



Uniper strategy highlights
Andreas Schierenbeck, CEO Uniper

Fortum Capital Market Day, December 3, 2020

Uniper at a glance

Our business

- Power Generation
- Commodity Trading
- Energy Storage
- Energy Sales
- Energy Services

100 years
Experience

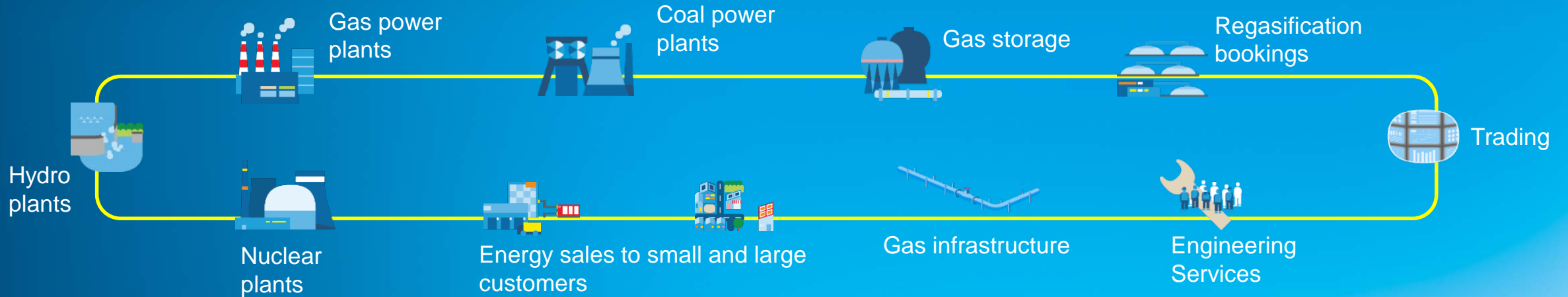
€863mn
Adj. EBIT¹

~34 GW
Generation capacity¹

~200 TWh
Energy Sales

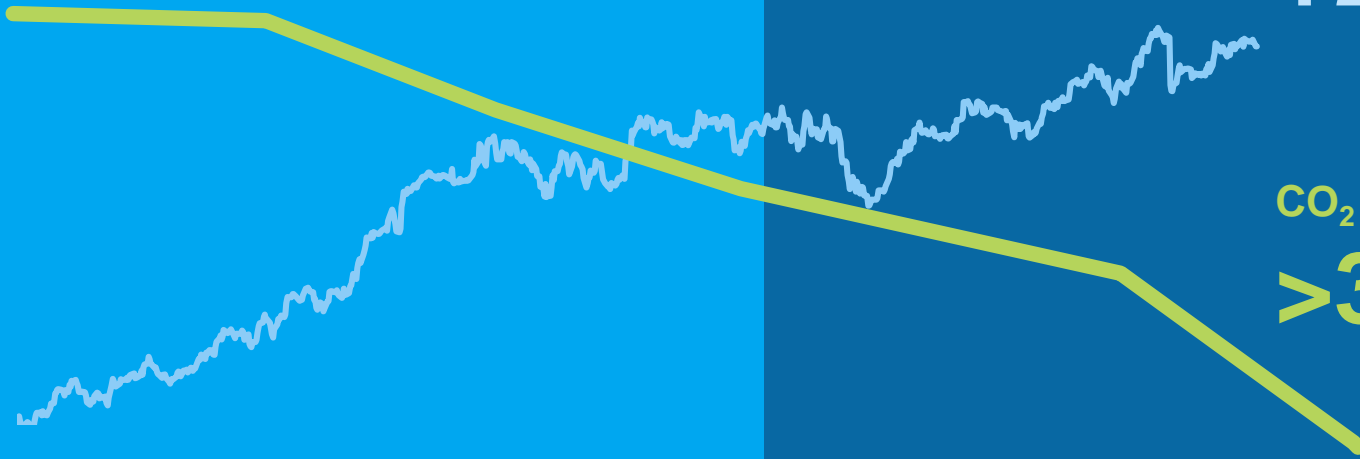
~2000 TWh
Trading

~400TWh
LTC



Uniper's evolutionary steps

Tightening the ship 2015 - 2017



- Cash optimized
- Portfolio streamlined
- Rating secured
- Transparency increased

Setting the sails 2018 - 2019

- Operations improved
- Growth in security of supply initiated
- Legacy projects put on home stretch
- Track record of delivery established

