energy infrastructure of the future

In highly attractive markets

With success



€291m
revenue



>1,300
employees

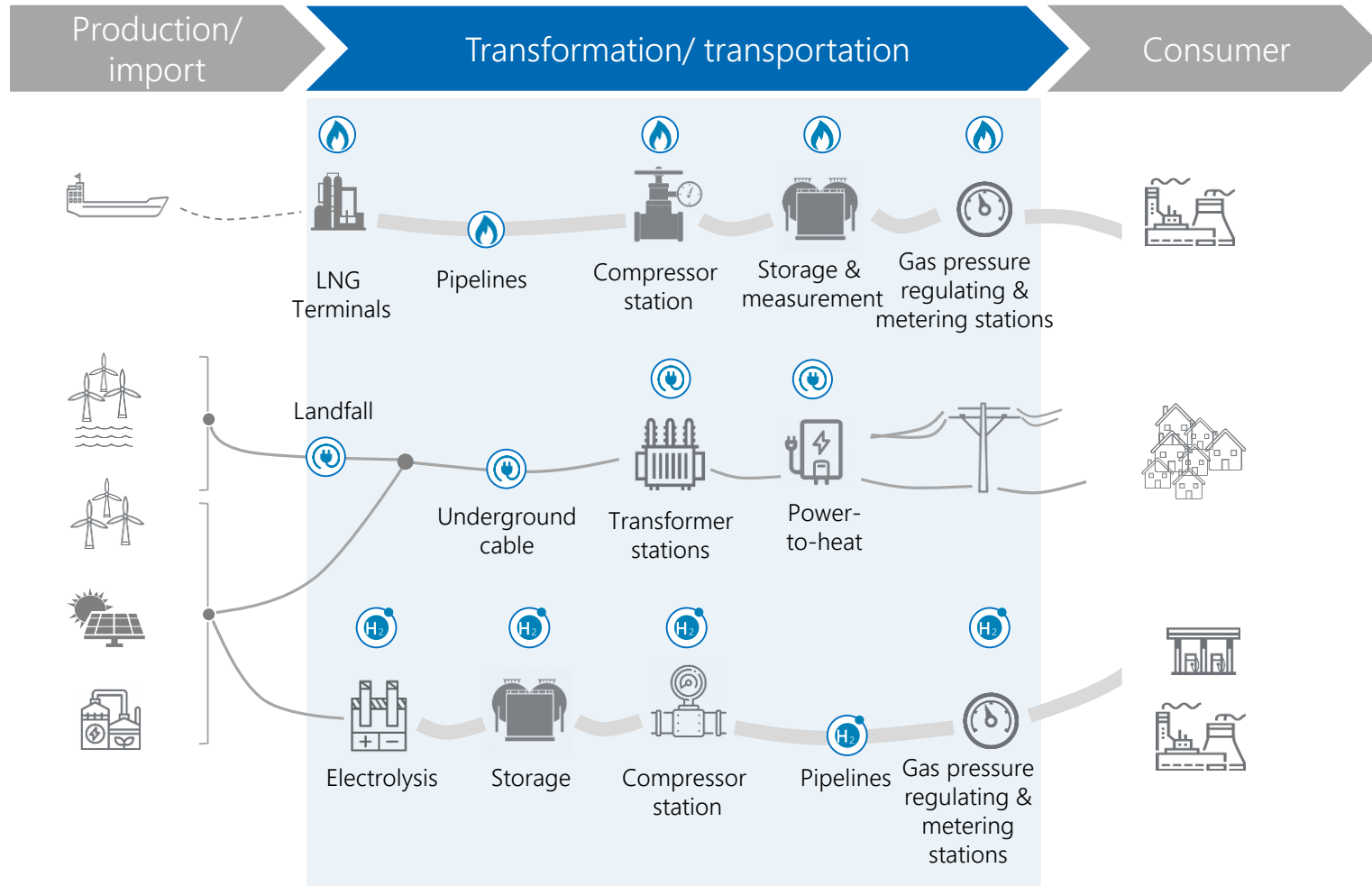


16%
EBIT margin



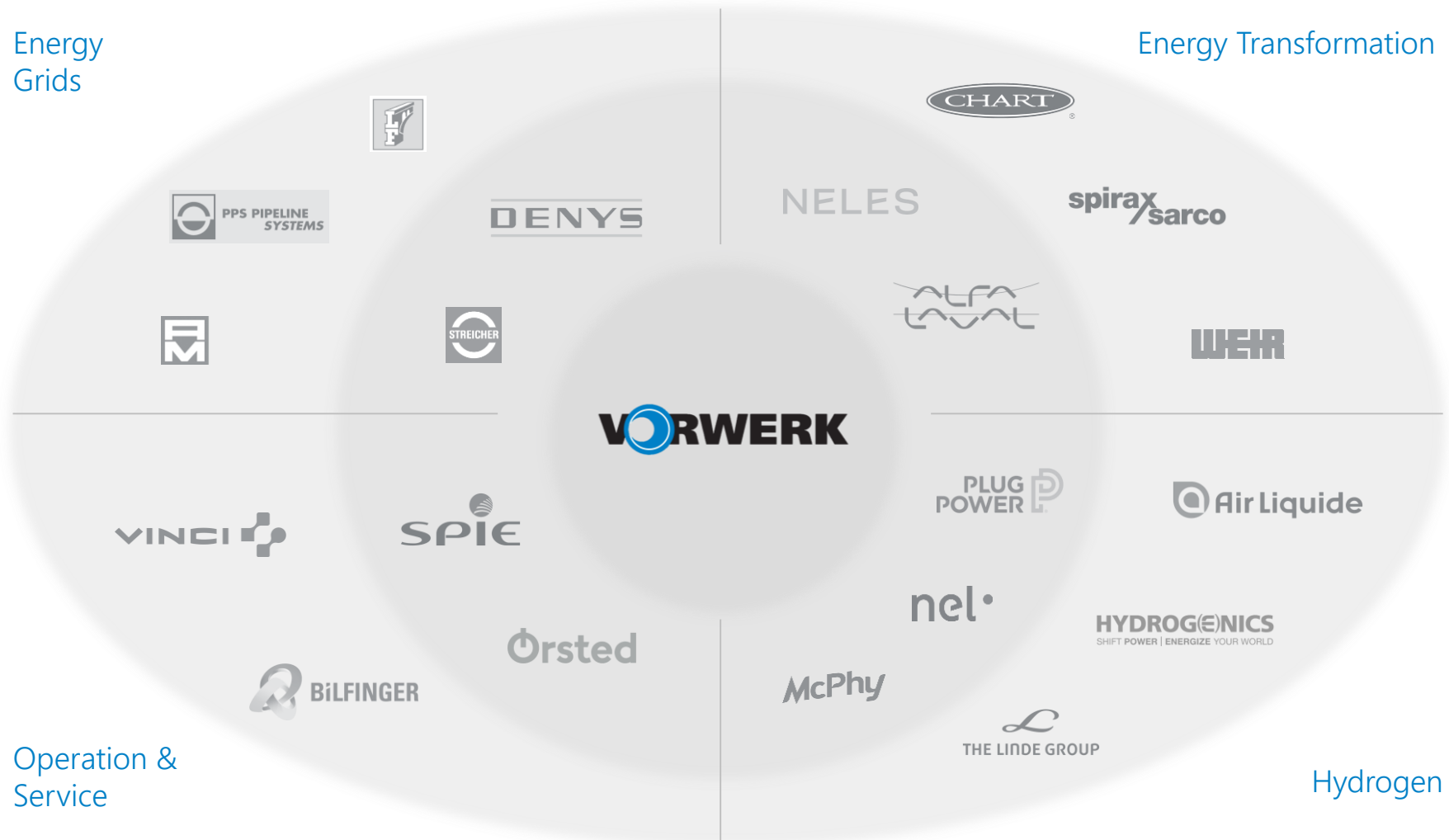
>15%
organic CAGR

VORWERK offers critical solutions to transform and transport energy



VORWERK solutions

VORWERK in the midst of the universe of innovative energy players



VORWERK benefits from sustainable market entry barriers

Customers & References

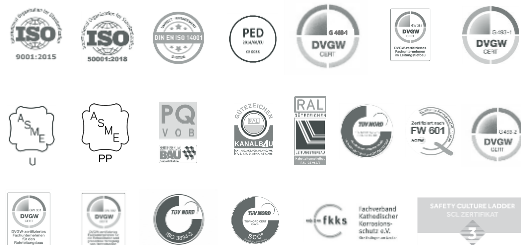


Turnkey competence

- Energy grids
- Energy transformation
- Service & Operation
- Intelligent Infrastructure Mgmt.



Regulation & accreditation



Technology & Patents

- OrQa® flow metering
- HDD drilling
- Cathodic corrosion protection
- Carbon capture
- Heat management
- Knock-out drums
- Gas analysis
- Heat exchangers
- + many more

Best-in-class governance through an experienced supervisory board



Dr Christof Nesemeier

Chairman of the supervisory board

CEO & Member of the Board at MBB SE

Decades-long track-record in developing successful German Mittelstand companies

PhD University St Gallen

Born in 1965



Heike von der Heyden

Member of the supervisory board

Head of M&A at Green City AG

10+ years of international experience in M&A with a strong focus on driving sustainability in the German Mittelstand

Diploma in Business University of Munster

Born in 1966



Dr Julian Deutz

Member of the supervisory board

Chief Financial Officer at Axel Springer SE

Decades-long experience in finance & controlling and strategy with a focus on realizing value through innovation and digitalisation

PhD with focus on banking & finance

Born in 1968

Key Investment Highlights



Climate change commands **billions in infrastructure investments** in VORWERK core end markets gas, electricity and hydrogen



50+ years of technology leadership in design, realization and operation of system critical energy infrastructure



Key player in ramping up the European hydrogen infrastructure thanks to a unique combination of know-how and decade-long customer relations

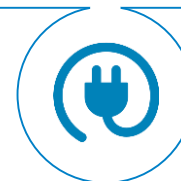
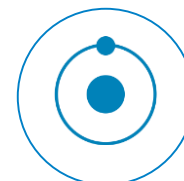


Double-digit revenue growth with a stable **>16% EBIT margin** as an ideal starting point for **exponential growth potential** ahead



Owner-managed business with an **ambitious strategy** to further accelerate profitable growth

Business model & technologies



Full turnkey competence across all core end-markets from one source



Natural gas



Electricity



Hydrogen

Adjacent opportunities



Planning & Design



Energy grids



Energy transformation



Service & Operation



Planning & engineering complex energy grids and transformation systems



Planning & Design



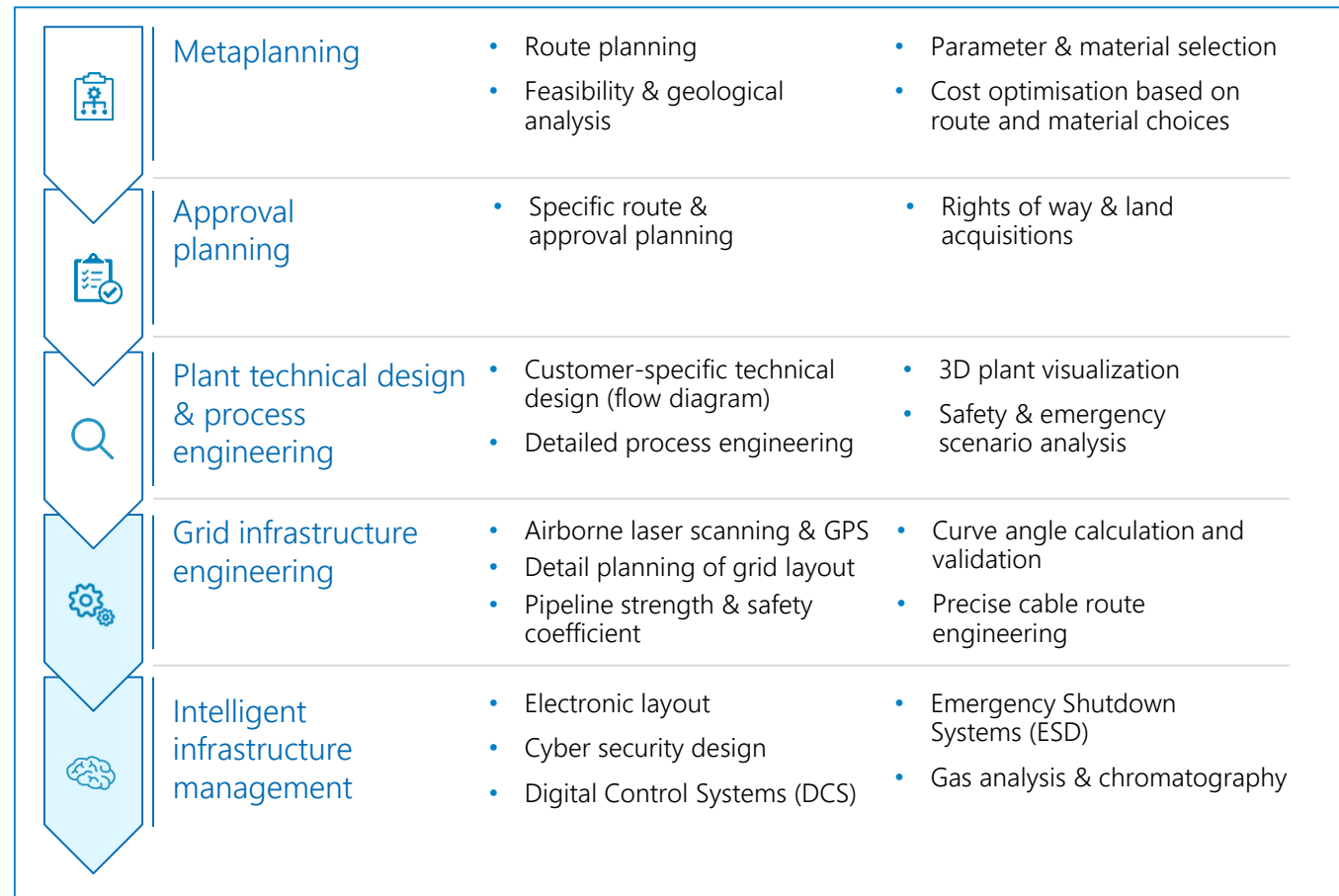
Energy grids



Energy transformation



Service & Operation



Deep-dive on following page

VORWERK leverages state-of-the-art digital planning and engineering tools



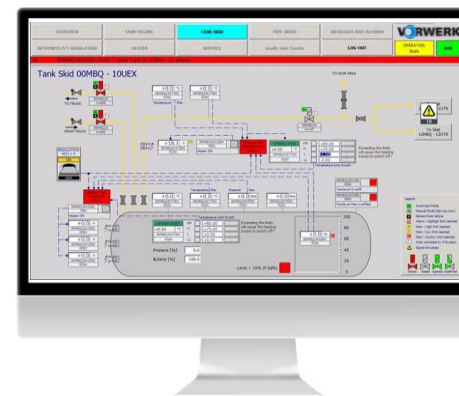
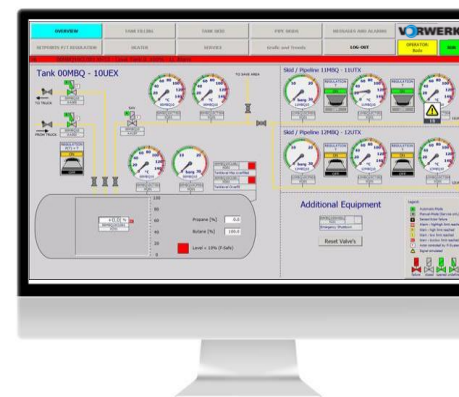
VORWERK competence in Grid Infrastructure & Plant Engineering



Intelligent Infrastructure Management is the brain of VORWERK's integrated offering



Intelligent Infrastructure Management



- Electrical & Automation Engineering
- Emergency Shutdown System (ESD)
- Flow metering (OrQa®)
- Digital Control System (DCS)
- Gas analysis & chromatography
- Safety engineering (HASOP, SIL)

Realizing critical energy grids through specialized technologies



Planning & Design



Energy grids



Energy transformation



Service & Operation

	Specialized welding technologies	<ul style="list-style-type: none"> Specialized welding for safe and reliable energy grids Hot tapping 	<ul style="list-style-type: none"> Sophisticated, manual tie-in welding Specialized non-destructive examination techniques
	Grid inspection & preparation	<ul style="list-style-type: none"> Stress pressure & integrity testing 	<ul style="list-style-type: none"> Calibre tests by intelligent pig robots Grid dehumidification
	Horizontal directional drilling (HDD)	<ul style="list-style-type: none"> Preservation of sensitive nature Proprietary near-surface drilling technologies 	<ul style="list-style-type: none"> Patented relief shaft procedure (C&P technology) Patented in-pipe drilling (HCD technology)
	Cable pull, handling, logistics & installation	<ul style="list-style-type: none"> Insertion technology into protection pipe systems 	<ul style="list-style-type: none"> Stress-free laying of high-weight cable lines
	Landfall connections & renaturation	<ul style="list-style-type: none"> Underground transition joints in coastal areas Landfall installation Mud flats procedures 	<ul style="list-style-type: none"> Soil remediation & re-plantation Proprietary Horizontal Casing Drilling (HCD) patent

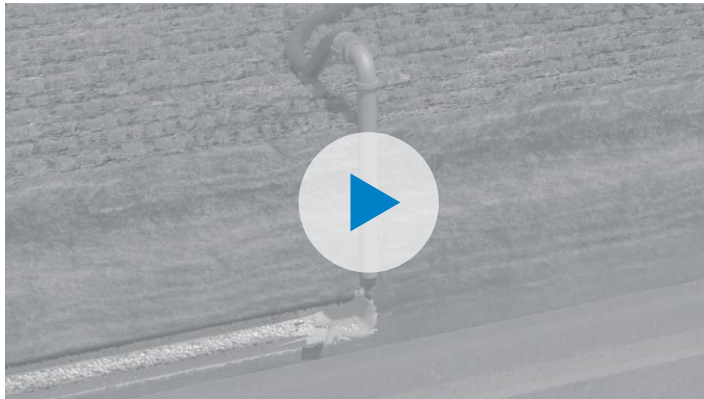


Deep-dive on following page

HDD drilling technologies for optimised efficiency and low ecological impact



Horizontal Directional Drilling (HDD)



Cable & Pipe (C&P) technology

Specialized near-surface drilling technology to puncture the borehole and control pressure of the drilling fluid to maintain borehole stability



Horizontal Casing Drilling (HCD)

inserts a protective plastic tube simultaneously to the drilling process

Delivering complex energy transformation systems based on best-in-class engineering



Planning & Design



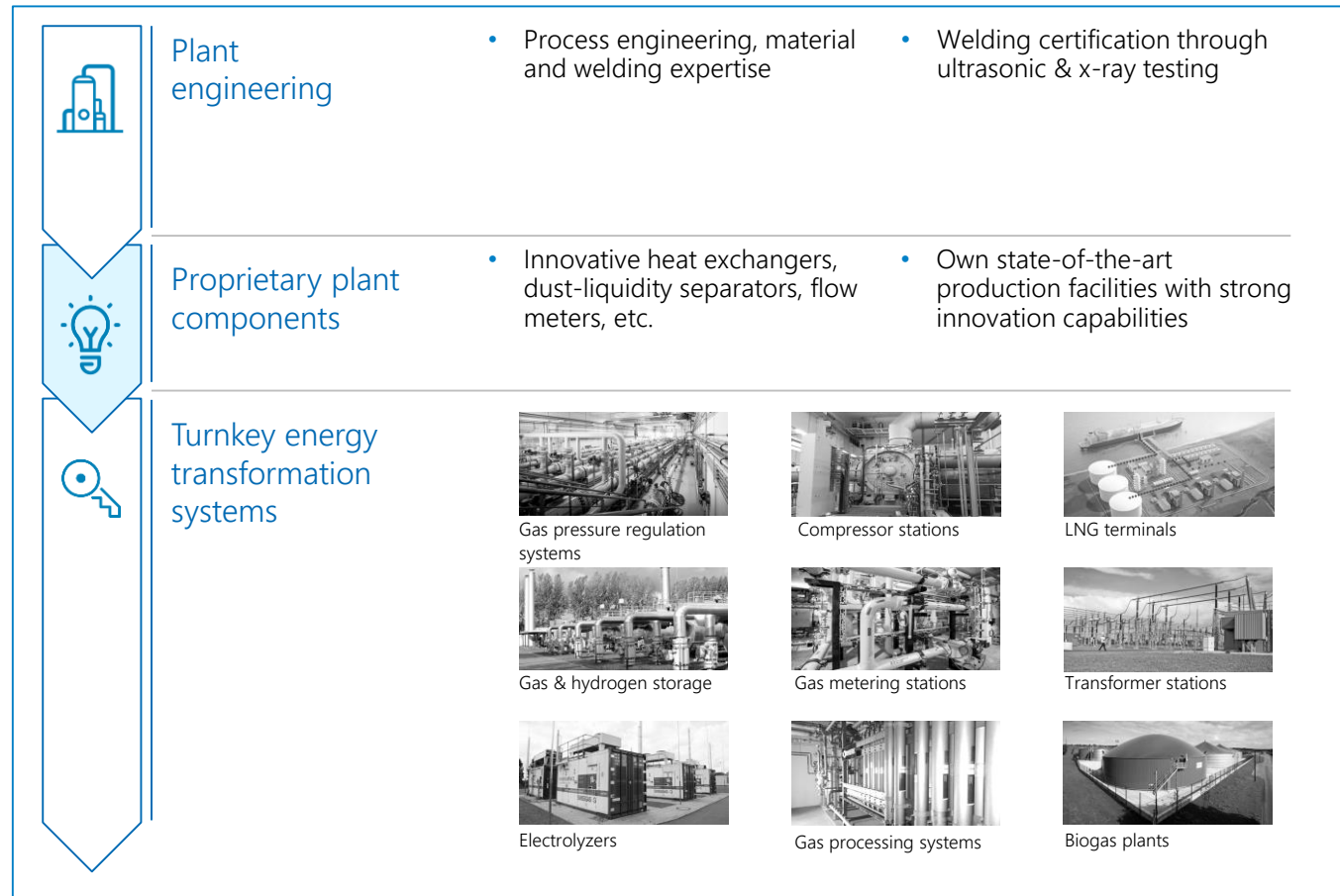
Energy grids



Energy transformation



Service & Operation

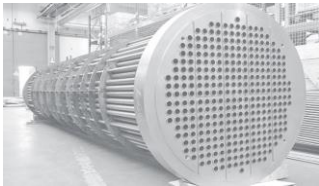


Deep-dive on following page

Tailored heat exchanger solutions for specialised applications in energy transformation



Proprietary heat exchangers



- Enables efficient and safe controlling and regulating temperature changes during gas pressure regulation
- **Used in:** Gas regulating, compressor, storage, LNG & electrolyzer systems to protect the ensuing system (e.g. freeze-in of components)

Proprietary dust liquidity separators

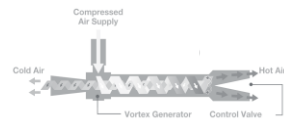
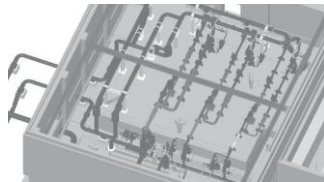


- Prevents corrosion/ damage to plant components through specialized knock-out drums incl. special cyclone tubes & inlet filters
- Versatile aerodynamic gas flow technology with high reliability and safety
- **Used in:** Gas pressure regulating, storage, compressor, electrolyzer & other plant systems

Cutting-edge gas processing & measurement for precise and reliable operation

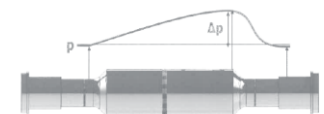


Proprietary vortex tubes



- Enables CO₂-neutral gas warming
- Based on thermodynamic process with four tangential gas feed-ins to separate warm from the cold gas streams
- No gas volume losses as no gas combustion is required
- **Used in:** Gas pressure regulating, storage and other systems

Proprietary flow-metering devices (OrQa)



- Enables precise legally calibrated gas volume metering
- Manufactured from one seamless piece without moving external parts
- Requires no/ low maintenance & recalibration
- **Used in:** Gas pressure regulating, storage, compressor, electrolyzer & other plant systems

Ensuring reliability through our extensive service, maintenance & operation offering



Planning & Design



Energy grids



Energy transformation



Service & Operation

	<p>Commissioning & expansion</p>	<ul style="list-style-type: none"> • Gassing of natural gas & hydrogen pipelines • Hot tapping procedures 	<ul style="list-style-type: none"> • Works & repairs on pressurised systems • Inductive preheating for welding works on pipes in use
	<p>Cathodic corrosion protection, inspection & repair</p>	<ul style="list-style-type: none"> • Electrical engineering and cathodic corrosion protection • Calibration and function checks of telecontrol engineering 	<ul style="list-style-type: none"> • Gas detection & inspection
	<p>Energy transformation services</p>	<ul style="list-style-type: none"> • Recalibration of sensors & data collection components and flow-metering systems 	<ul style="list-style-type: none"> • Functional and electrical checks
	<p>Infrastructure Operations</p>	<ul style="list-style-type: none"> • Operational management of gas-based plants and network infrastructure • Constant remote monitoring 	<ul style="list-style-type: none"> • Reporting & documentation • Standby services

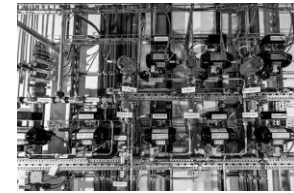
VORWERK focuses on high value-added proprietary solutions

VORWERK value-add

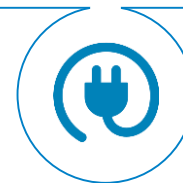
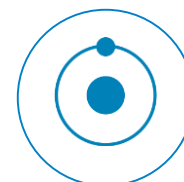
- High value-added products & components (e.g. heat exchangers, flow meters)
- Proprietary technologies (e.g. HD drilling, CCP, special welding)
- Engineering services (Process engineering, electrical and mechanical engineering CAD)
- Intelligent infrastructure management
- Project management

Purchased externally

- Cable and pipeline raw materials
- Low value-added services (e.g. building construction, demolition, concrete works)
- Non-differentiated high-volume plant components (e.g. valves, tubes, switches)



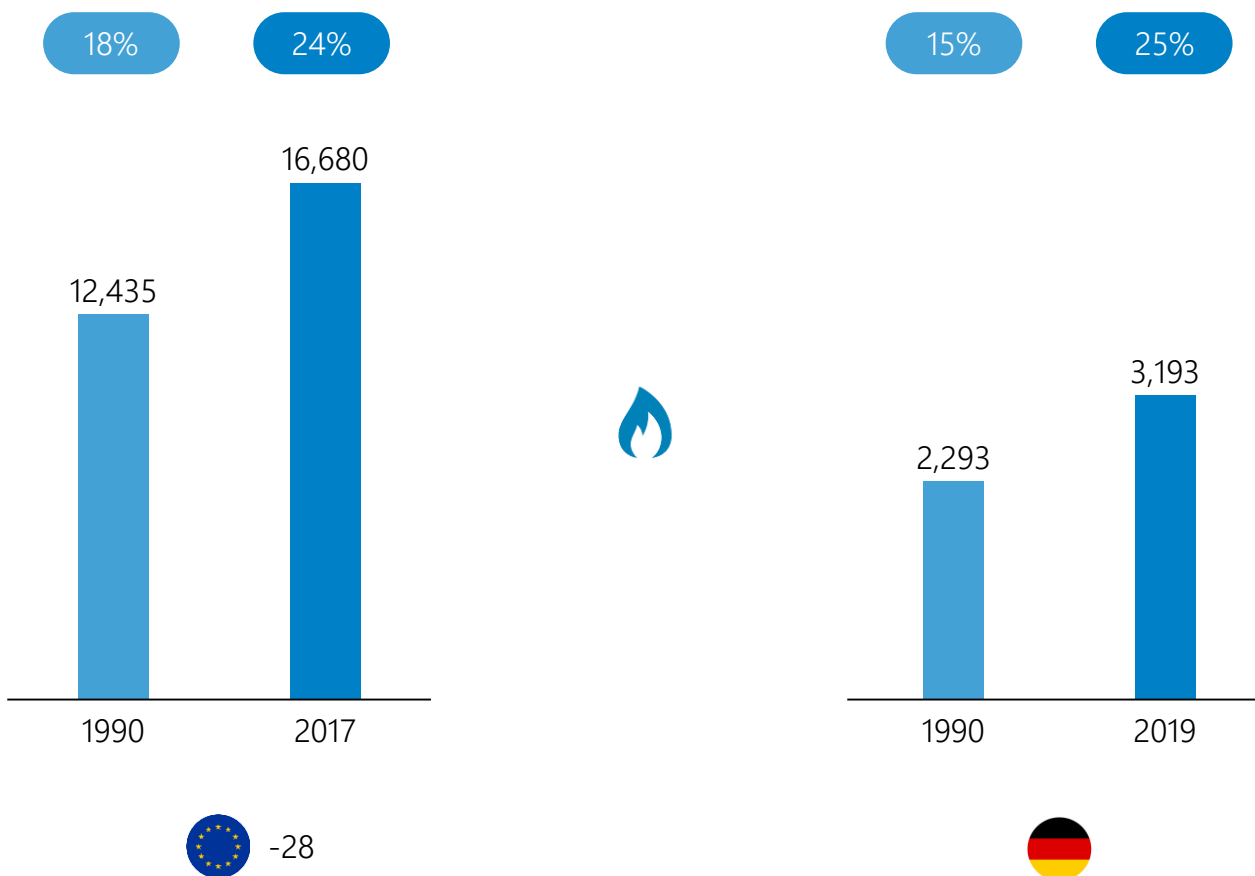
Our natural gas opportunity



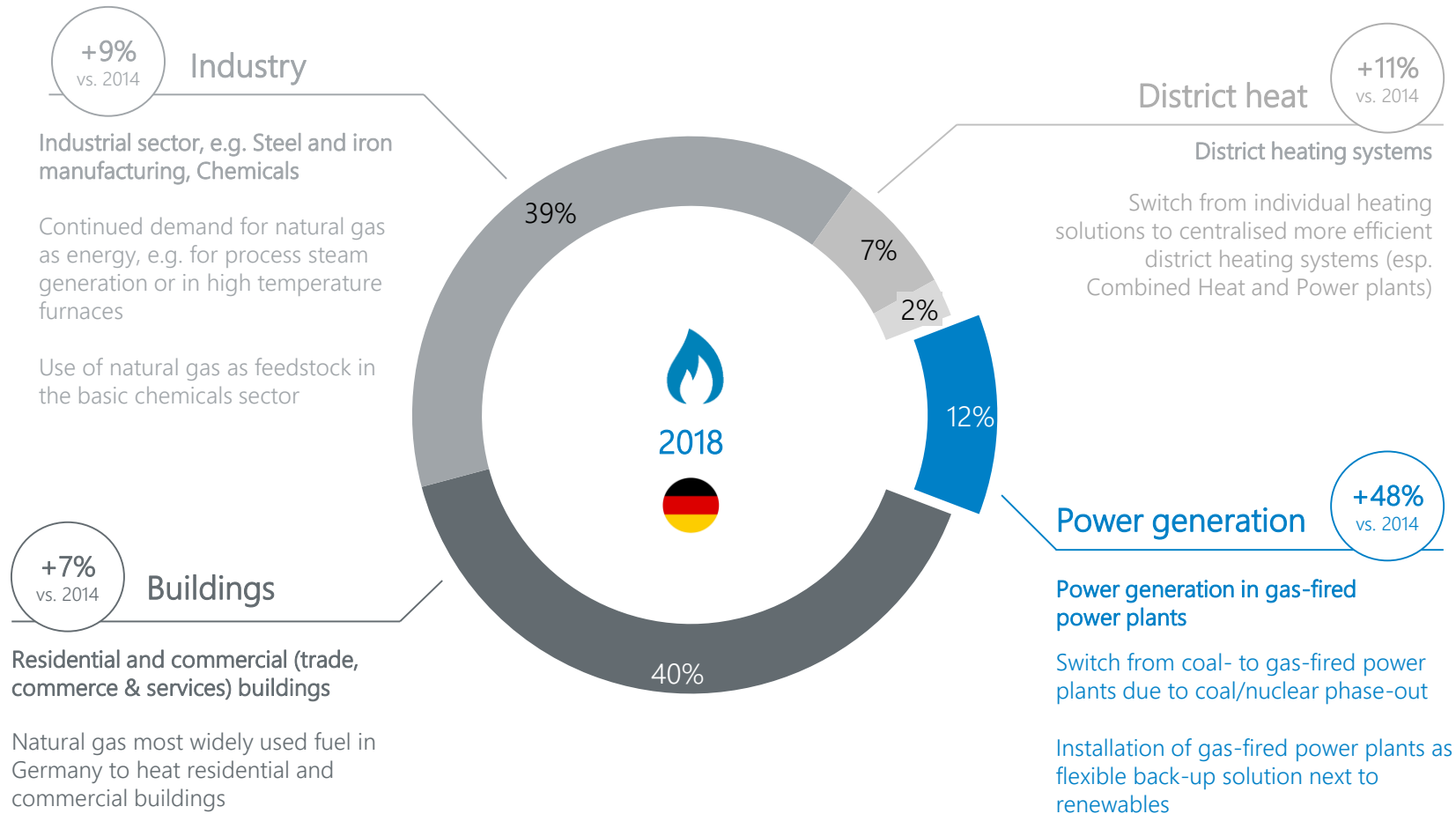
Natural gas has gained significant momentum on European and German level

Total natural gas consumption

in PJ, blue bubbles show share of natural gas in total primary energy consumption



Industry and buildings sectors are currently largest gas consumers



The nuclear and coal phase-out calls for rapid changes in the German energy sector

Lignite, coal and nuclear exit

Structure of the controllable power today vs 2038

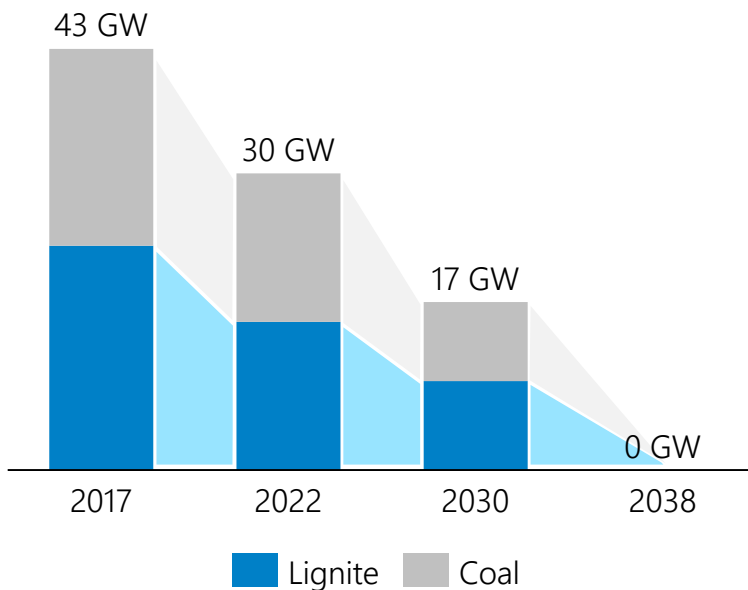


No. of nuclear power plants

8

0

0



Germany is first major economy to phase out coal and nuclear

Germany lawmakers have passed new legislation finalizing the country's long-awaited phase-out of coal, over objections from environmental groups the plan is not ambitious enough



Germany passes 'coal-exit' law to phase out fossil fuels by 2038

German lawmakers have voted a roadmap for the coal-free era in the country, which includes abandoning nuclear power by 2022

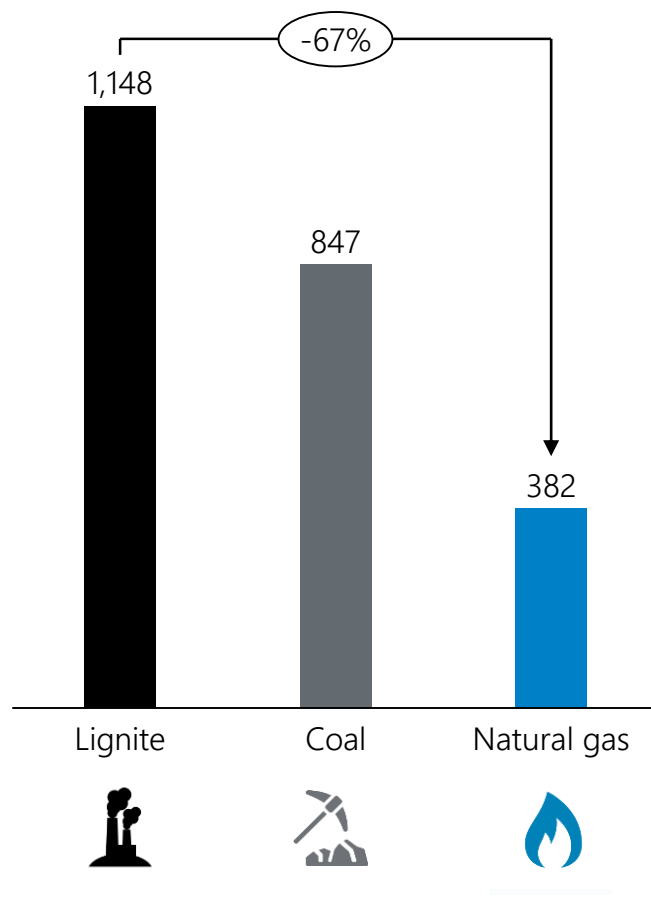


EU's New 2030 Climate Target Could Mean Exit From Coal By 2030

Forbes

Gas-fired power plants represent the only viable complement to renewables

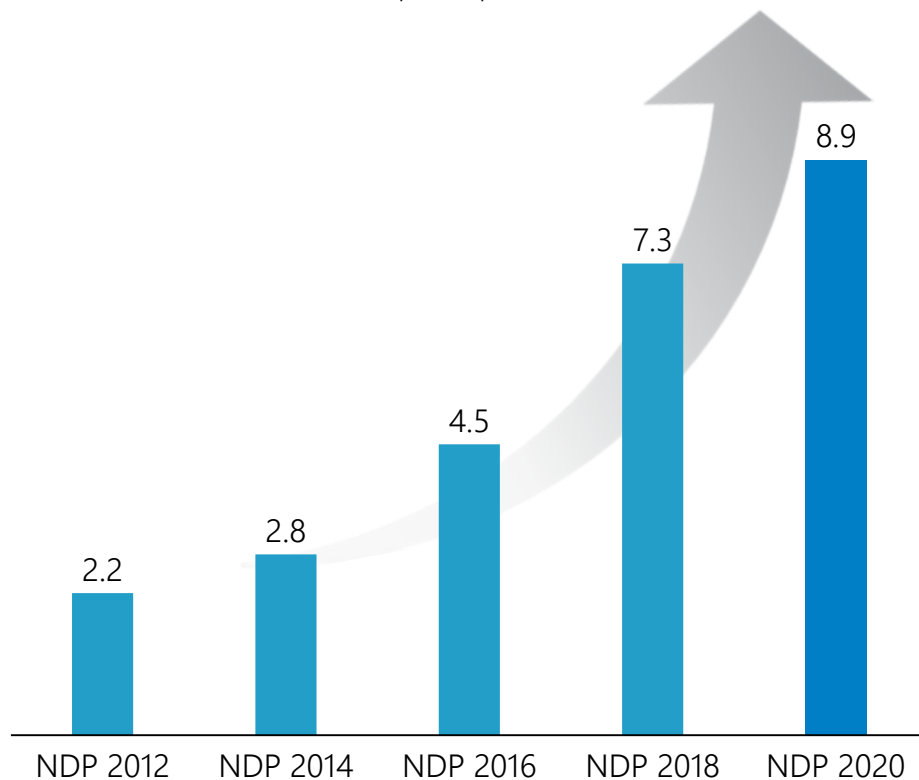
CO₂ footprint in electricity generation
in g CO₂/kWh



- Highly flexible due to short ramp-up time
- High level of operational efficiency
- Independent of extreme weather conditions
- Suited for back-up due to high storability
- Dense transport and storage infrastructure

Investments in the transmission grid have seen continuous increases since 2012

Historical investments in the German natural gas network
in €bn; based on network development plan

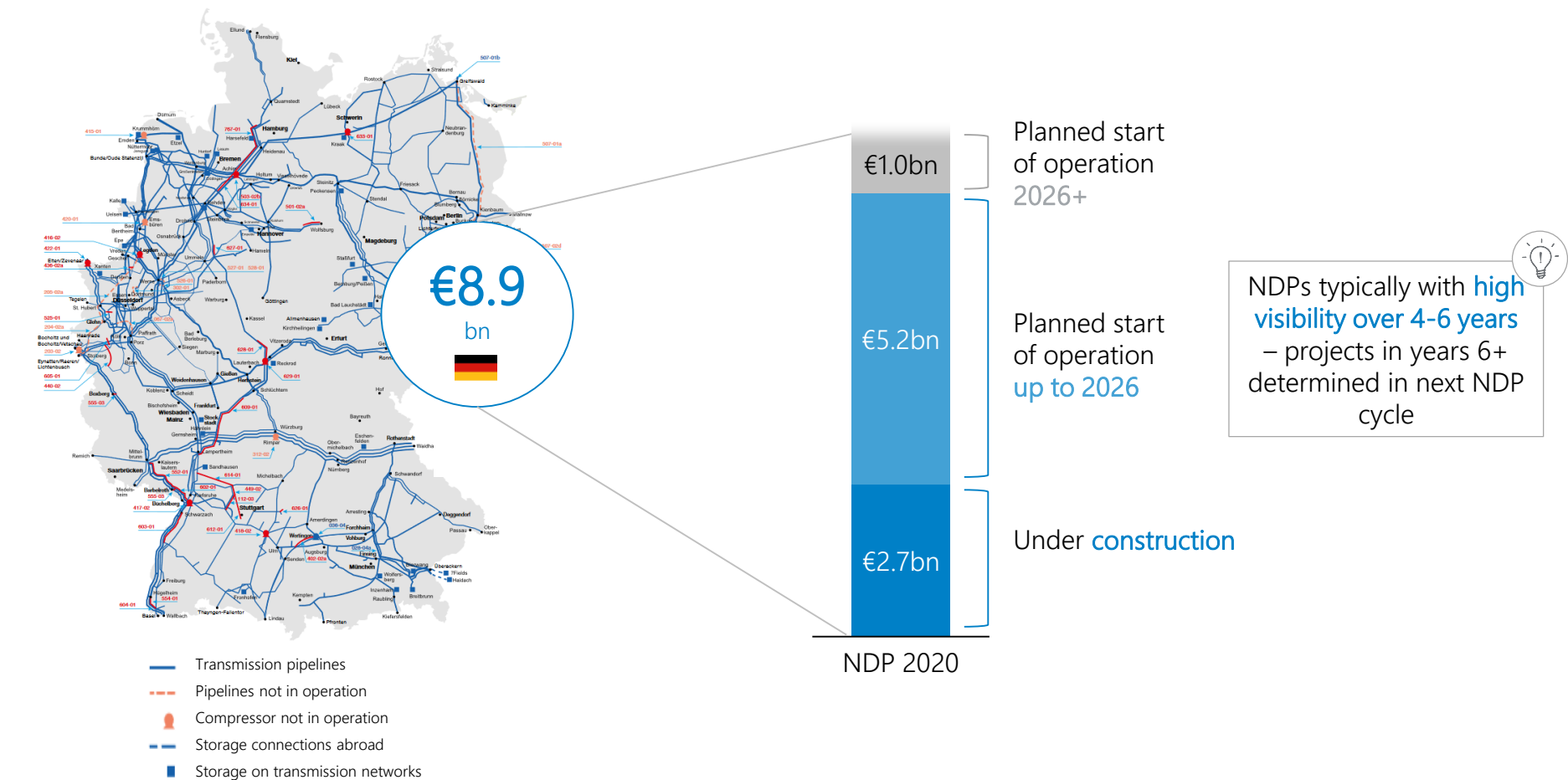


Network development plan (NDP)

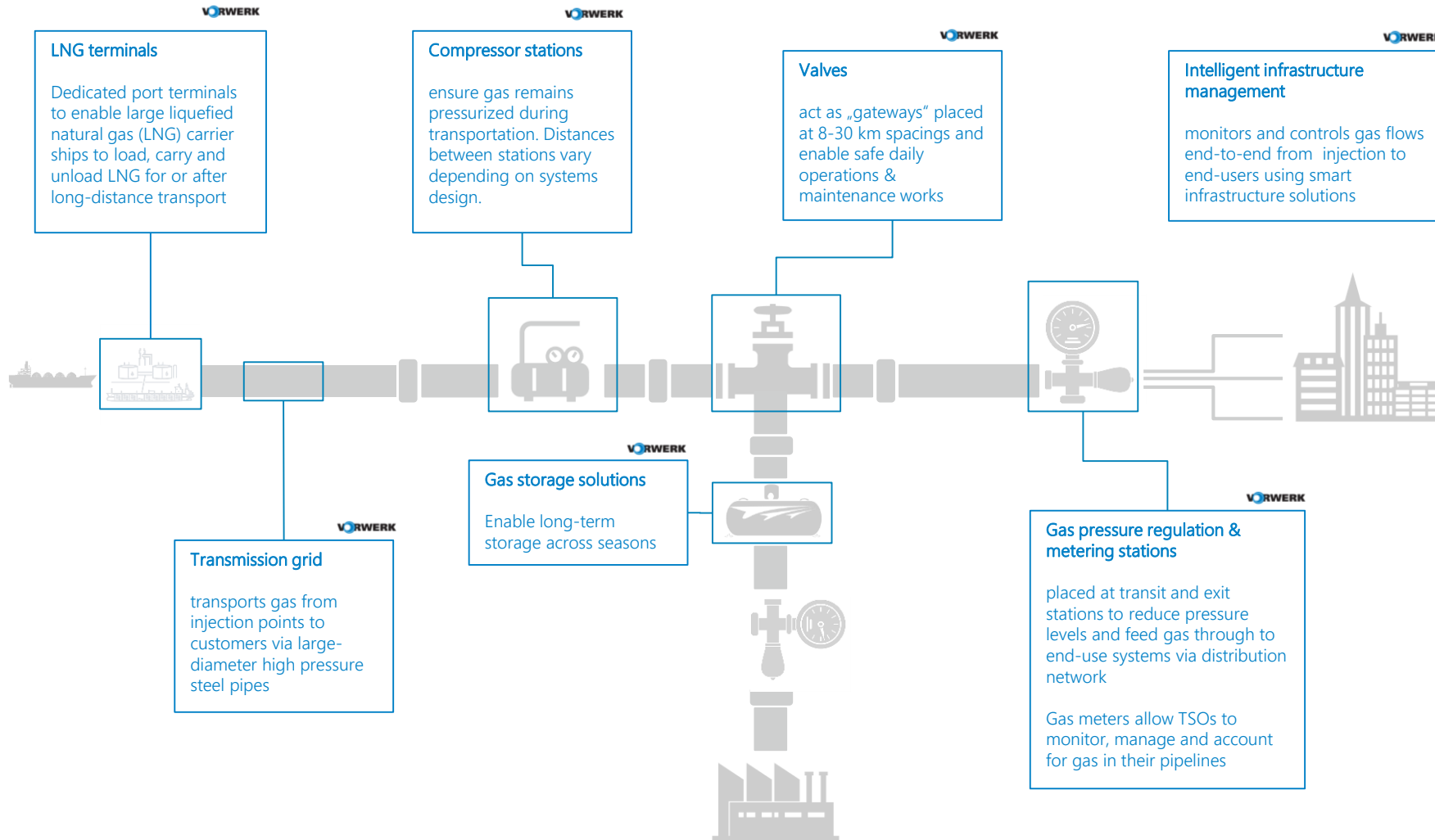
- Developed and published every 1.5-2 years to outline the grid expansion plan for the gas transmission network
- Contains all network expansion and upgrade measures incl. investment volumes over 10-year horizon
- Drafted on the basis of various scenario frameworks concerning the natural gas demand going forward
- Based on iterative process involving several consultation rounds with the public and experts
- Disclosure of projects and expected costs in the NDP provide high revenue visibility and certainty of execution

Investments in the German gas transmission grid of >€5bn over the next 5 years

Planned investments in the German natural gas infrastructure in €bn

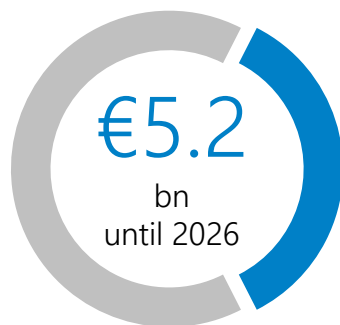


VORWERK covers all critical components of the gas transmission grid



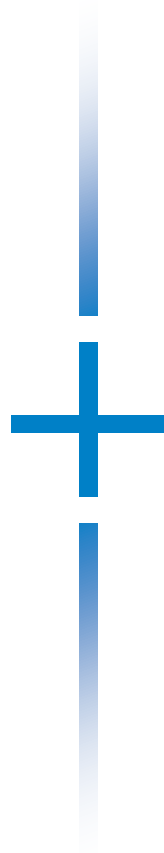
VORWERK has a unique track-record and is set to benefit from strong projects pipeline from NDP as well as additional investment opportunities