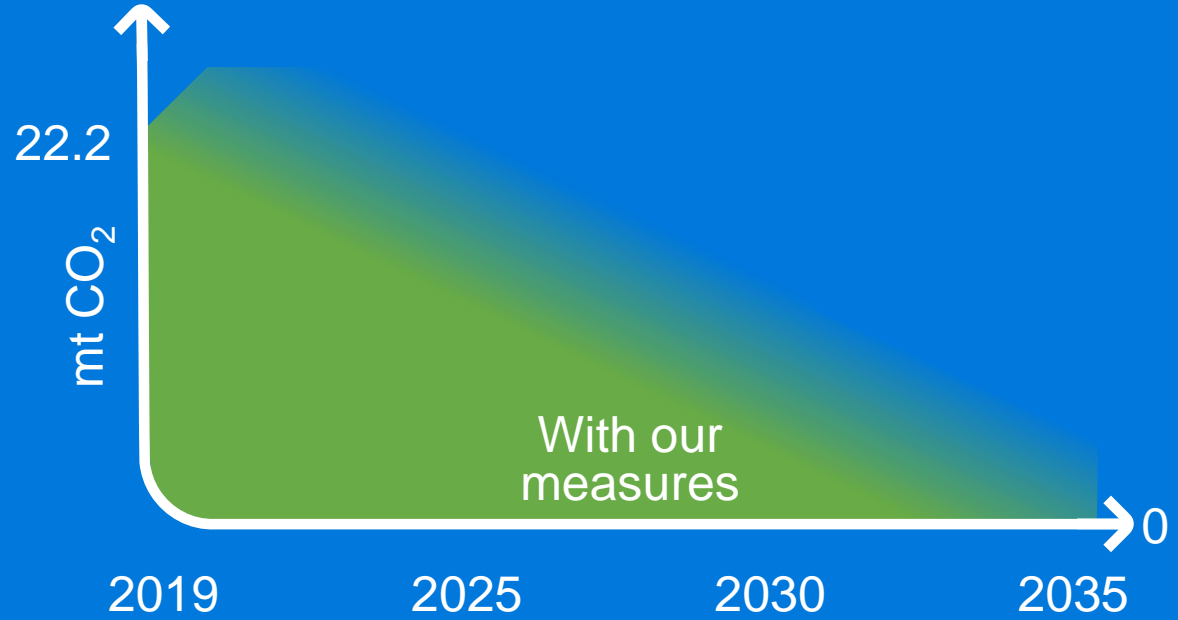
New Strategy 2020



- Carbon-neutral in Europe by 2035
- World's 8th most valuable brand (utilities) according to BrandFinance
- Classified best employer amongst German utilities
- Best employee feedback ever
- TRIF ~ 50% lower than 2016

Driving decarbonization actively

European Generation



Global Commodities



Russian Power



Carbon neutral by 2035

Actively reduce carbon emissions



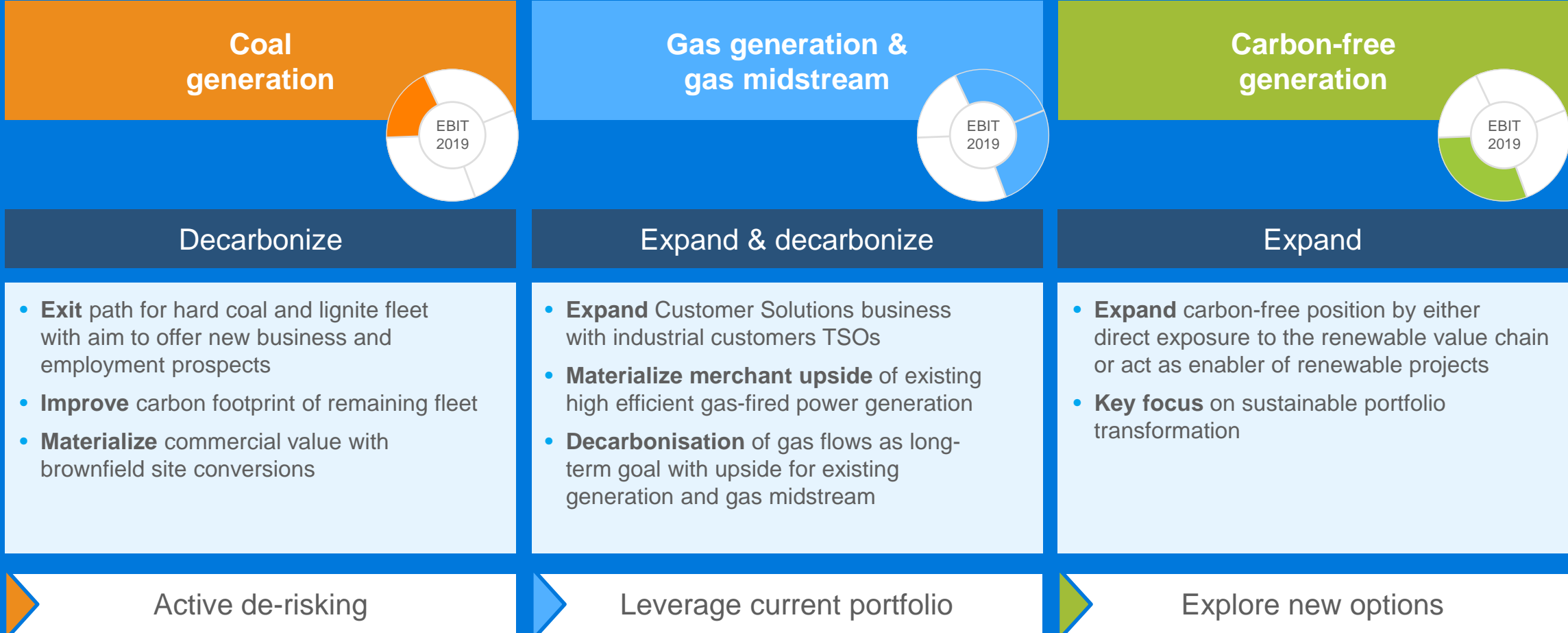
Sustainability ambitions further increased