Network development plan



~35%

share of NDP projects 2012-2018 with VORWERK participation¹



Additional market opportunities



- Large industrial gas consumers
- Dedicated on-site power plants



- Pipeline rerouting
- Parts replacement
- Upgrades



- International or cross-border projects not covered by German NDP



- Inspections
- Function checks
- Route maintenance
- 24/7 standby services

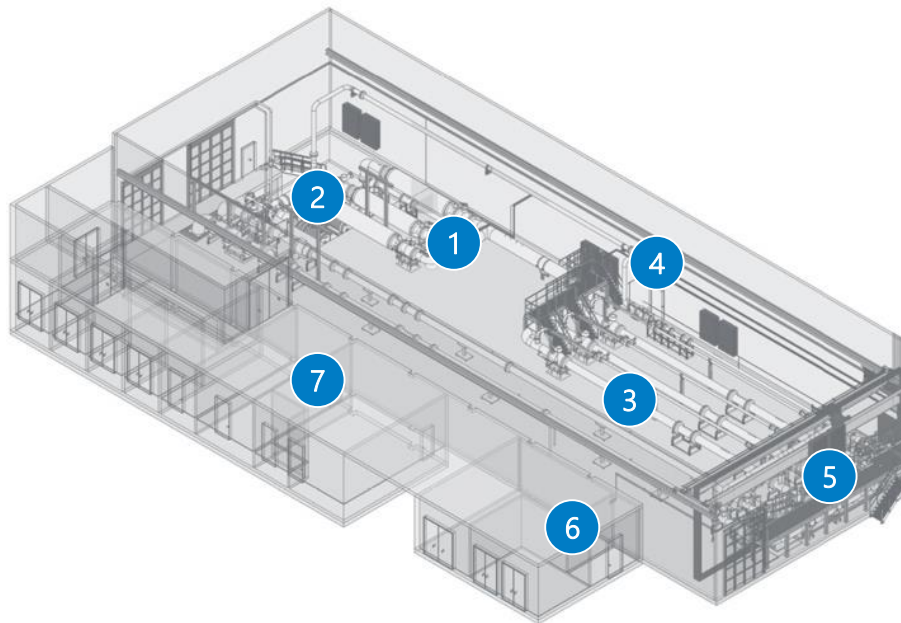
~€5
bn
until 2026

¹) Based on all projects contained in gas network development plans 2012-2018 >€2m
Source: NDP 2012-2018, NDP 2020-30 Gas (Draft); Company data

With the Closed Loop pigstar calibration facility VORWERK set the standard for gas meters

Case study:

Closed Loop pigstar (CLP) calibration facility for gas meters



Technology highlights

- World's leading **high-pressure gas meter test facility** located in Dorsten, Germany
- Home to the **national standard for high-pressure natural gas measurement**
- Used for **testing volumetric and mass flow meters** for natural gas transmission and trading

- 1 Proprietary heat exchangers
- 2 High-pressure blower
- 3 Test piece measuring station
- 4 PTB measuring station¹
- 5 Transducer
- 6 Emptying and filling compressors
- 7 Measuring station

Customer: OGE

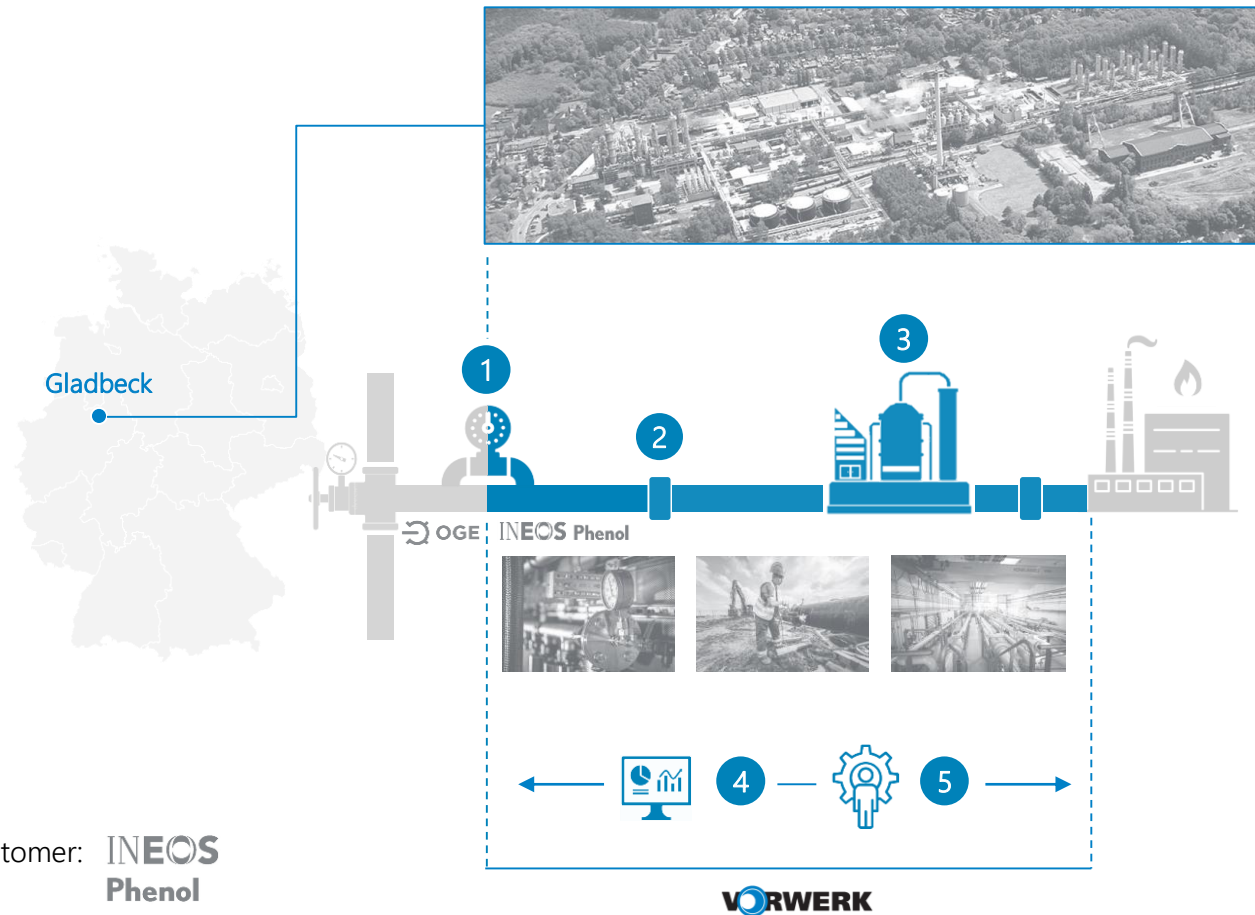
VORWERK's project for Ineos Phenol showcases our end-to-end turnkey competence

Case study:
Ineos Phenol turnkey project Gladbeck

Technology highlights

- Full turnkey project including energy grid, transformation and recurring operation & service
- Connection of on-site gas-fired power plant to transmission grid

- 1 Metering station at connection point to OGE transmission grid
- 2 Dedicated 1.3 km gas pipeline on client property (incl. CCP)
- 3 Gas pressure regulating and metering station at connection to gas-fired power plant
- 4 Operational management of complete on-site gas system
- 5 Recurring service & maintenance contract



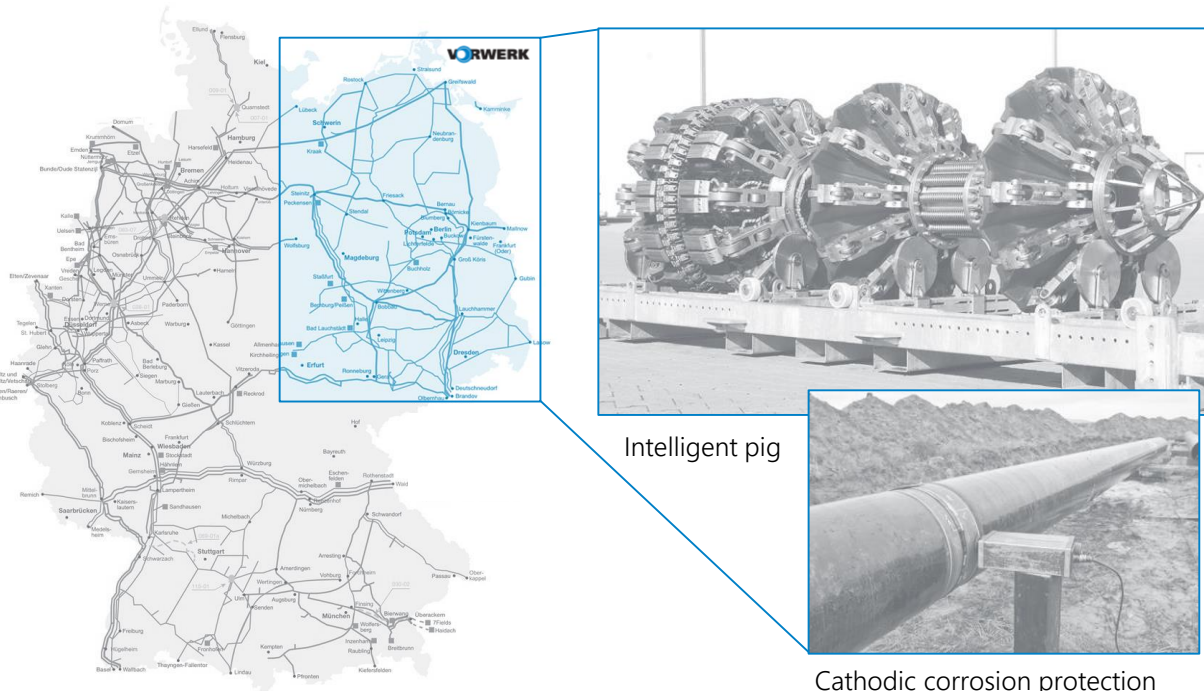
VORWERK maintains and operates the largest part of the gas network in Eastern Germany

Case study:

Ontras service & operation contract for East German gas transmission grid

Technology highlights

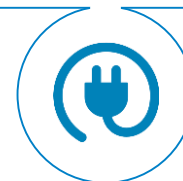
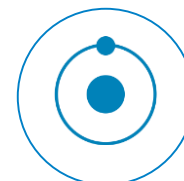
- 10-year service, maintenance and operation contract with Ontras
- Full range of maintenance and operations services associated with running a transmission grid



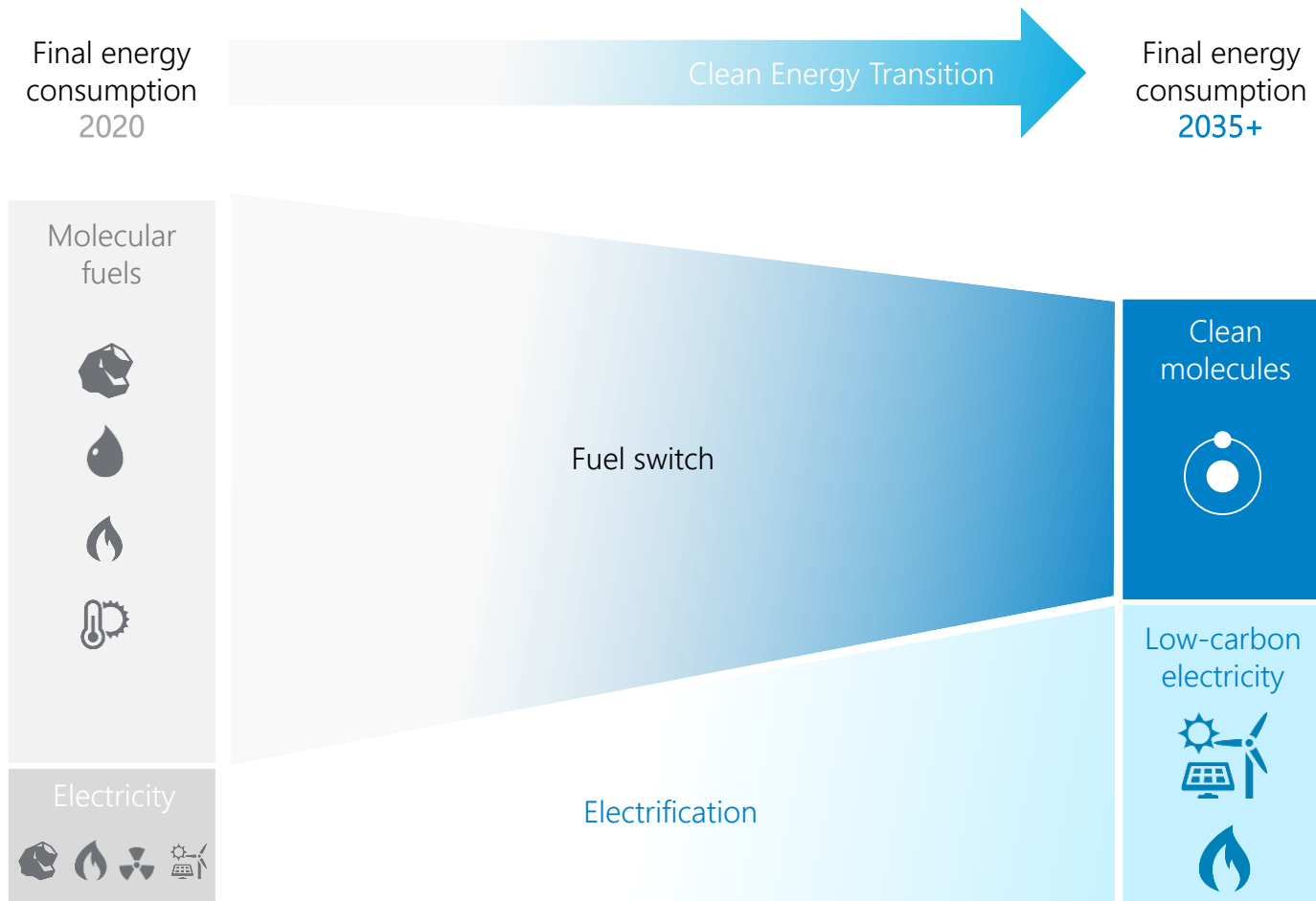
- Electrotechnical installations
- Control of galvanic anode systems
- Plant maintenance and inspection
- Revision/ repair of CCP systems
- Remote monitoring
- 24/7 standby services

Customer:  **ontras**
Gastransport GmbH

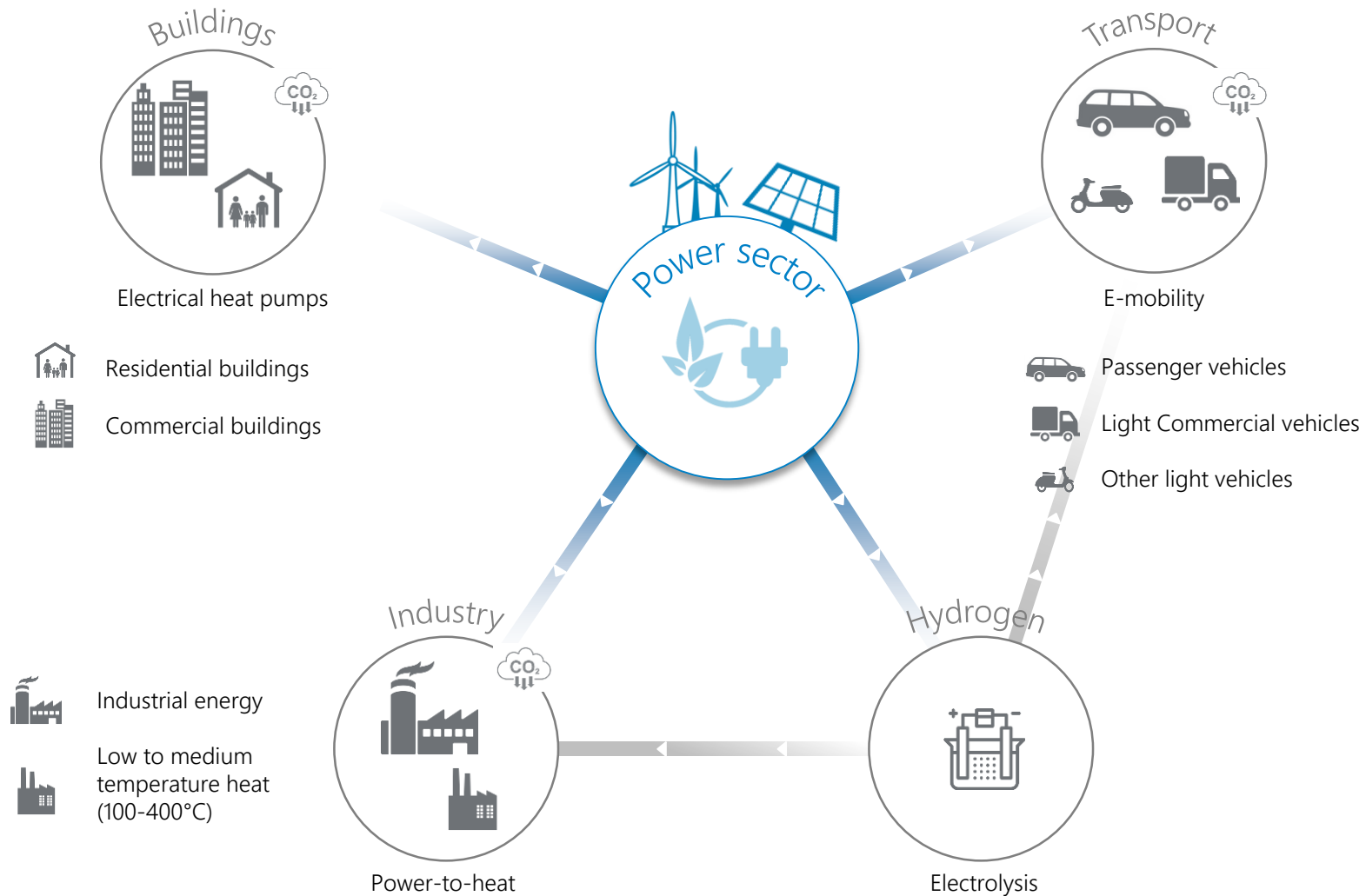
Our electricity opportunity



The energy transition requires large-scale electrification



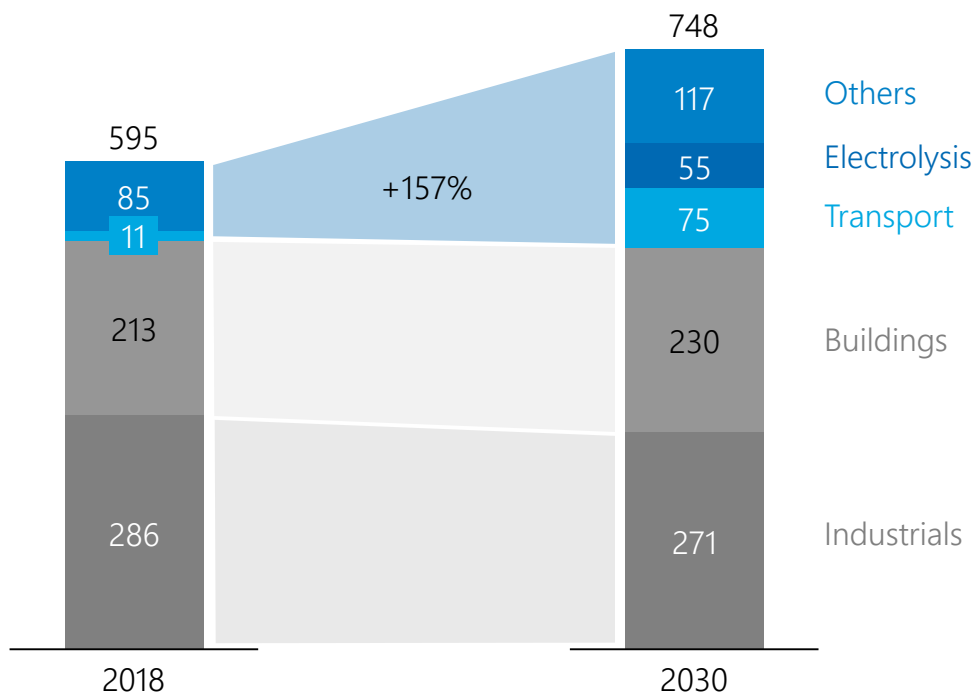
The power sector is the key to decarbonizing the economy



Significantly increased demand for electricity across sectors

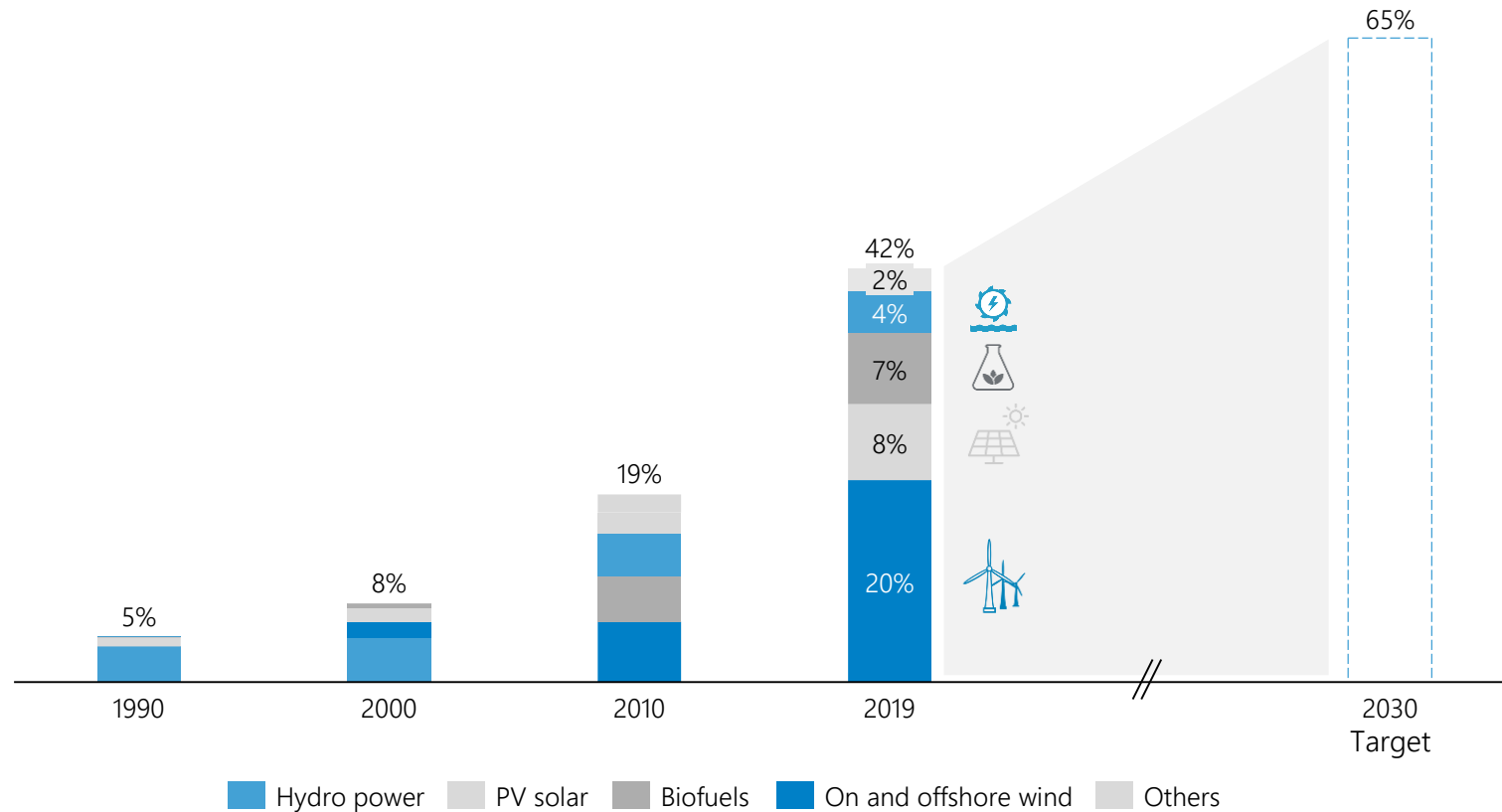
Gross electricity demand in Germany

TWh



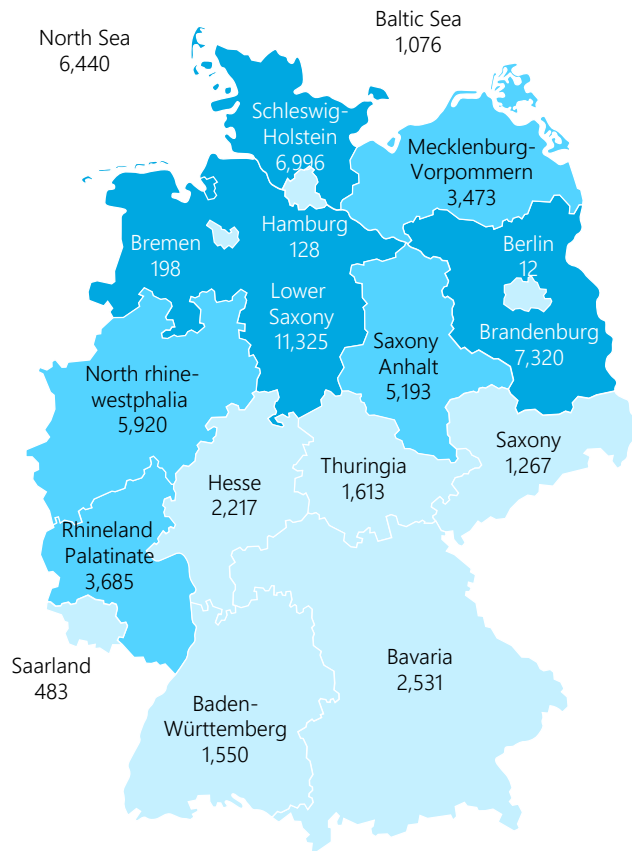
To enable decarbonization, electrification is becoming increasingly carbon-neutral