	European Generation	Global Commodities	Russian Power
March 20	Carbon neutral by 2035 at the latest	Actively reduce carbon emissions	

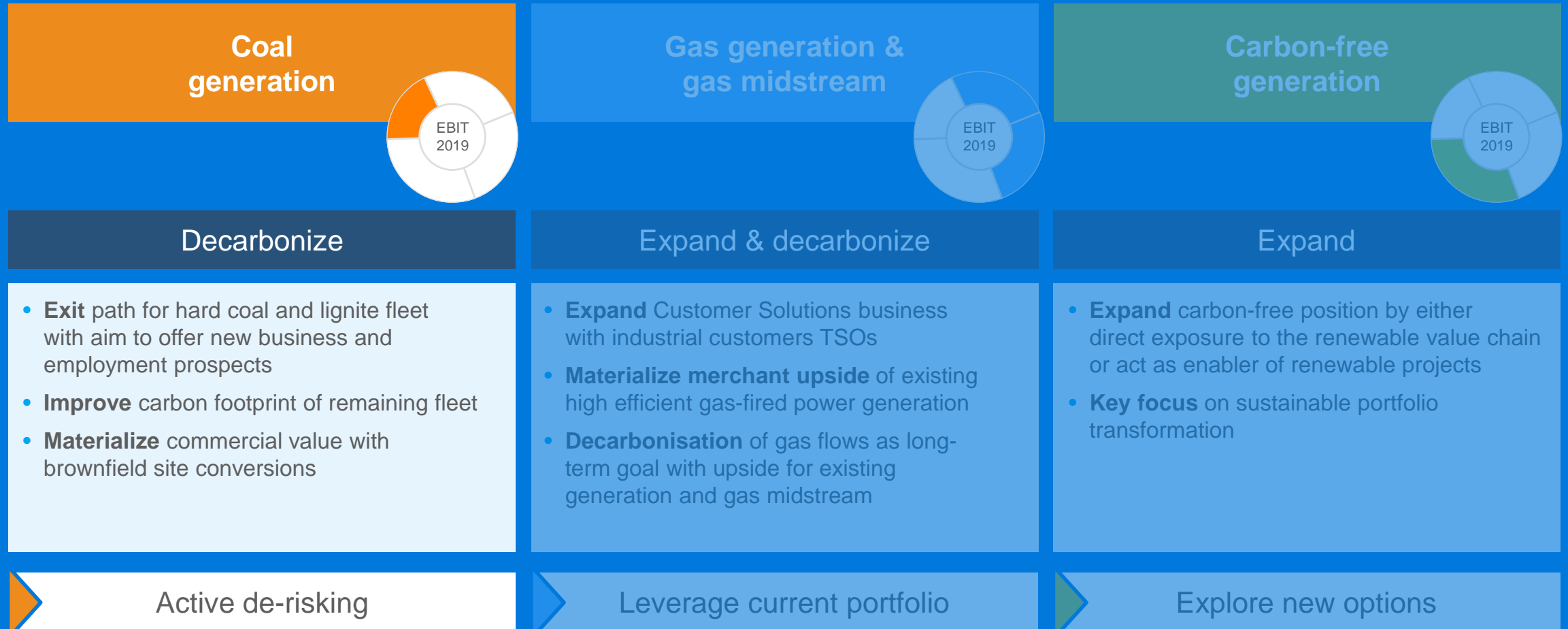
Today	>50% emission reduction* by 2030	Scope 3 targets to be developed in 2021	Focus on RES capacity scheme
	Implementation of TCFD framework		
	Commitment to become carbon neutral by 2050		

*compared to 2019, including Scope 2

Strategy: Clear transition agenda

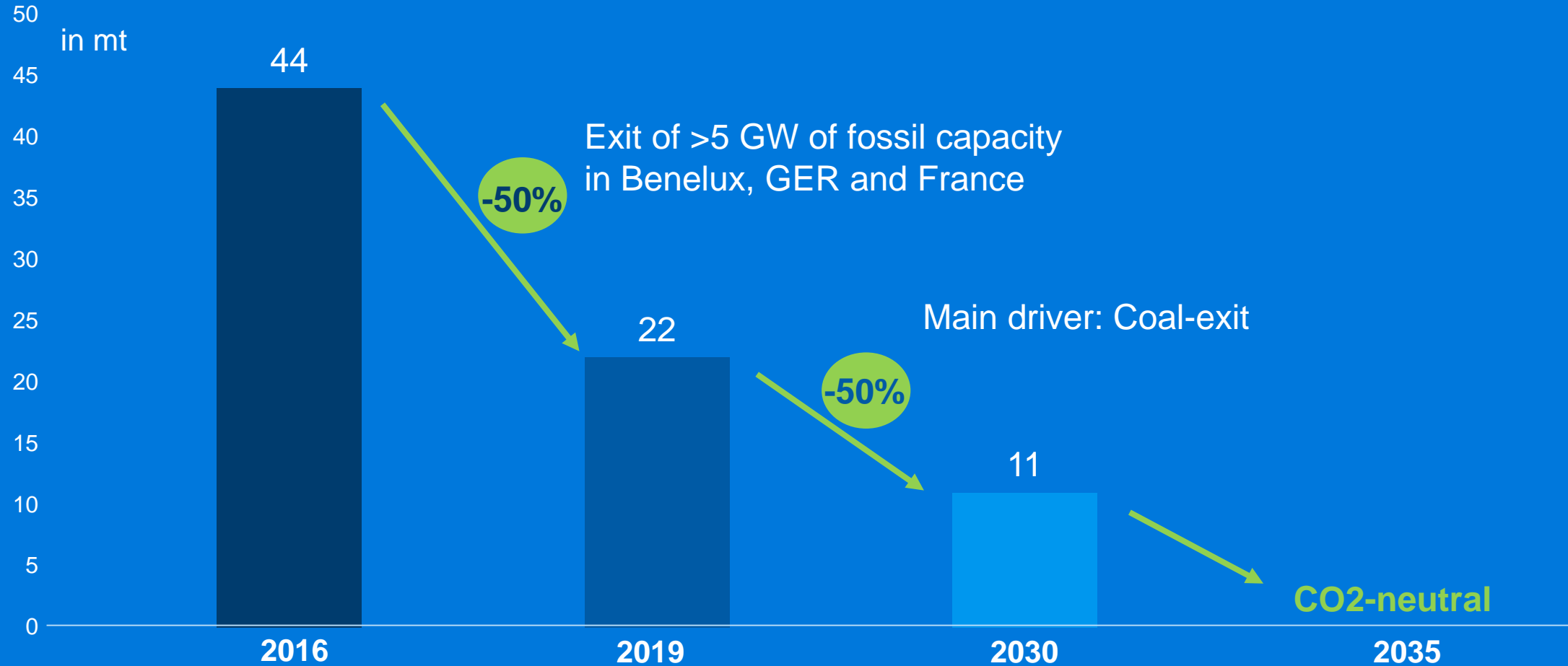


Strategy: Clear transition agenda



European Generation CO₂-neutral by 2035

CO₂ emissions of European Generation (net)