Share of renewable energy in total electricity generation

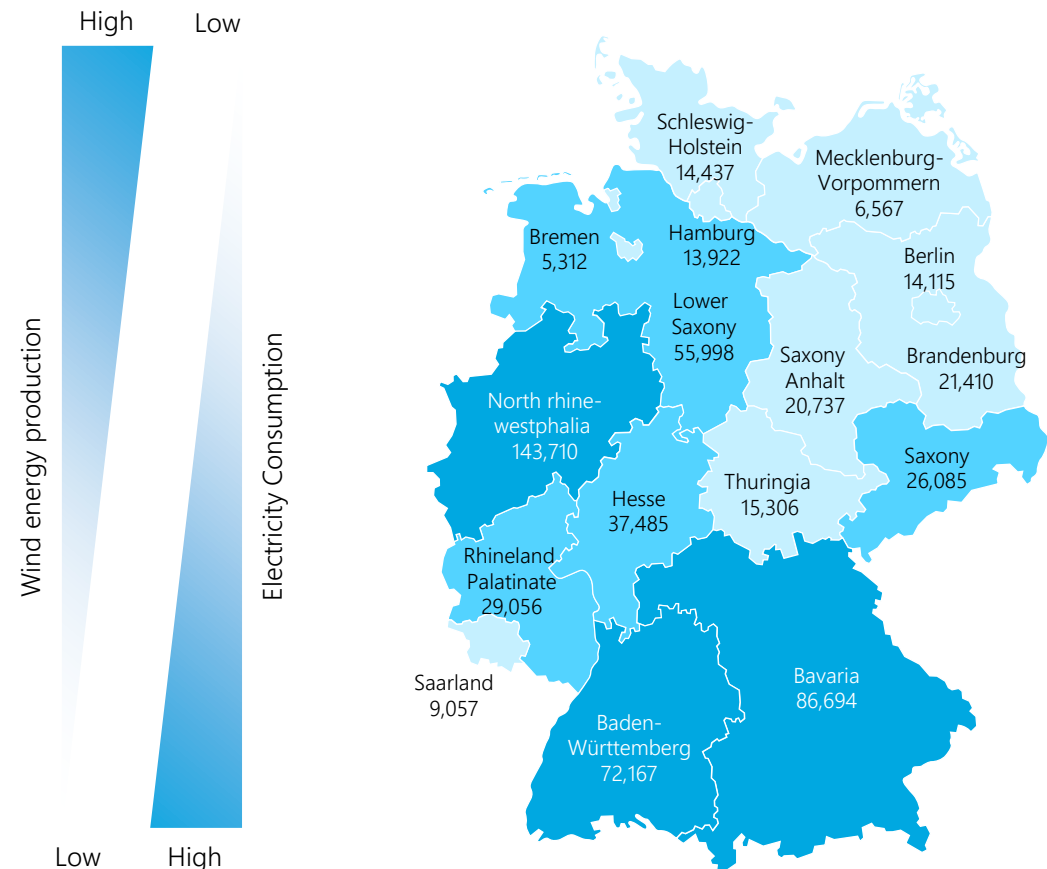


In Germany, energy generation and consumption are becoming increasingly disparate

Germany Wind Energy Production by State in MW



Germany Electricity Consumption by State in million kWh



To enhance transmission capacity, Germany is realizing four major electricity highways

1 A Nord

Route: Emden Ost (Lower Saxony) to Osterath (North Rhine Westphalia)

Length: approx. 300 km

Capacity: 2 GW

Operator: Amprion

Planned start of operation: 2025

Investment volume: €2bn

4 Suedostlink

Route: Wolmirstedt (Saxony-Anhalt) to Isar (Bavaria)

Length: approx. 539 km

Capacity: 2 GW

Operators: TenneT 50hertz

Planned start of operation: 2025

Investment volume: €5bn

2 3 Suedlink

ROUTE 2

Route: Brunsbüttel (Schleswig-Holstein) to Großgartach (Baden-Wuerttemberg)

Length: approx. 684 km

Capacity: 2 GW

Operators: TransnetBW TenneT

Planned start of operation: 2026

Investment volume : €5bn*

ROUTE 3

Route: Wilster (Schleswig-Holstein) to Bergheinfeld West (Baden-Wuerttemberg)

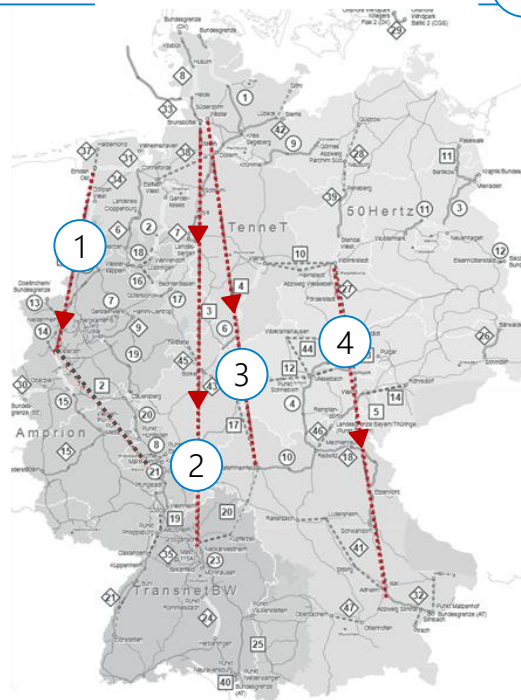
Length: approx. 532 km

Capacity: 2 GW

Operators: TransnetBW TenneT

Planned start of operation: 2026

Investment volume : €5bn*



1) Assuming equal distribution of total investment volume of €10bn among both routes of Suedlink project
Source: TransnetBW Website; Federal Network Agency; Amprion Website, Kurier, EW online, A-Nord, PV Magazine

To promote public acceptance of DC projects, underground cabling is required by law



German cabinet opts for underground power cabling

Thick underground cables to transmit wind-generated power across Germany have been endorsed by federal cabinet. The plans fit with Chancellor Angela Merkel's push for renewables ahead of the Paris UN climate summit.



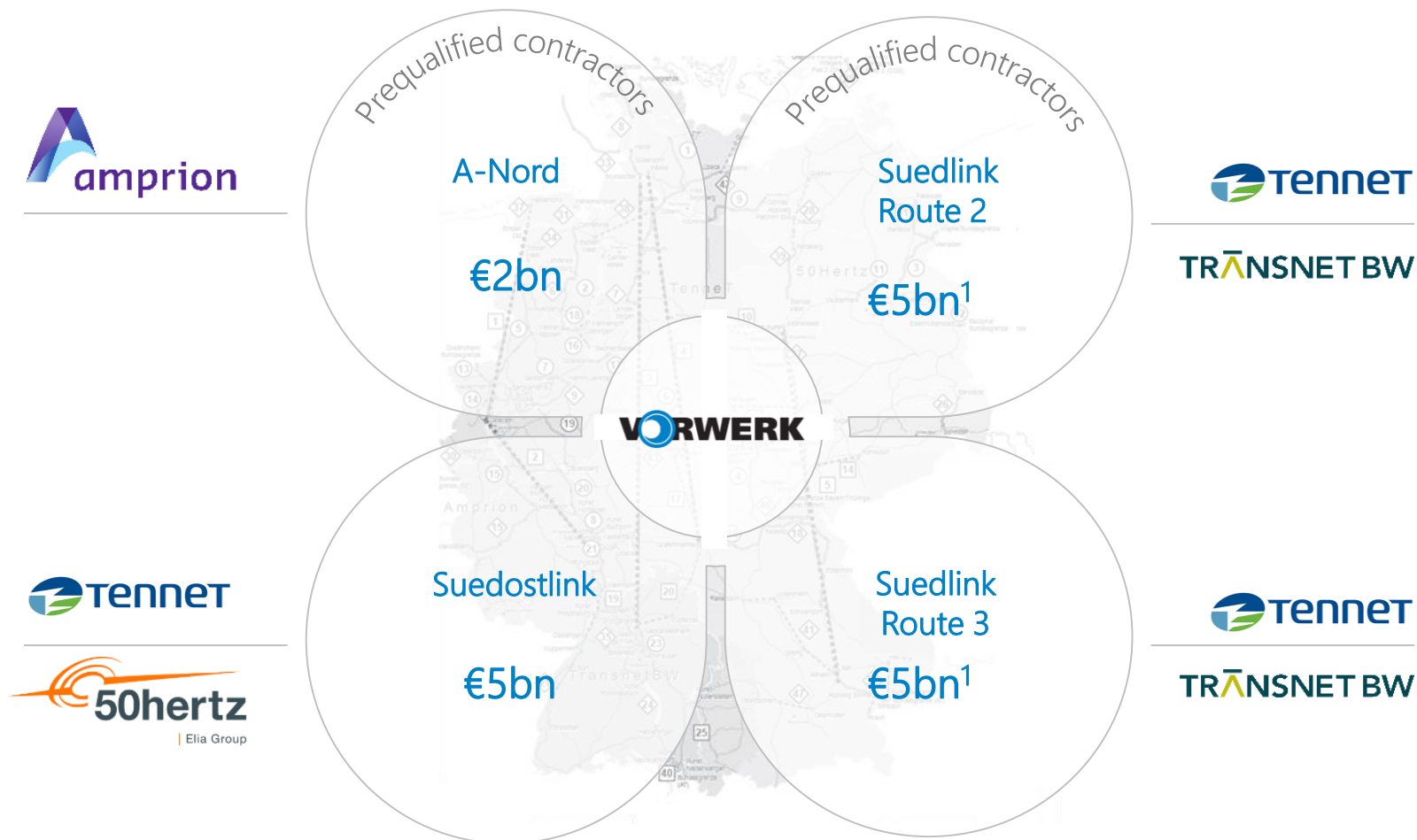
3-10x

higher costs
compared to overland lines

+€3-8bn

additional investments
for major electricity projects
due to underground cabling

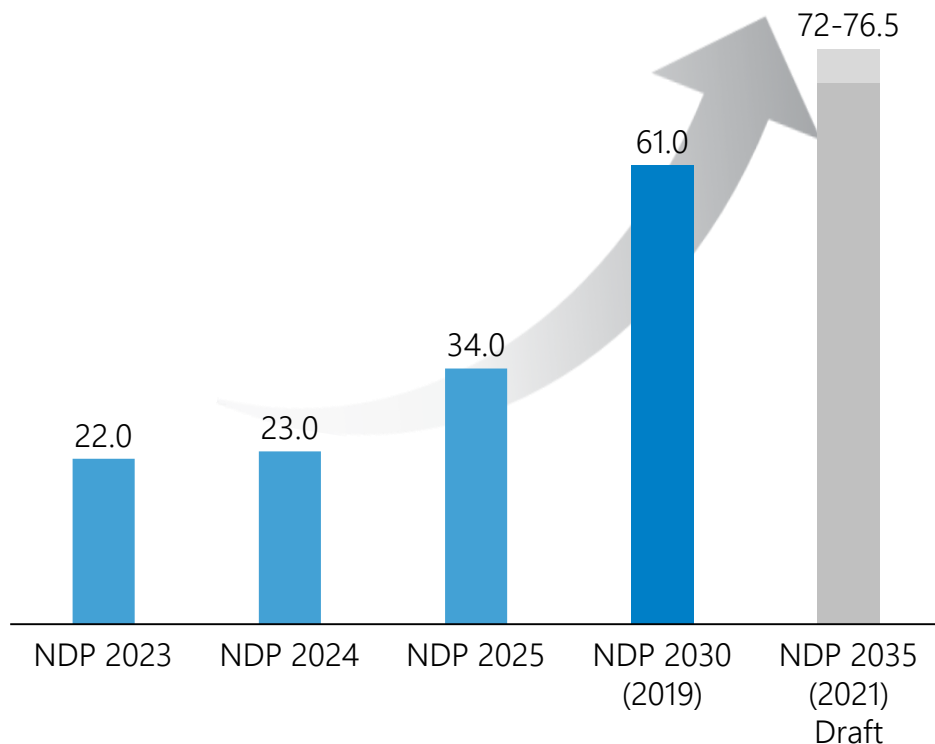
VORWERK is prequalified for all major high-voltage DC projects



1) Assuming equal distribution of total investment volume of €10bn among both routes of Suedlink project
Source: en:former; BMWi

Investments in the transmission grid have increased continuously

Investments in the German electricity network
in €bn, based on network development plan (NDP) electricity (Scenario B)

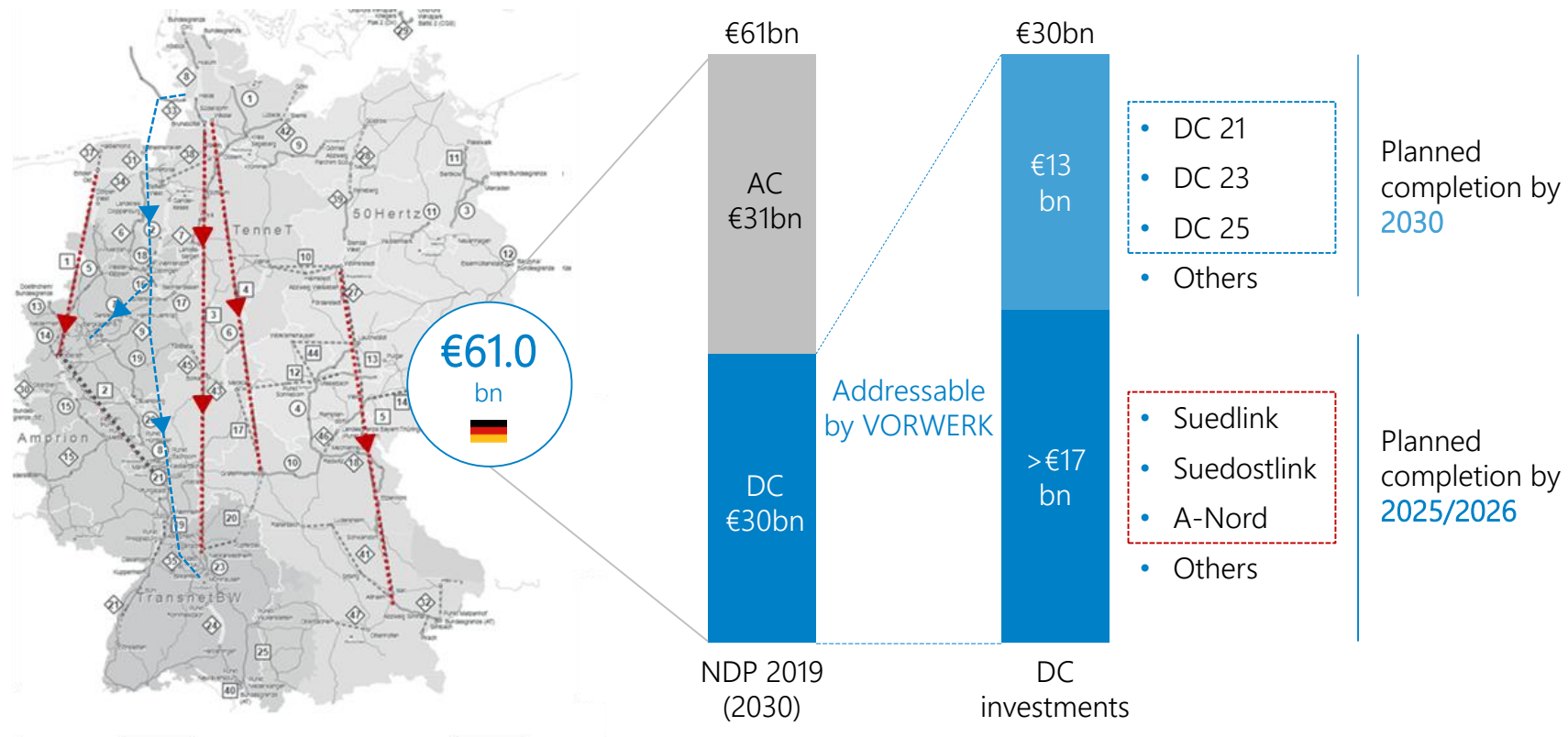


Network development plan (NDP)

- Developed and published every 1.5-2 years to outline the grid expansion plan for the electricity network
- Contains all network expansion and upgrade measures incl. investment volumes over 10- to 15-year horizon
- Drafted on the basis of various scenario frameworks concerning the electricity demand going forward
- Based on iterative process involving several consultation rounds with the public and experts
- Disclosure of projects and expected costs in the NDP provide high revenue visibility and certainty of execution

Investments in the German electricity transmission network of €61bn until 2030

Planned investments in the German electricity infrastructure¹



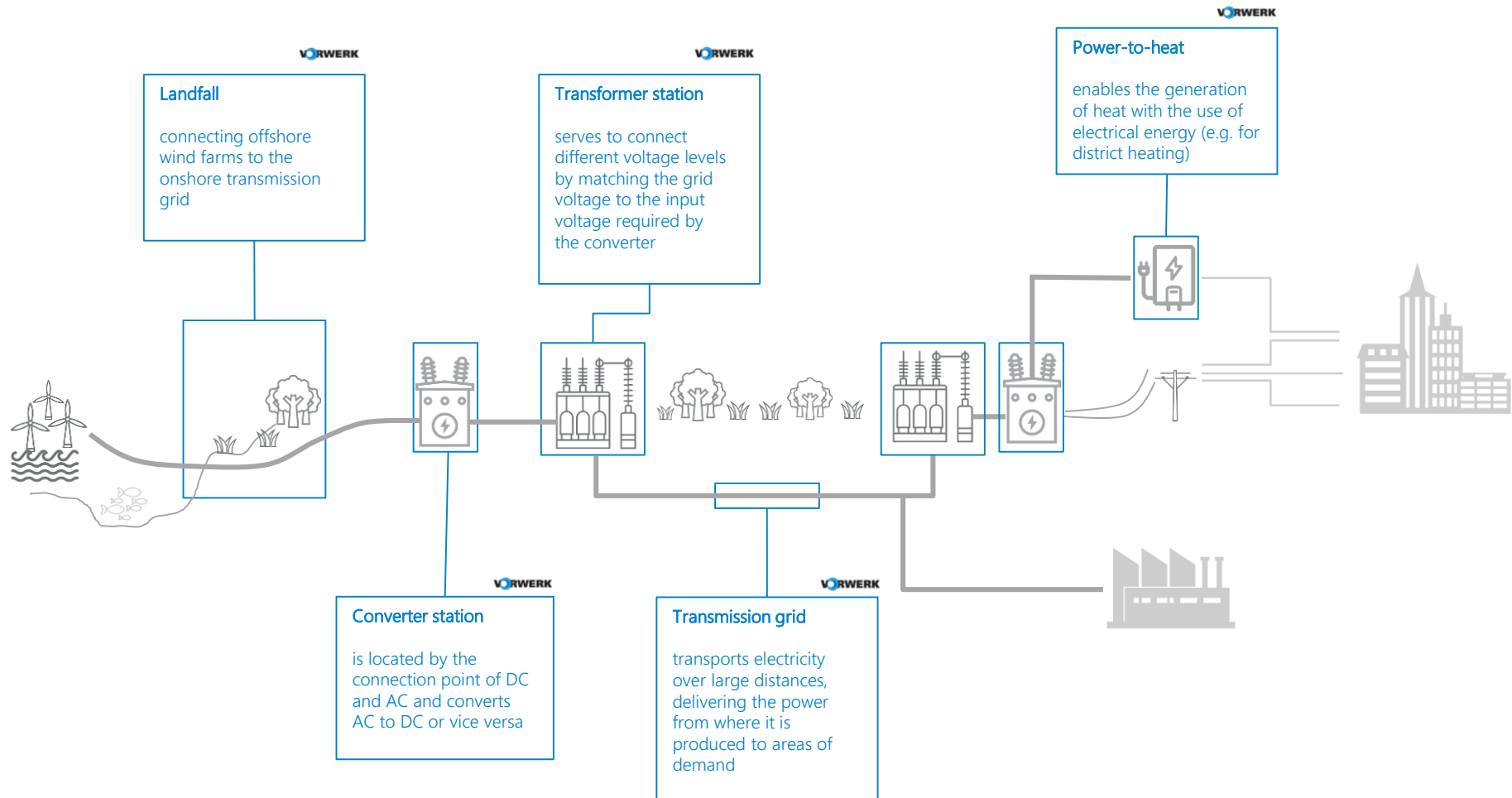
1) Investment volumes and grid expansion measures based on Scenario B 2030 in NDP 2030 (2019)

2) DC investments refer to direct current electricity grids

3) AC refers to alternative current electricity grids

Source: Network Development Plan Electricity 2030 (2019)

VORWERK covers all critical components of the electricity transmission grid



VORWERK ready to capitalize on significant market opportunities in electricity

Network development plan



~20%

VORWERK market share
based on total length of
realized cable line²



€3.4
bn
until 2026³

Additional market opportunities



- Pilot projects for underground AC connections



- Large industrial clients
- Dedicated on-site power plants



- Cable line rerouting
- Parts replacement
- Upgrades



- International or cross-border projects not covered by German NDP



- Inspections & function checks
- Route maintenance
- 24/7 standby services

1) Total NDP volume of €61bn (NDP Electricity 2030 (2019)), thereof at least €17bn of investments into the DC grid by 2026 which is by law primarily realized as underground cable

2) Estimation based on projects included in the Offshore NDP 2025 (Version 2015)

3) Additional project volume estimated at approximately 20% of market potential from NDP projects

Source: NDP 2025 Electricity (Version 2015); management estimates; company data

VORWERK enables the transport of green energy from wind farms to the mainland

Case study:

DolWin 6 - 900 MW DC connection linking wind farms to the onshore grid



Technology highlights

- 45 km onshore underground cable for transporting 900 MW green offshore wind electricity from landfall to converter station in Emden
- Completion scheduled for 2023

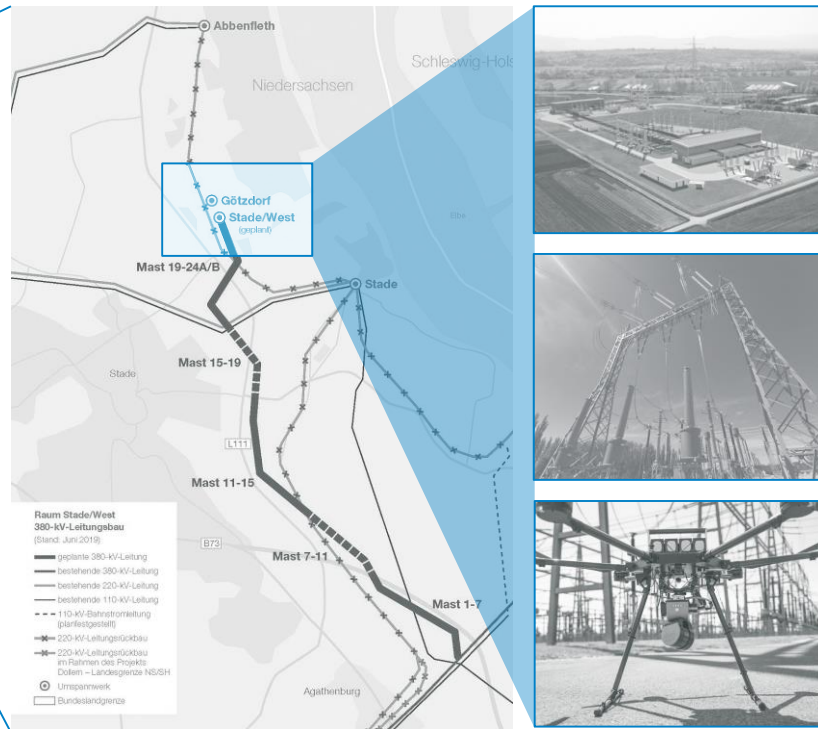
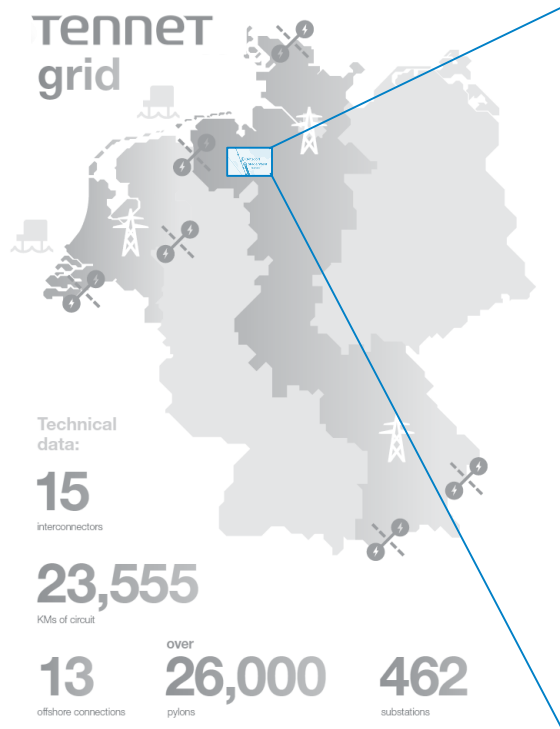
- Airborne laser scanning
- Route engineering
- HDD installation & drilling
- Cable pulling & testing
- Landfall cable pull-in
- Soil analysis and management

Client:

HD drilling

VORWERK realized the substation Stade West as turnkey project

Case study:
Substation Stade-West



Technology highlights

- Realization in the DOW chemistry park demand **highest level of safety requirements**
- Special requirements due to **construction works in areas of plants in operation**
- **GPS controlled machinery** with height limitations

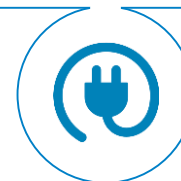
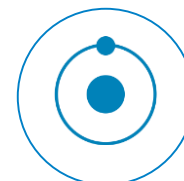
- Structural Engineering
- Site development & safety concepts
- Concrete engineering
- Pile foundation
- Specialized equipment

Client: **Tennet**

VORWERK realized the substation Stade West as turnkey project



Our hydrogen opportunity



Without clean molecules deep decarbonisation will not be possible



Transport



Buildings



Industry



Electrification

- Passenger vehicles
- Light Commercial vehicles
- Other light vehicles

- Residential buildings
- Commercial buildings

- Industrial energy
Low to medium temperature heat
(100-400°C)



Clean molecules

- Heavy-duty trucks
- Aviation
- Shipping

- Residential buildings
- Commercial buildings

- Industrial feedstock
(e.g. refinery processes, ammonia, chemicals)
- Industrial energy
High temperature heat
(>400°C), e.g. steel or cement production)

✓ Highly energy and CO2 intensive

✓ Highly dependent on fossil fuels

✓ Electrification not viable or possible

Hydrogen offers many advantages as the clean molecule of the future

Infinite supply



Most abundant element in the universe

Extremely efficient



One of the highest energy density values per mass

Zero CO₂ emissions when combusted



Combustion produces water vapour and warm air

Diverse production methods



Potential for zero-emission production methods

Non-toxic



No harm or destruction to human health or environment

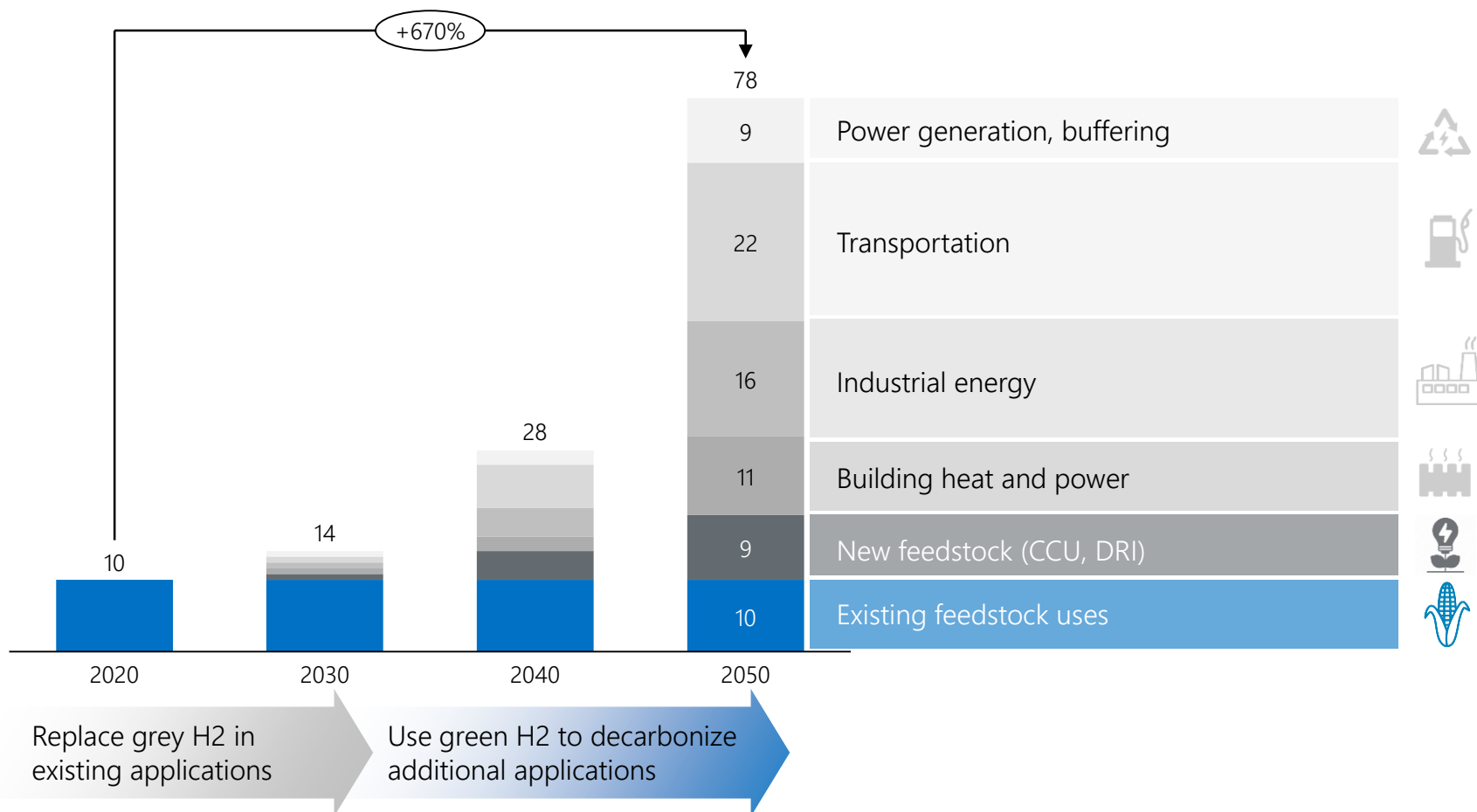
Storable



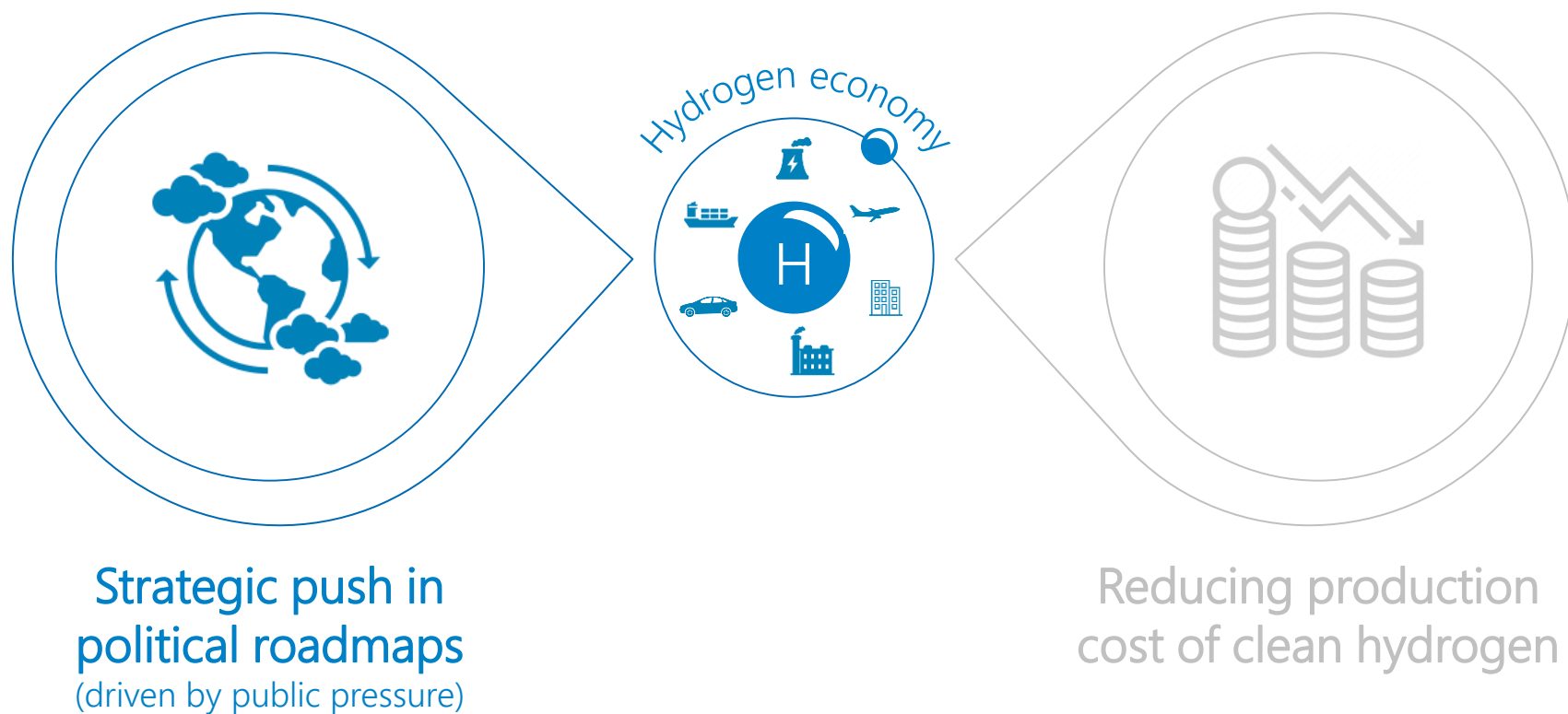
Long-term storage across seasons

Going forward hydrogen demand is expected to increase substantially

Global energy demand supplied with hydrogen
in EJ



Two main drivers accelerate ramp-up of the hydrogen economy



EU Hydrogen Strategy may finally drive hydrogen beyond the tipping point

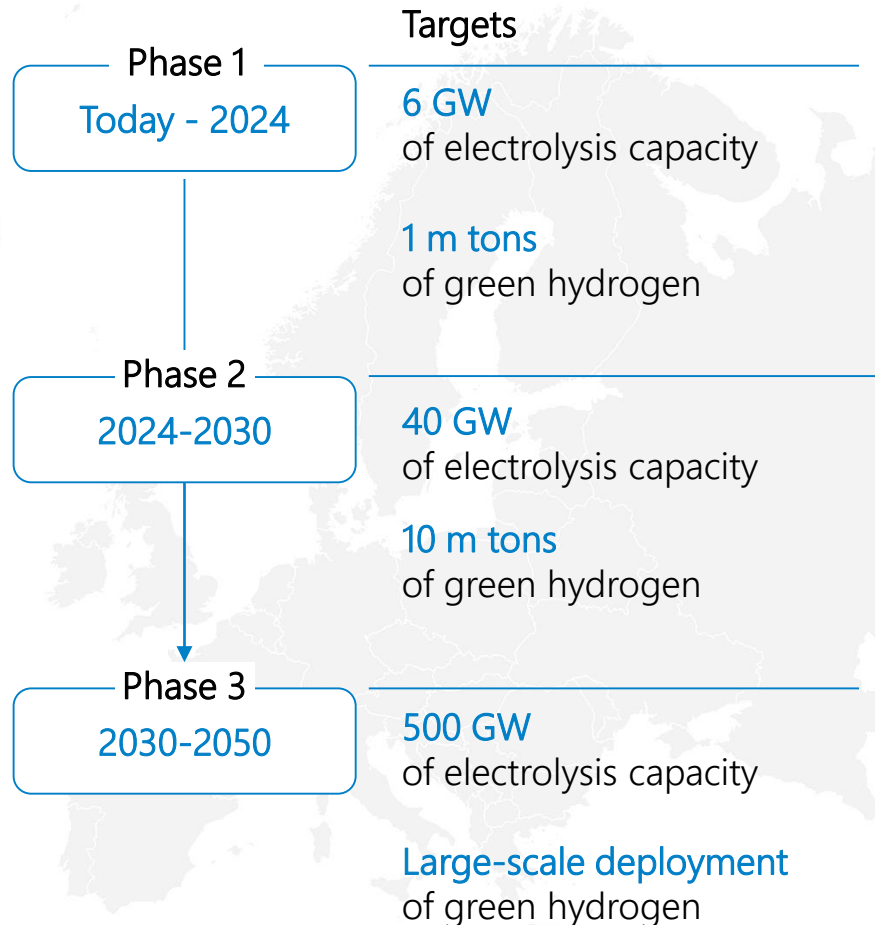
€430bn

total investment volume by 2030¹

13-14%

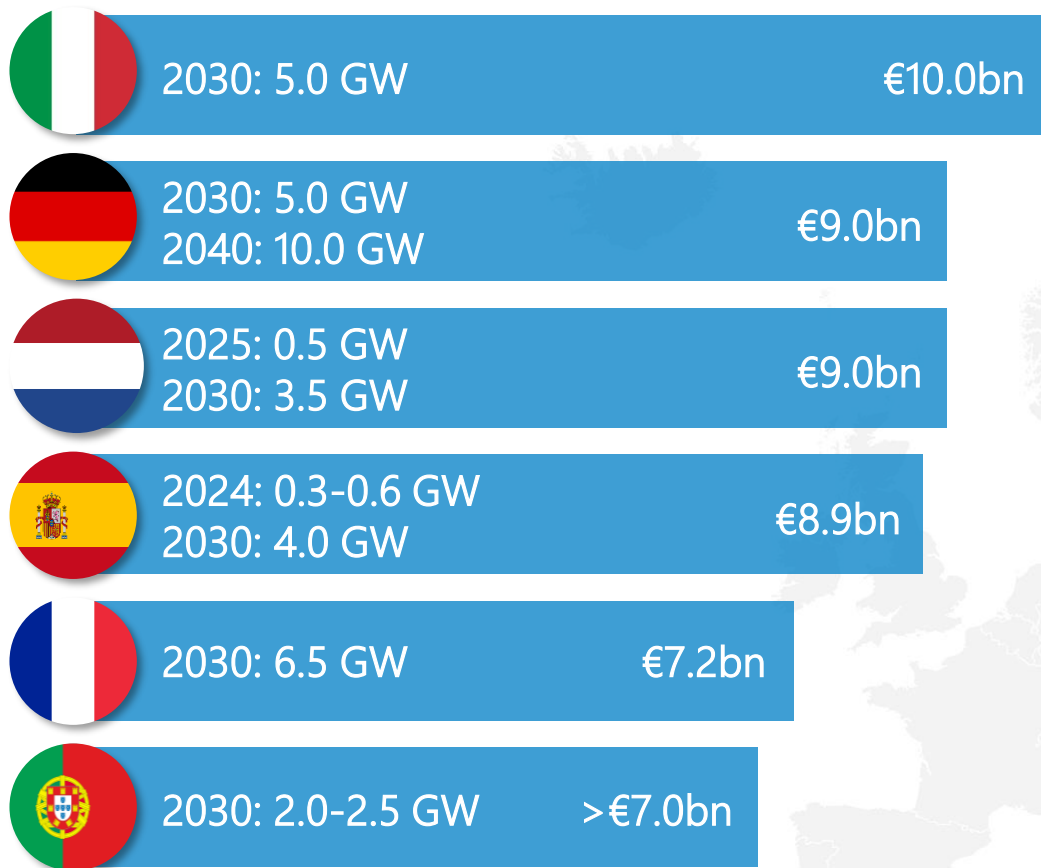
share of hydrogen in the European energy mix by 2050 (vs. 2% today)

“Many indicators signal that we are now close to a **tipping point**.”



¹) Based on a first industry blueprint proposed by the European Clean Hydrogen Alliance
Source: European Commission; European Clean Hydrogen Alliance

Many countries have taken decisive action to kick start the hydrogen economy

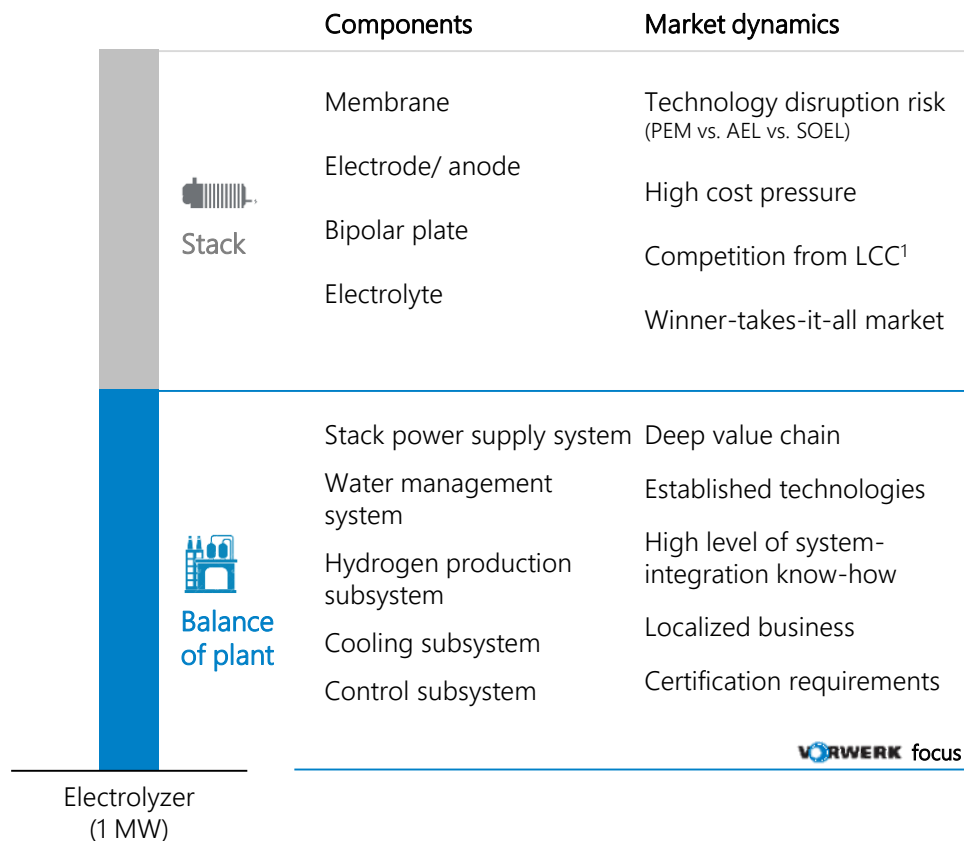


> €50bn

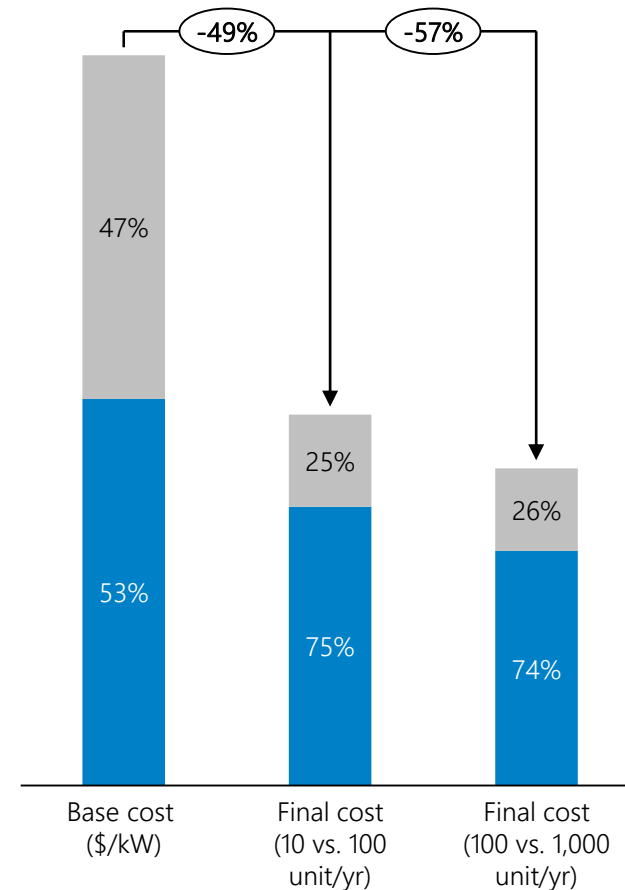
total national investment programmes into hydrogen economy

Electrolyzer stack accounts for <50% of electrolyzer cost but is under price pressure

Cost split electrolyzer production in US\$/kW

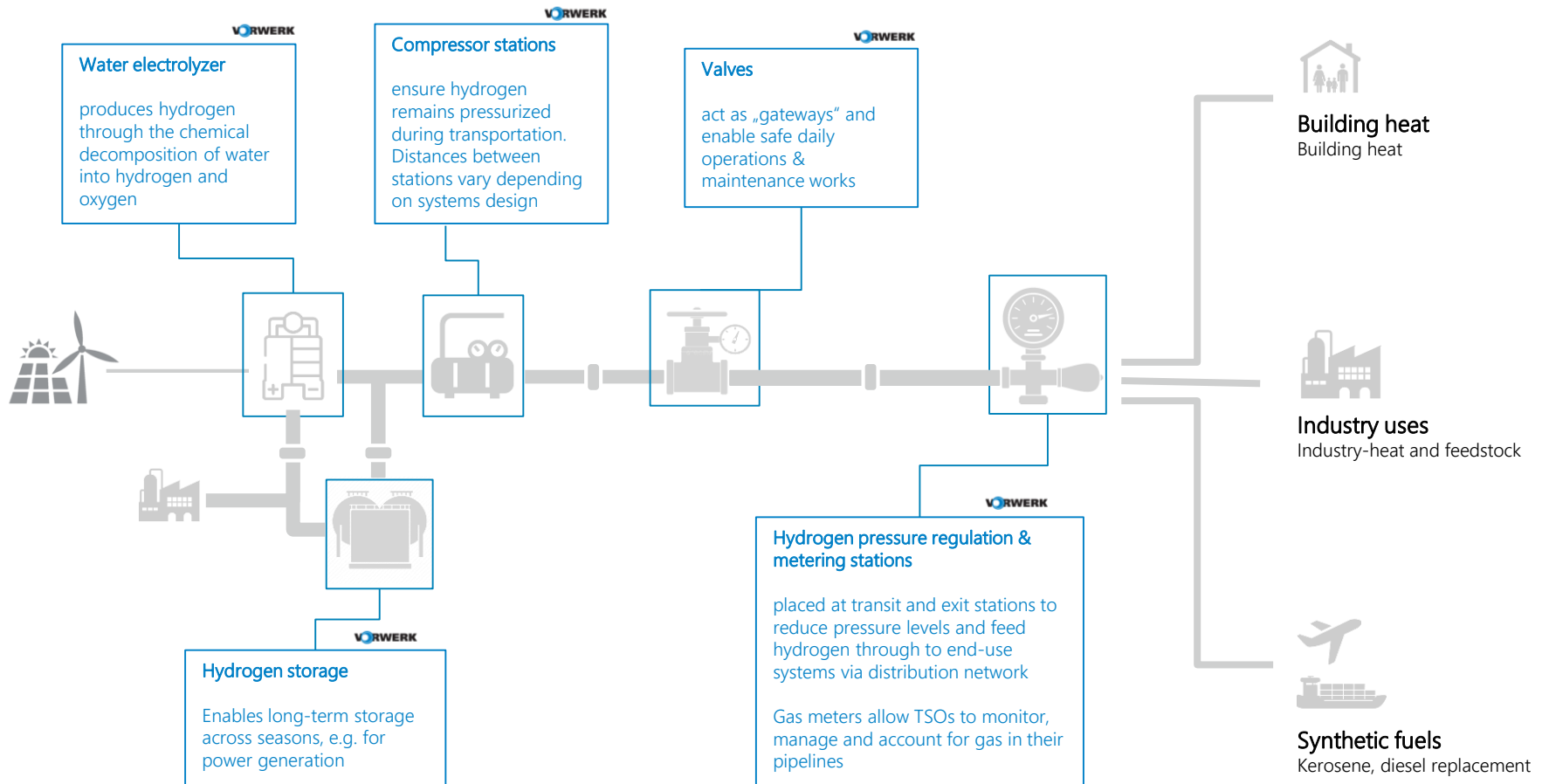


Price development electrolyzer stacks by increasing production volume, in USD, 1 MW plant

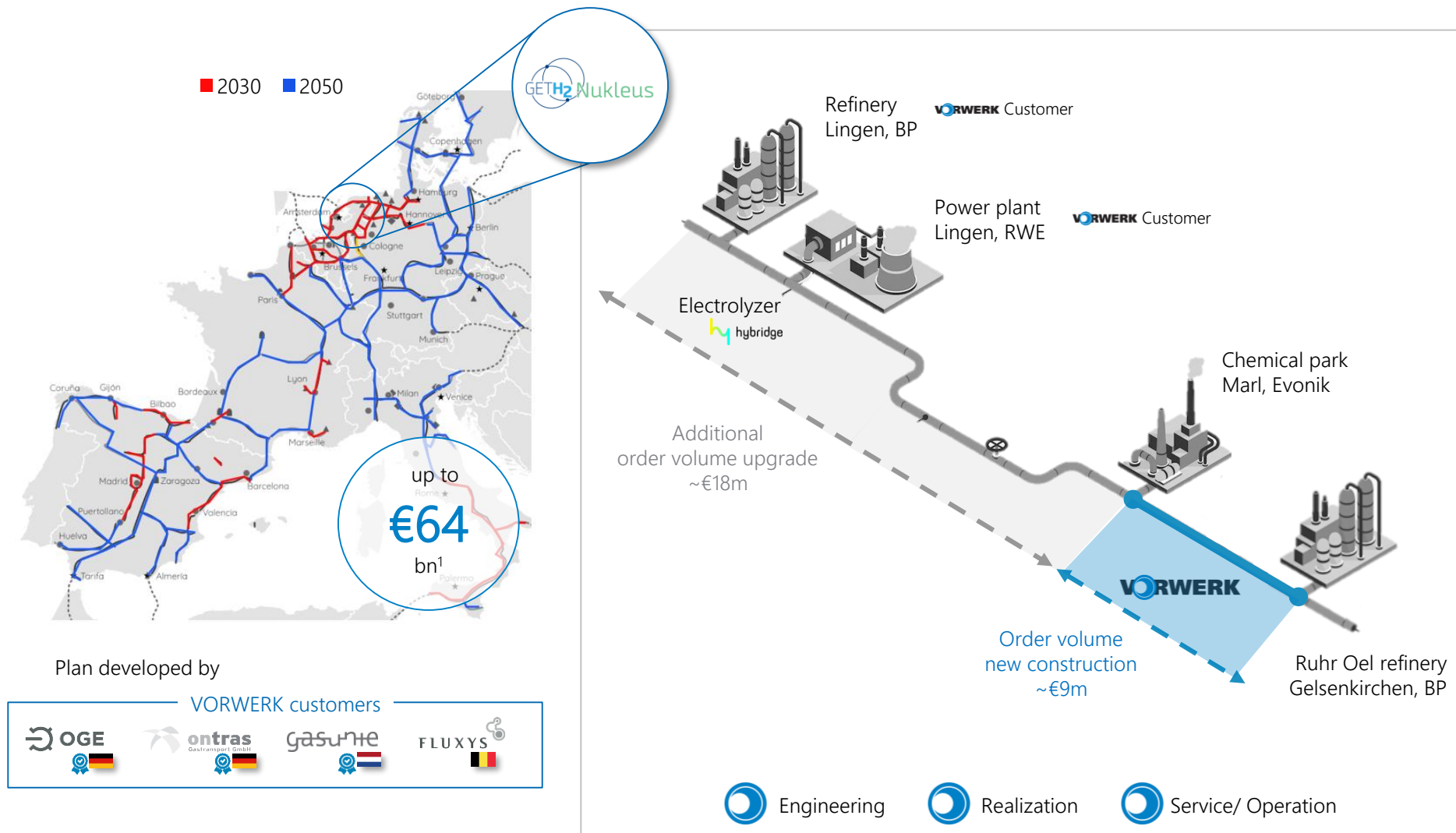


1) LCC = Low Cost Country
Source: BNEF; BNP Paribas; NREL National Renewable Energy Laboratory

VORWERK covers all critical components of the hydrogen value chain



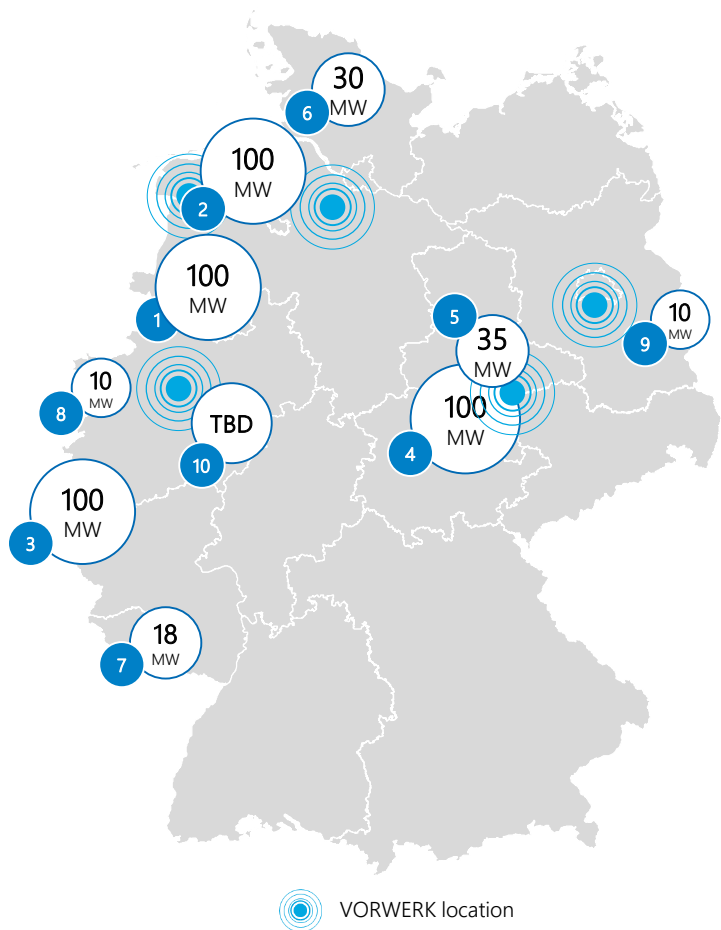
VORWERK is already working on the nucleus of the European hydrogen backbone



VORWERK Top 20 customers

In Germany, VORWERK customers are planning 500 MW of new electrolysis capacity

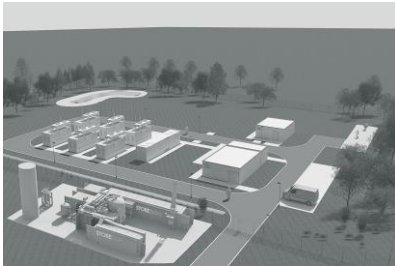
Select planned electrolyzer projects



	Location	Plant size	Planned by
1	Lingen	100 MW	
2	Diele	100 MW	
3	Wesseling	100 MW	ITM Power
4	Leuna	100 MW	
5	Bad Lauchstädt	35 MW	
6	Heide	30 MW	
7	Fenne	18 MW	
8	Metelen	10 MW	
9	Schw. Pumpe	10 MW	 Schwarze Pumpe
10	Essen	tbd	

VORWERK participated in the realization of the first German electrolyzer pilot project

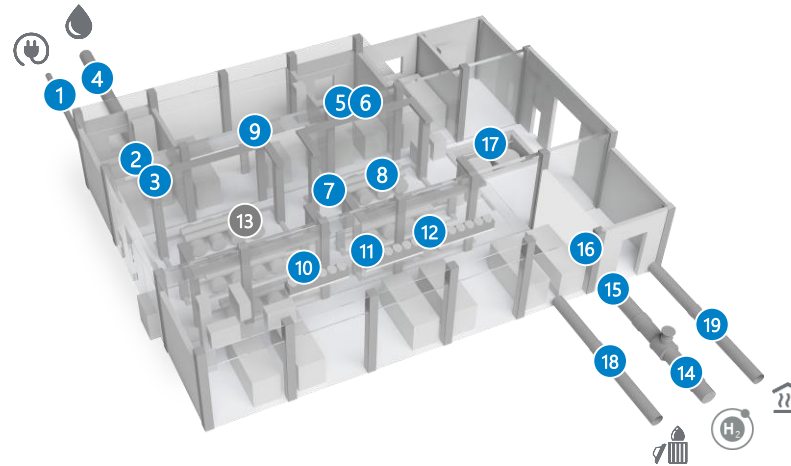
Pilot plant Power-to-Gas Falkenhagen



"World's first demonstration plant for the storage of wind power in the natural gas grid"

- 2 MW performance
- 1.6 km H₂ pipeline
- Feed-in in the long-distance gas network of ONTRAS

VORWERK's balance-of-plants electrolysis competencies¹

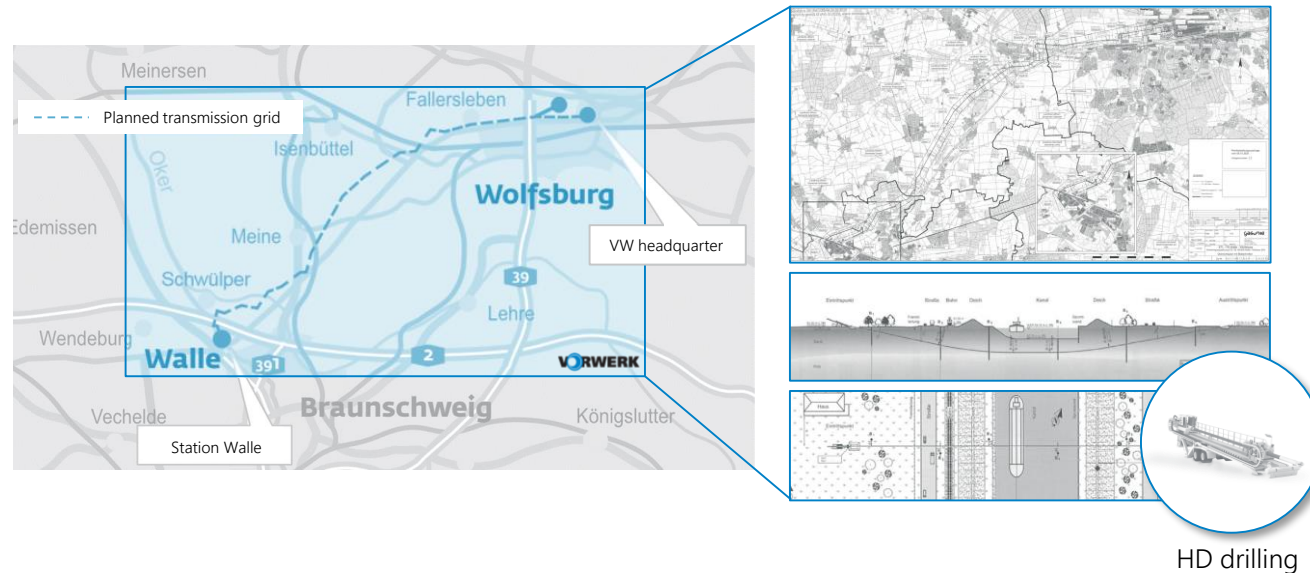


- | | | |
|-------------------------------|--|---|
| 1 Undergr. cable / cable pull | 5 H ₂ digital control system | 14 H ₂ feed-in |
| 2 Transformer design/ cabling | 6 H ₂ emergency shutdown system | 15 H ₂ measurement/ metering |
| 3 Flow metering | 7 H ₂ gas drying | 16 H ₂ gas analysis |
| 4 Water supply system | 8 H ₂ gas separation | 17 H ₂ storage |
| | 9 H ₂ gas compression | 18 Waste water management |
| | 10 Water treatment | 19 Heat distribution network |
| | 11 Water compression | |
| | 12 Heat extraction | |
| | 13 Electrolysis stack (purchase part) | |

VORWERK is realizing the most important gas infrastructure project for Lower Saxony

Case study:

Decarbonisation of industry through H2-ready pipeline Walle/ Wolfsburg



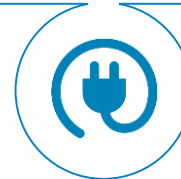
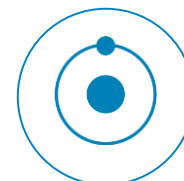
Technology highlights

- ETL 178 will lead to a **significant reduction** in CO₂ emission in Lower Saxony
- The annual **CO₂ savings** amount to around **1.5 million tonnes**
- Shift from **coal-based energy supply** to more emission-friendly **natural gas**
- In a second step **hydrogen** will replace natural gas
- **Completion** scheduled for **2021**

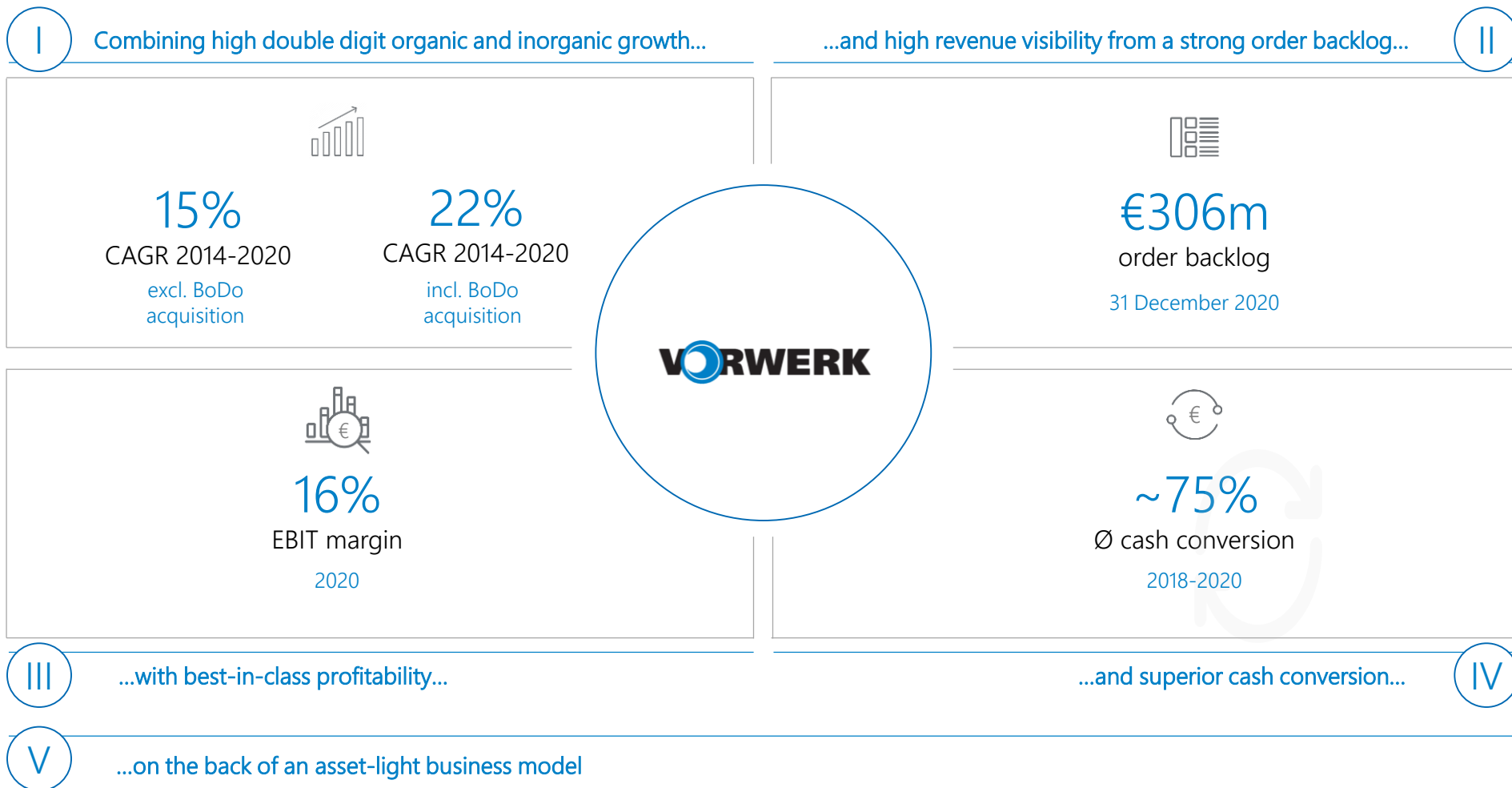
- HDD installation & drilling
- Special welding procedures
- H2 ready valve stations

Customer: **gasunie**

Financial Overview



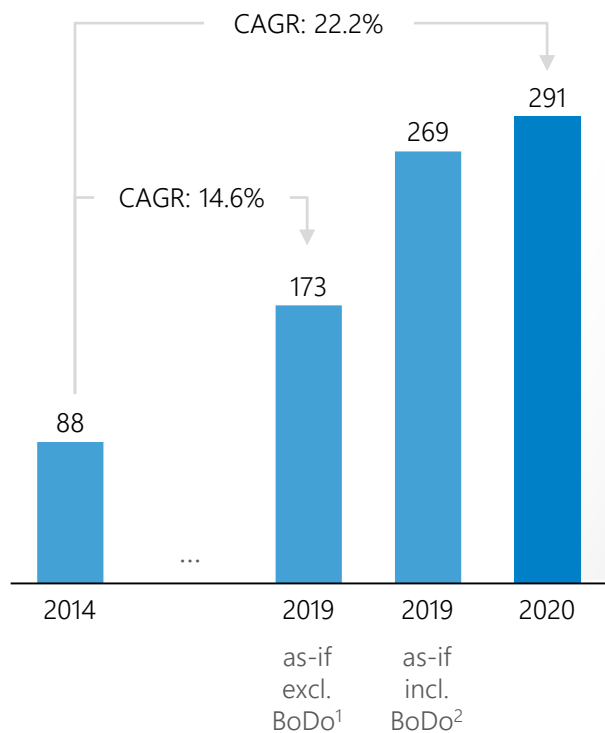
Key financial highlights



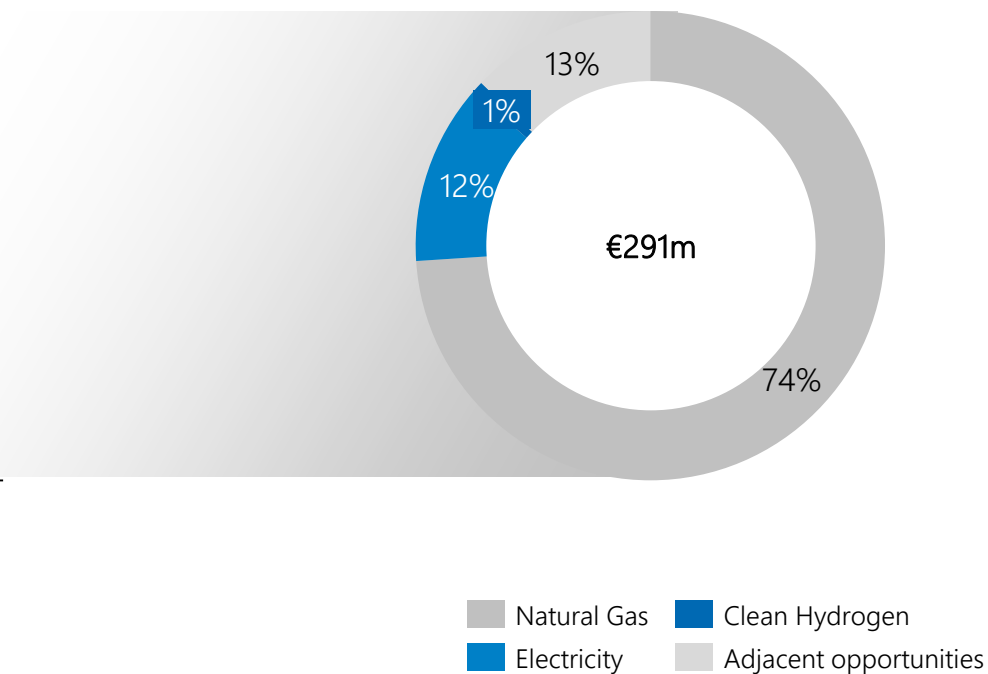


Revenue growth: Combining high double digit organic and inorganic growth

Revenue development
in €m



Revenue 2020 by segment
revenue split in %



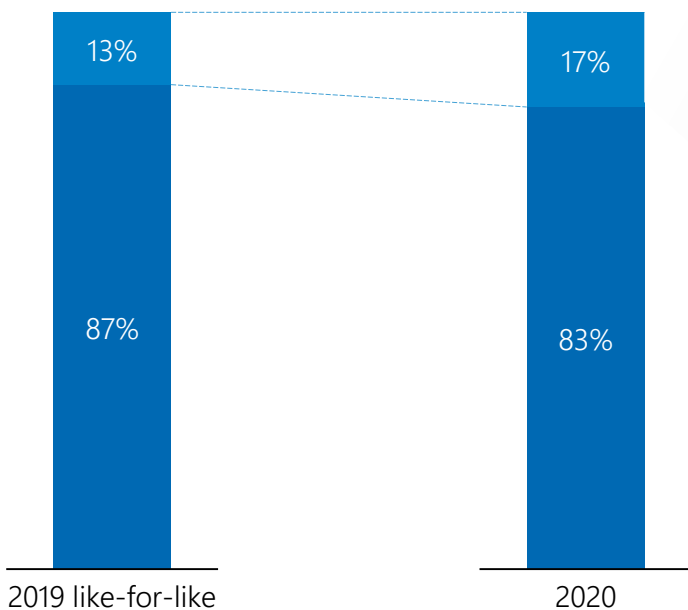
1) Presentation as if Bohlen & Doyen had not been acquired by VORWERK in 2019

2) Presentation as if Bohlen & Doyen had been part of the VORWERK group starting 1 Jan 2019; excl. discontinued operations with revenues amounting to ~€7.5m

Source: VORWERK

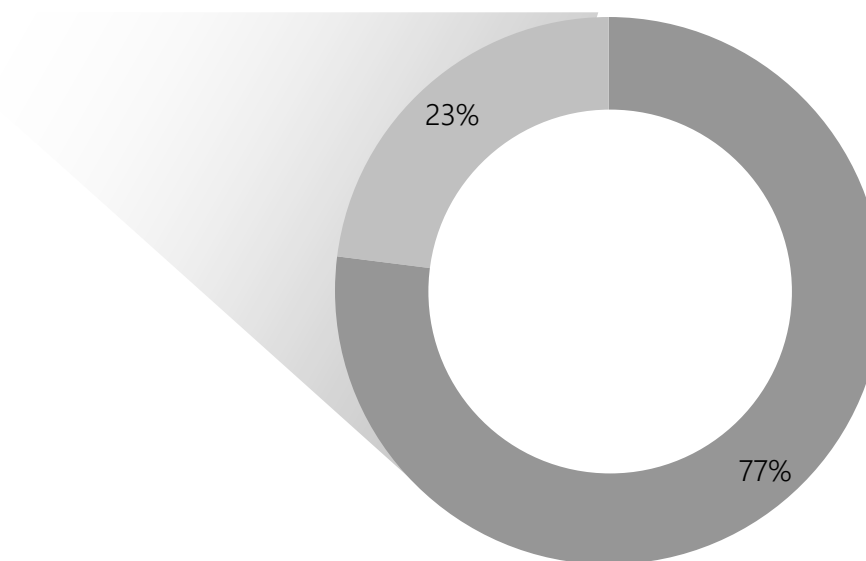
① Revenue growth: VORWERK has substantially increased service revenues

Revenue split by type



■ Project-based ■ Service

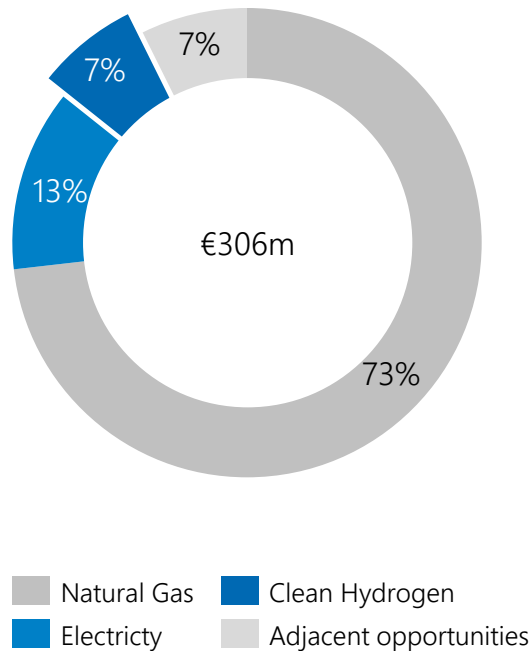
Service revenue 2020 by type



■ Recurring ■ Non-recurring

Order backlog: High revenue visibility from a strong order backlog

Order backlog
as at 31 December 2020



Project pipeline¹
name and estimated project volume

	OGE new compressor station Legden	€32m
	CENAM Closed Loop high-pressure test rig Mexico	€30m
	Amprion Corridor A-Nord	up to €300m
	TenneT requests from framework agreements Südlink/ Südostlink	€50-100m per lot
	TenneT BorWin 5 DC connection	€50m
	Wärme Hamburg long distance heat pipeline Südleitung	€63m
	OGE hydrogen feed-in plant Haren	€3-5m
	Magdeburg 1-5 MW electrolyzer	€5-17m

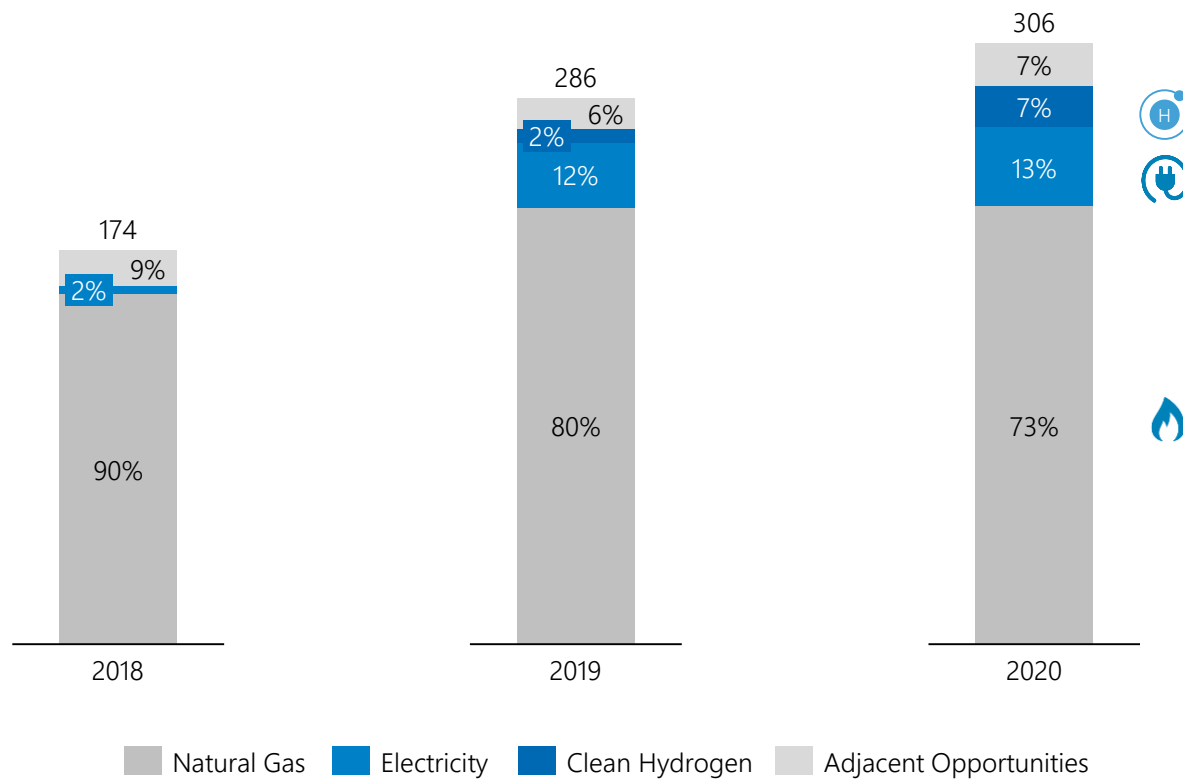
Gas
 Electricity
 Hydrogen
 Heat

¹) Contract values are based on current estimates and may change during the award procedure, not yet included in order backlog
Source: VORWERK



The order backlog clearly reflects changes in the German energy mix

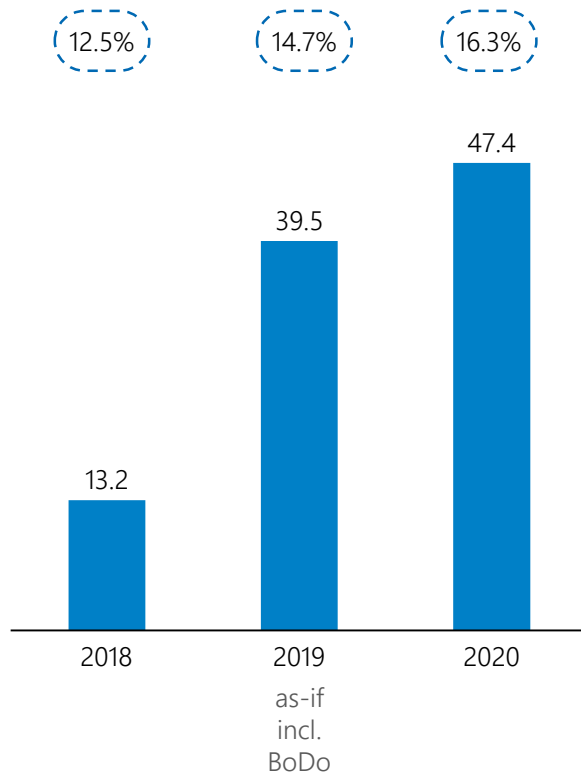
Order backlog
as at 31 December



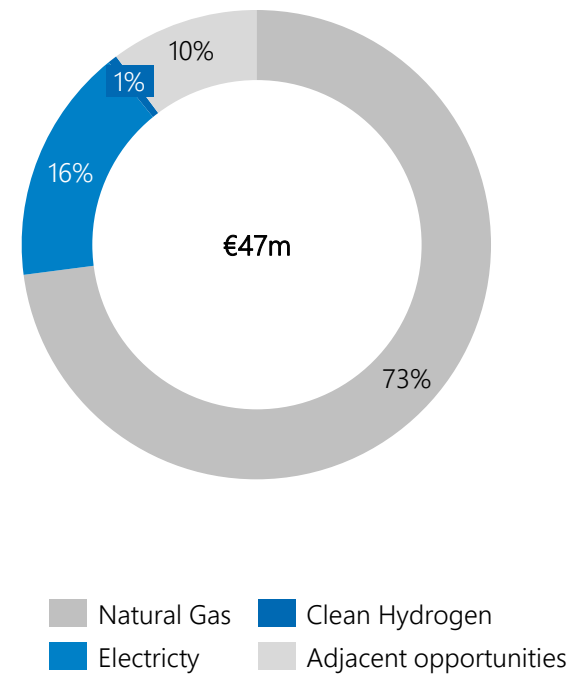


Profitability: Best-in-class profitability profile

EBIT adj.
in €m and margin in bubbles



EBIT adj. 2020 by segment¹
as % of EBIT adj.

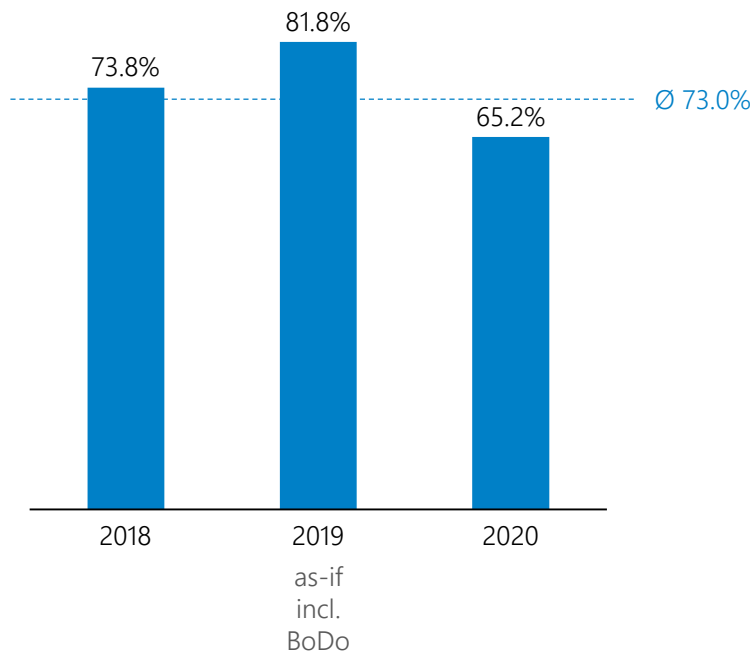


1) Reconciliation of €177T are not considered
Source: VORWERK

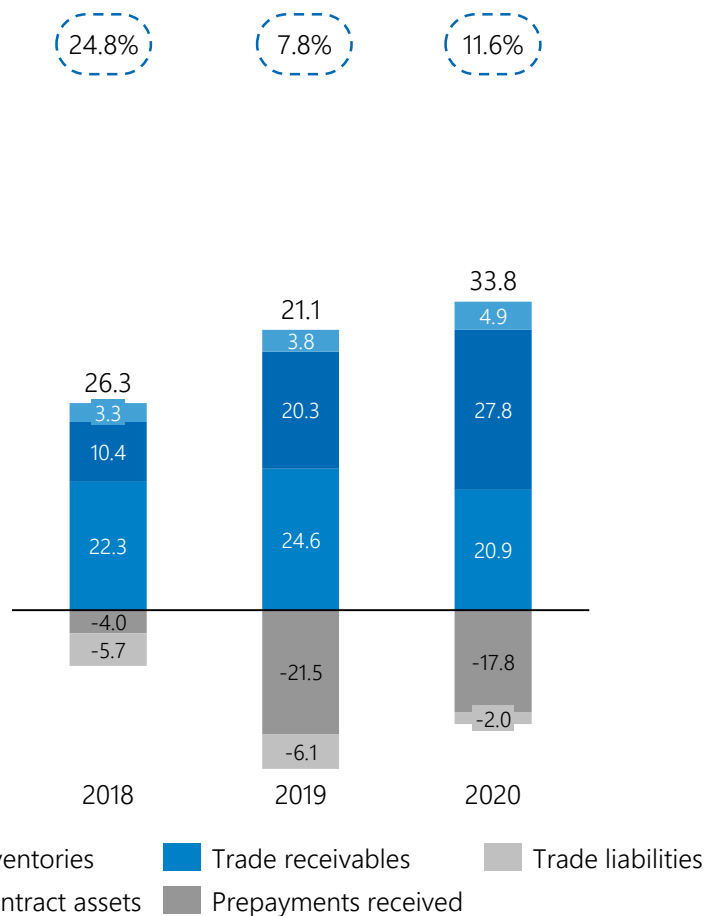
IV

Cash Conversion: Proven ability of strong cash generation

Cash conversion¹
in % of EBITDA



Trade working capital
in €m and as % of revenue



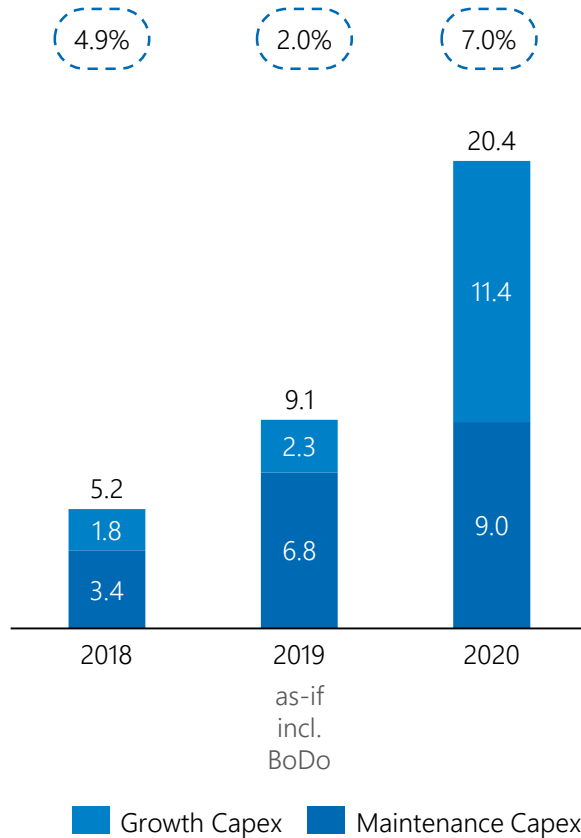
1) Cash conversion calculated as (EBITDA-Capex) / EBITDA
Source: VORWERK



Asset-light: Fully invested and asset-light platform, ready-to-scale

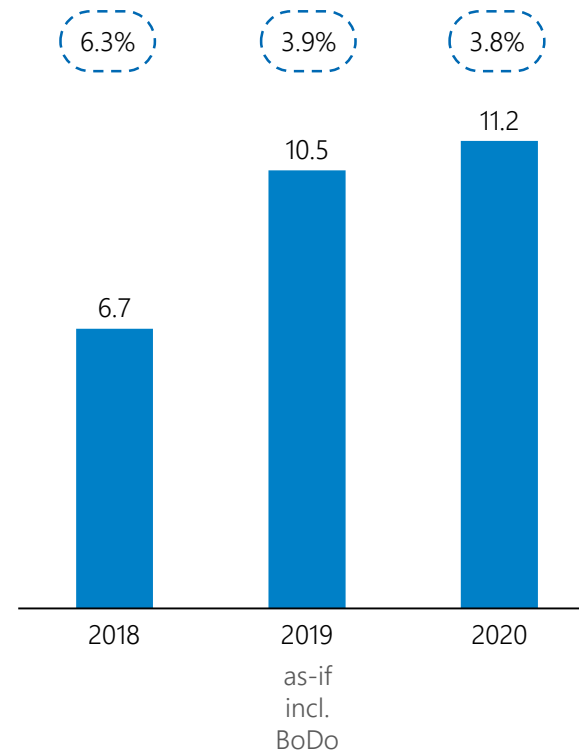
Capital expenditure

in €m and as % of revenue



Depreciation and amortization

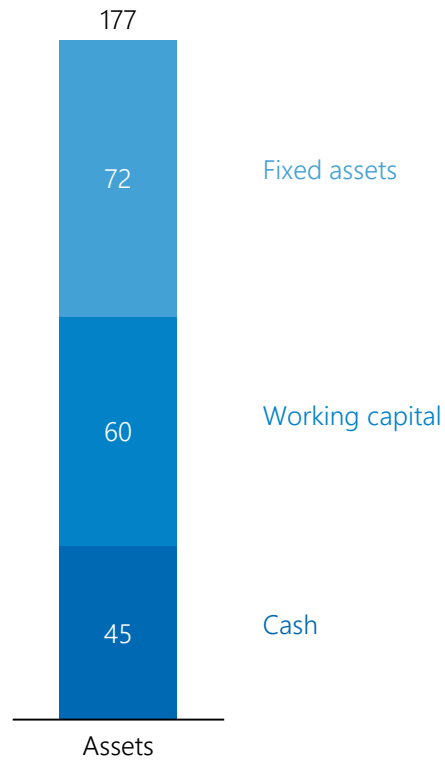
in €m and as % of revenue



Our asset-light business model results in a solid balance sheet

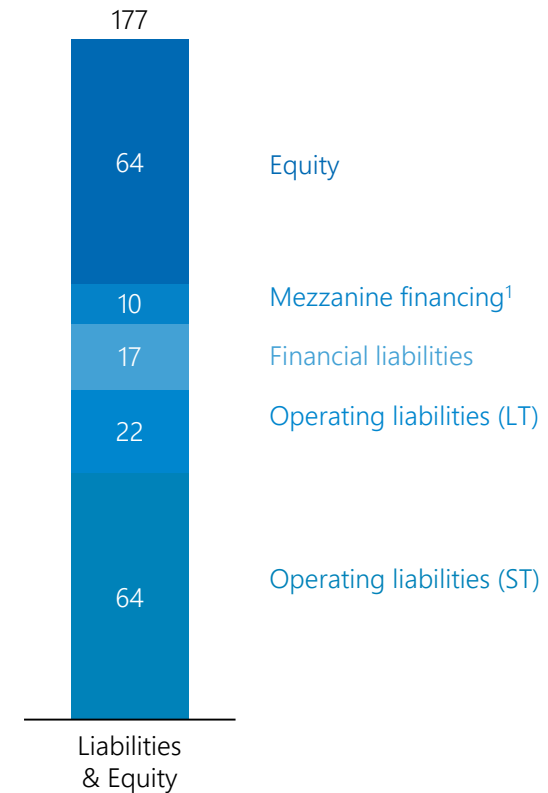
Assets

in €m as at 31 December 2020



Equity and Liabilities

in €m as at 31 December 2020

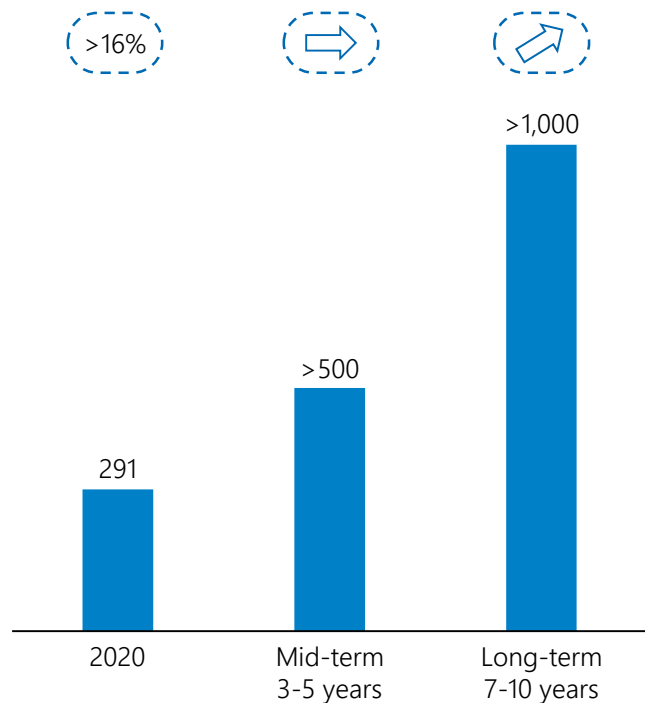


1) Financed by Irene und Friedrich VORWERK Stiftung: Non-profit foundation focusing on the promotion of young engineers, basic interest rate: 2-5% p.a.
Source: VORWERK

Substantial growth perspectives driven by accelerating clean energy transition

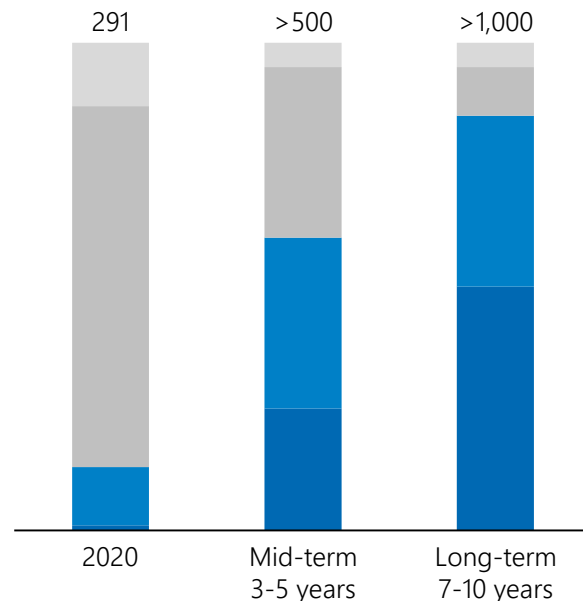
Revenue outlook

in €m, bubbles show EBIT margin targets

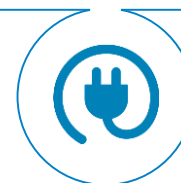
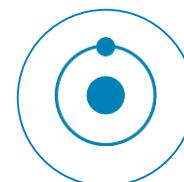


Segment revenue split

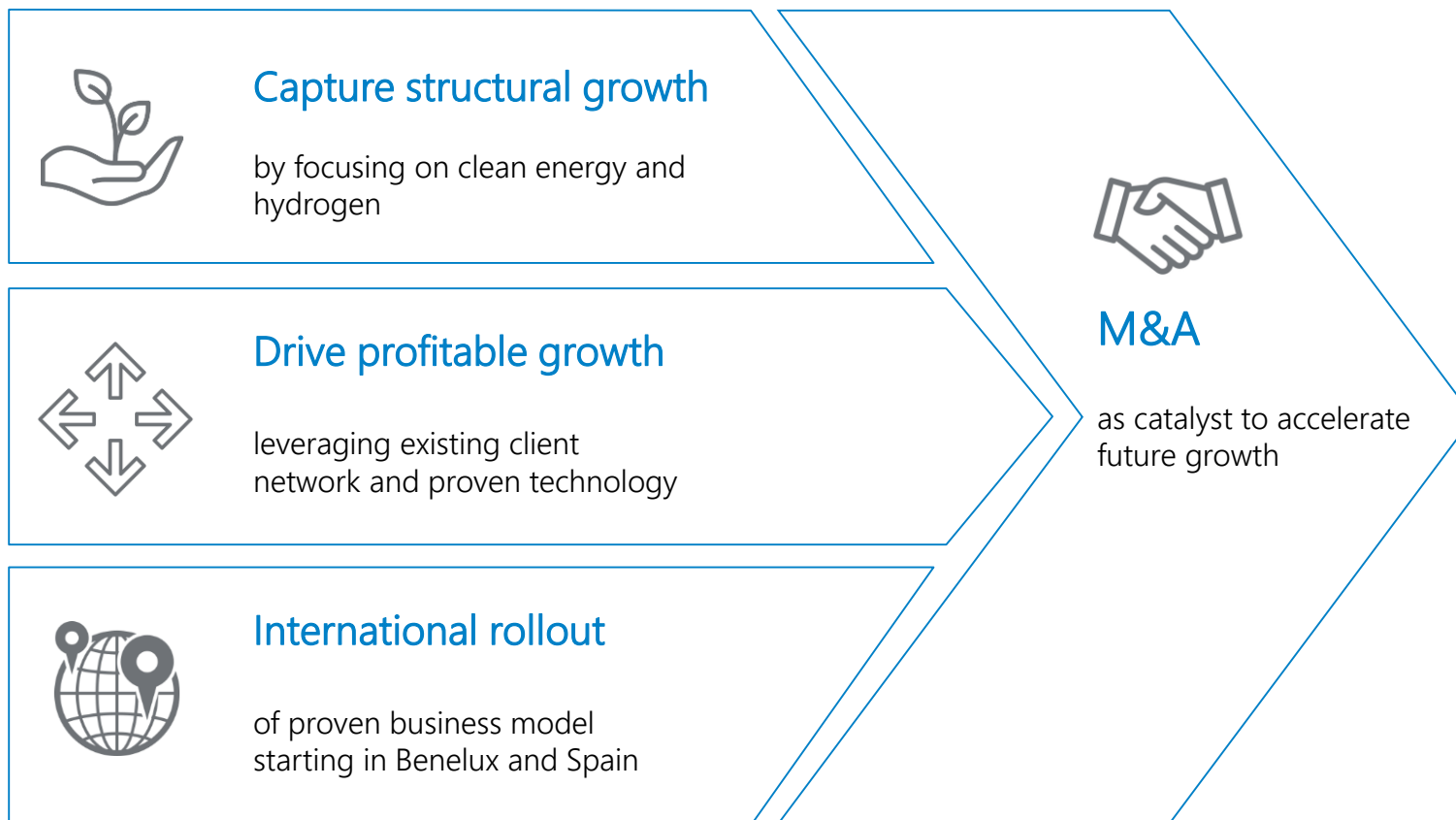
in €m



Strategy & Outlook



Clear strategic building blocks for sustainable and profitable growth



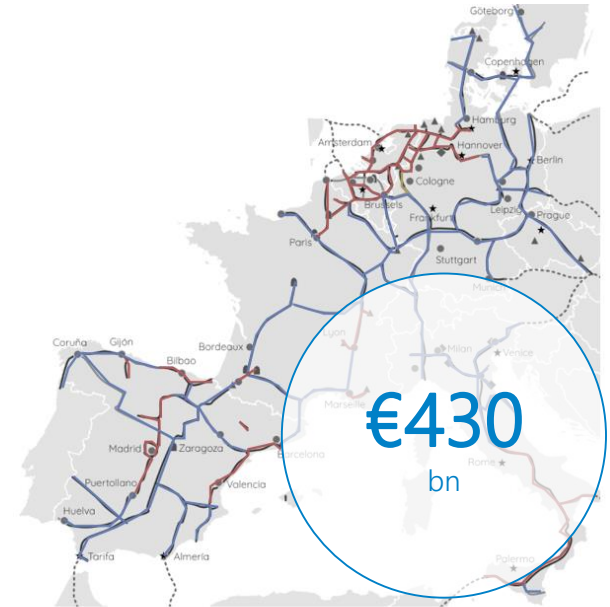
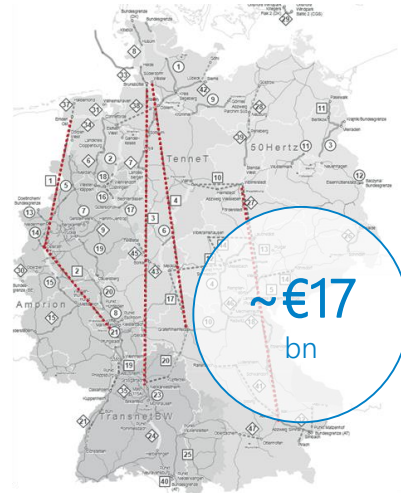
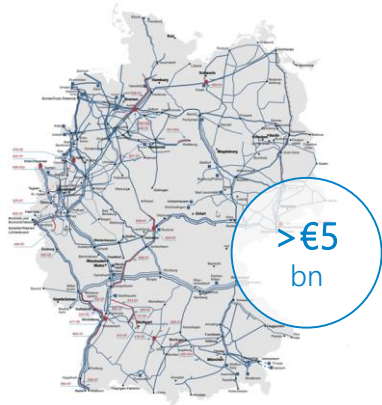


Capturing structural growth across markets with our fully integrated business model

 Natural gas

 Electricity

 Hydrogen



Planned investment until 2026¹



Planned investment until 2026²



Planned investment until 2030³

1) NDP investment volume 2020-2026; volume attributed to year of planned project completion

2) Total NDP volume of €61bn (NDP Electricity 2030 (2019)), thereof at least €17bn of investments into the DC grid by 2026 which is by law primarily realized as underground cable

3) Maximum cumulative investment volume until 2030 to achieve targets defined in European Hydrogen Strategy as outlined in the European Clean Hydrogen Alliance



The hydrogen economy is now at a critical tipping point

Hydrogen economy **today** ————○

€11_{tn}

VORWERK

sees the opportunity to become a major driver of the European clean hydrogen revolution

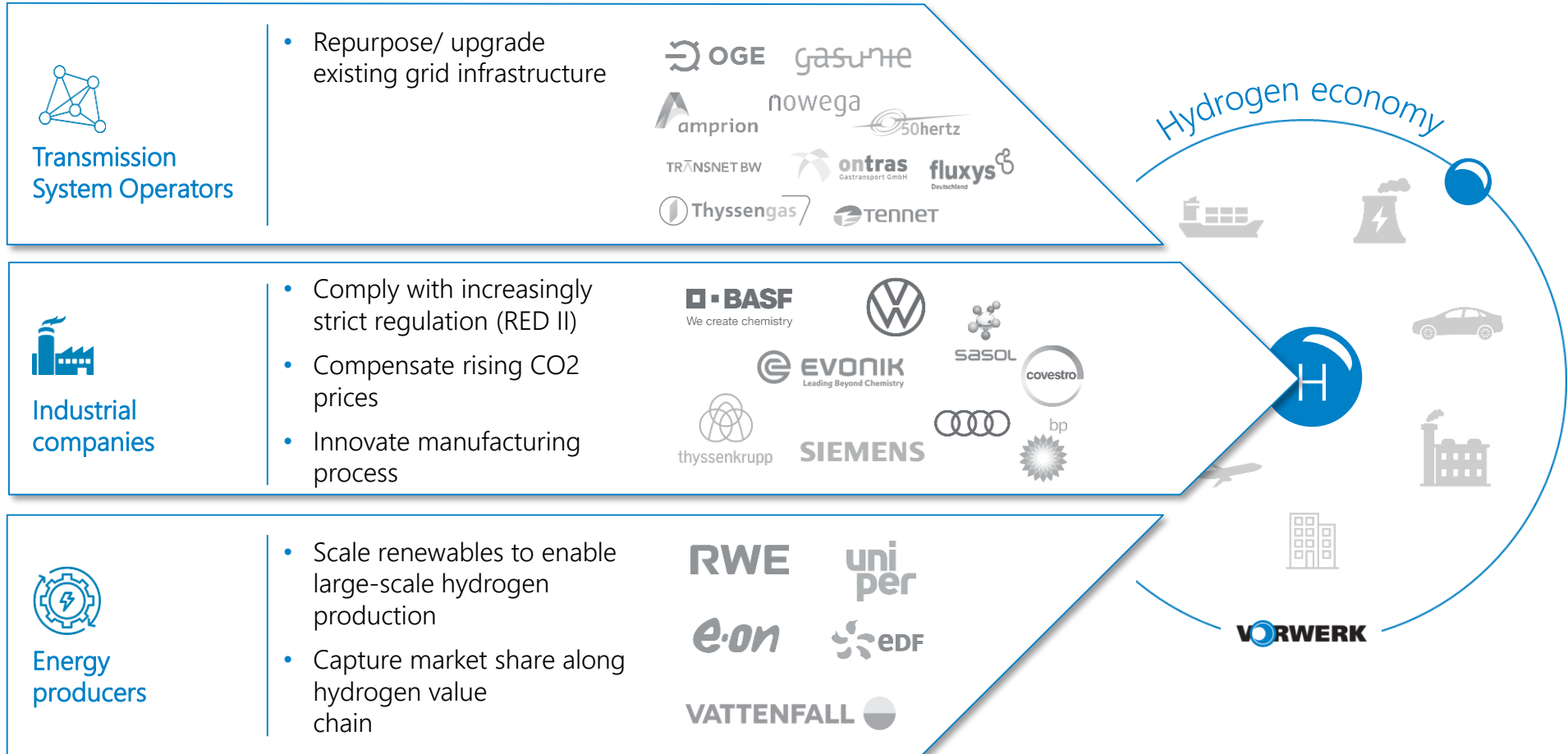
... and needs to further strengthen its technological edge right now

Hydrogen is at a 'tipping point' with \$11 trillion market set to explode, says Bank of America





Leveraging long-lasting customer relationships as partner of choice





The dedicated VORWERK hydrogen lab will focus on hydrogen-ready infrastructure



Electrolyzer technologies



H₂ transport infrastructure



Intelligent Infrastructure Management

VORWERK Component	Readily deployable	Development required	Research required
Gas compressor			✓
Gas dryer		✓	
Gas separator		✓	
Flow meters	✓		
Heat extractor	✓		
Chromatograph		✓	
Transmission pipeline		✓	
Compressor stations			✓
GPRM station		✓	
Flow meter	✓		
Valves		✓	
Digital control system	✓		
Emergency Shutdown System	✓		
Safety systems		✓	



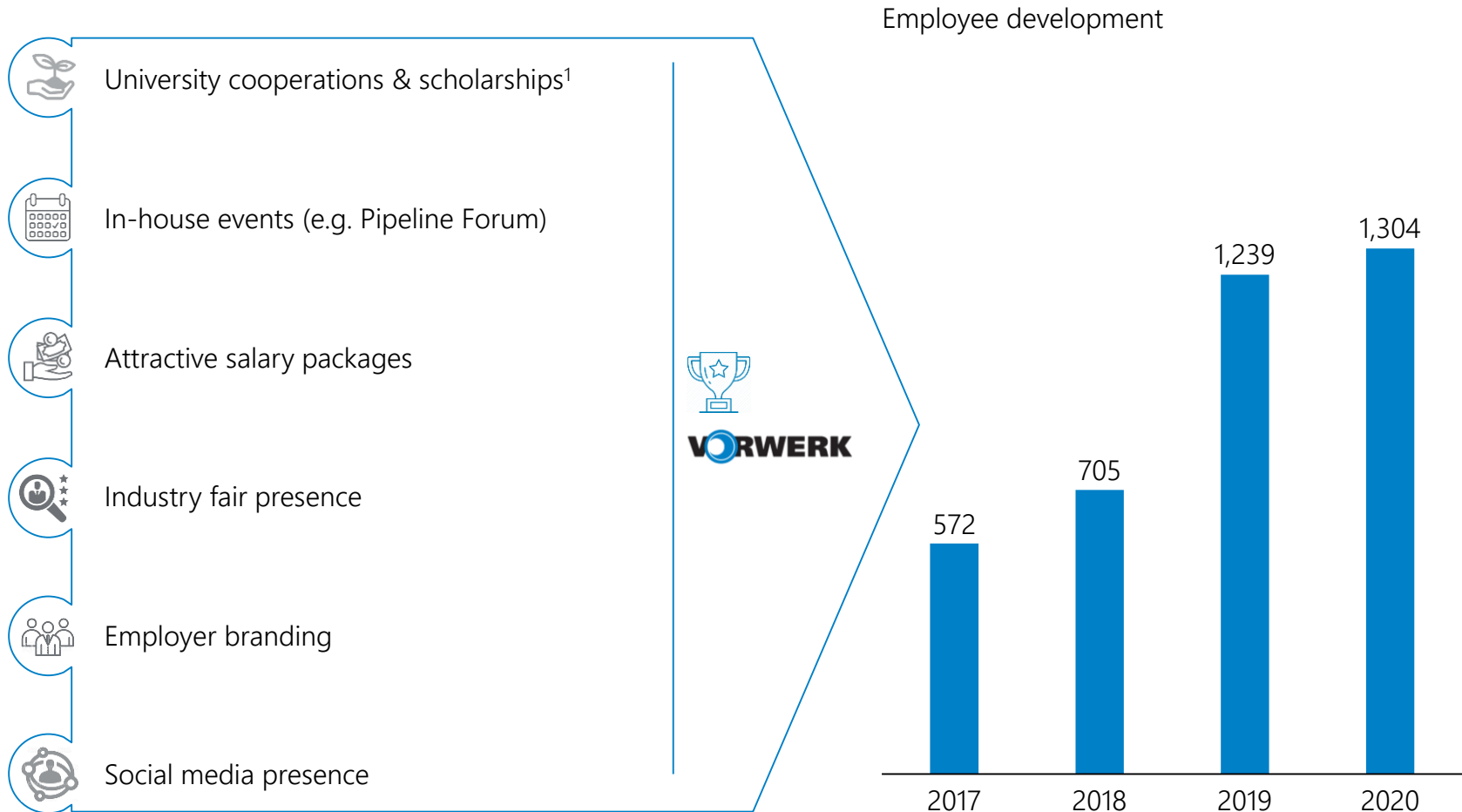
VORWERK

Hydrogen Lab

Tostedt



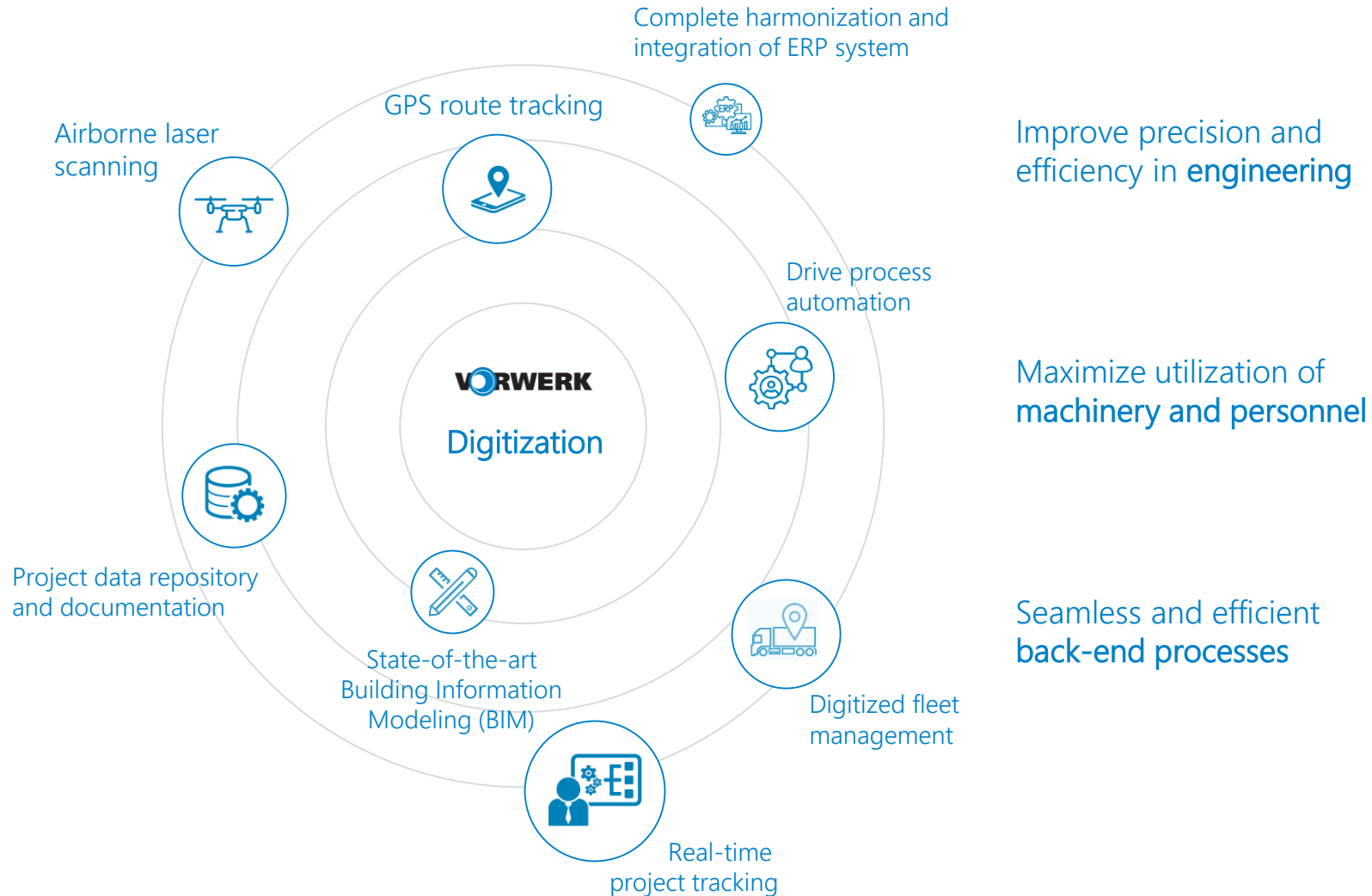
VORWERK will continue to invest in acquiring the best talent on the market



1) Supported by the Vorwerk Foundation

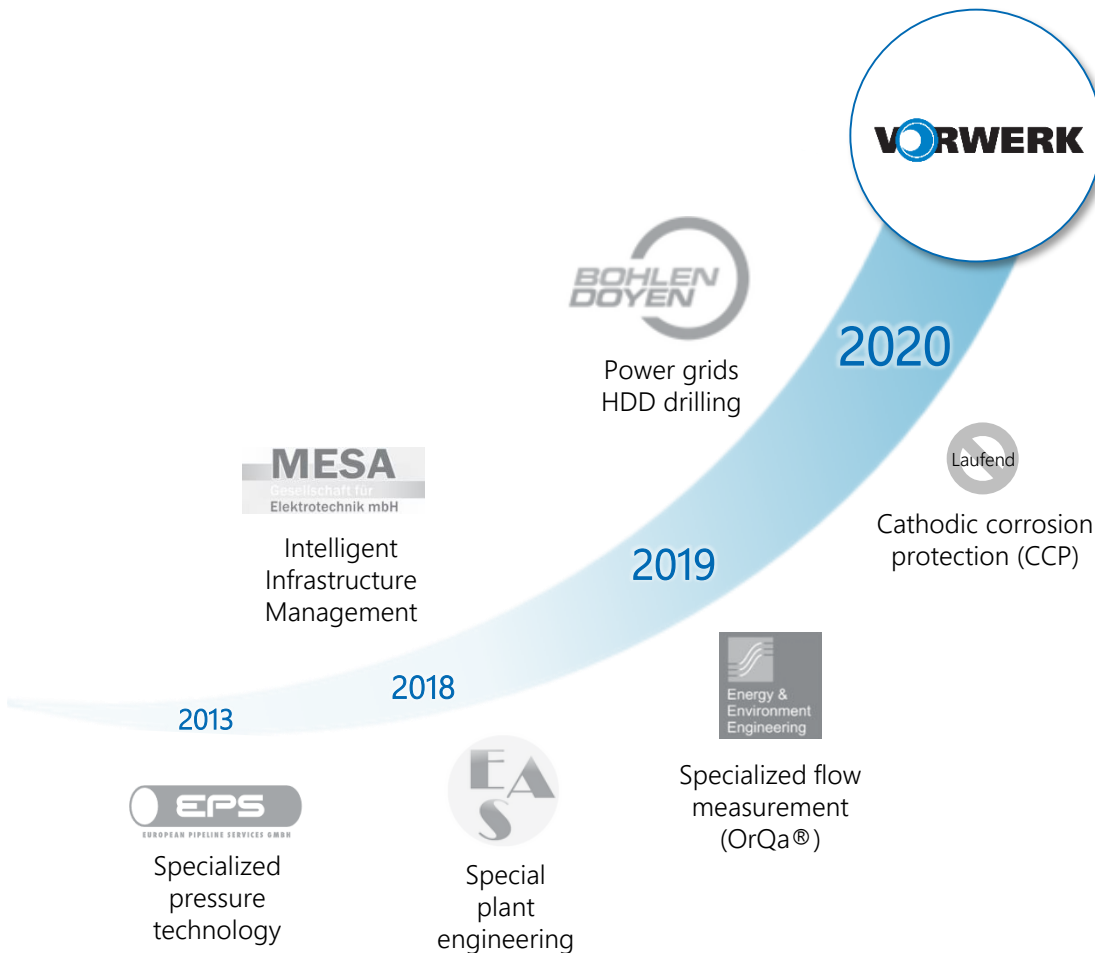


VORWERK leverages its operational excellence through state-of-the-art digital solutions





M&A remains a key catalyst to further accelerate profitable growth



Specialized technologies

- Hydrogen technologies
- Horizontal direct drilling (HDD)
- Biogenic gases and synthetic fuels

Employees & competencies

Smaller regional players with fully certified employees and/ or complimentary competencies

Regional footprint

- Benelux
- Spain

Key Investment Highlights



Climate change commands **billions in infrastructure investments** in VORWERK core end markets gas, electricity and hydrogen



50+ years of technology leadership in design, realization and operation of system critical energy infrastructure



Key player in ramping up the European hydrogen infrastructure thanks to a unique combination of know-how and decade-long customer relations



Double-digit revenue growth with a stable **>16% EBIT margin** as an ideal starting point for **exponential growth potential** ahead



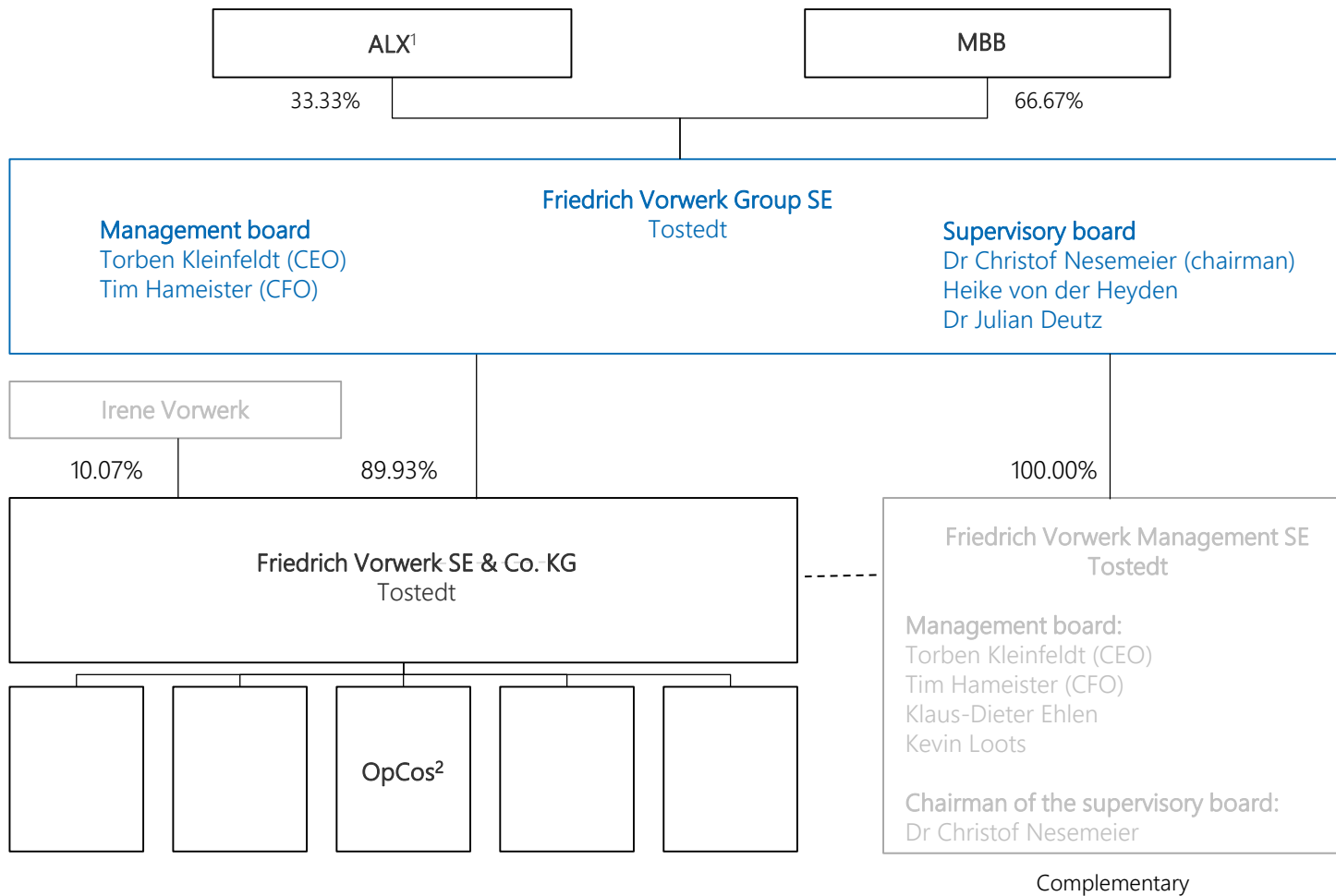
Owner-managed business with an **ambitious strategy** to further accelerate profitable growth



Driving the clean energy transition

Appendix

Legal structure of the VORWERK Group



1) ALX = Torben Kleinfeldt; 2) OpCos including holding companies
Source: VORWERK

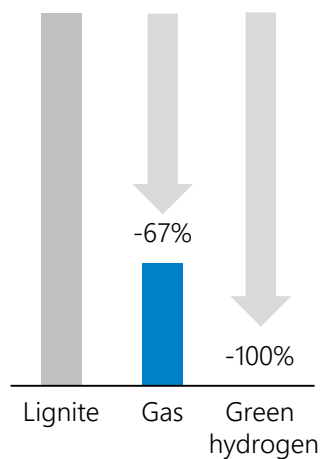
VORWERK is leading the way towards a sustainable future



Reporting according to **SASB** standards

Decarbonisation

Shift towards emission-free resources



Social engagement

Irene & Friedrich Vorwerk Foundation

Educational support of universities

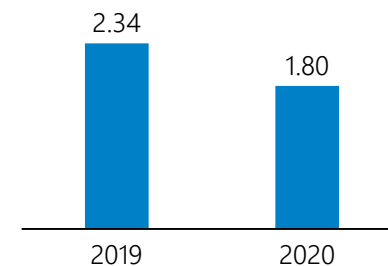


Development aid



Work safety

Total Recordable Incident Rate (TRIR)¹



UN Sustainable Development Goals



1) Only includes incidents recorded on project sites; Bohlen & Doyen included from 2019 on a like-for-like basis
Source: VORWERK; Zukunft Erdgas Report 2019