Uniper coal exit plans per country

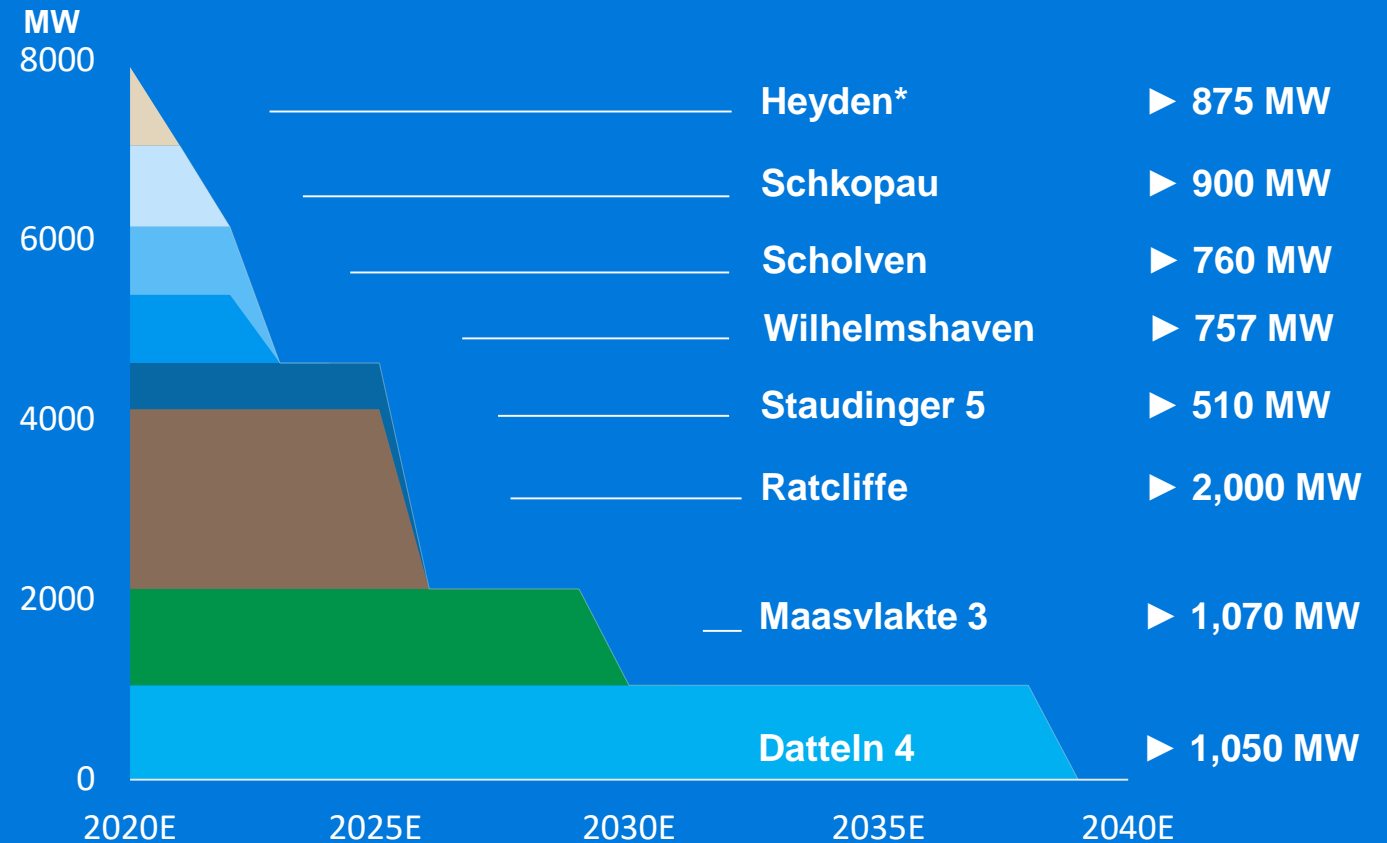
National coal exit plans

UK: **2025**

Netherlands: **2029**

Germany: **2038**

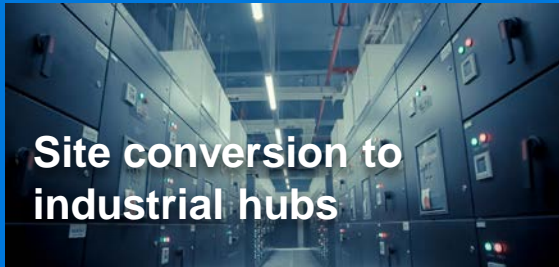
Uniper's coal fleet in Europe – Exit path



Transforming liabilities into opportunities



Ratcliffe (2GW)
Protect and maximize land value – pursue options wider regional development context



Scholven (0.8GW)
Maximize land value and aim for additional industrial customers supplied from CHP, develop disentanglement program incl. demolition



Staudinger (0.5GW)
Expand heat business and develop site for new services, e.g. data center hub.

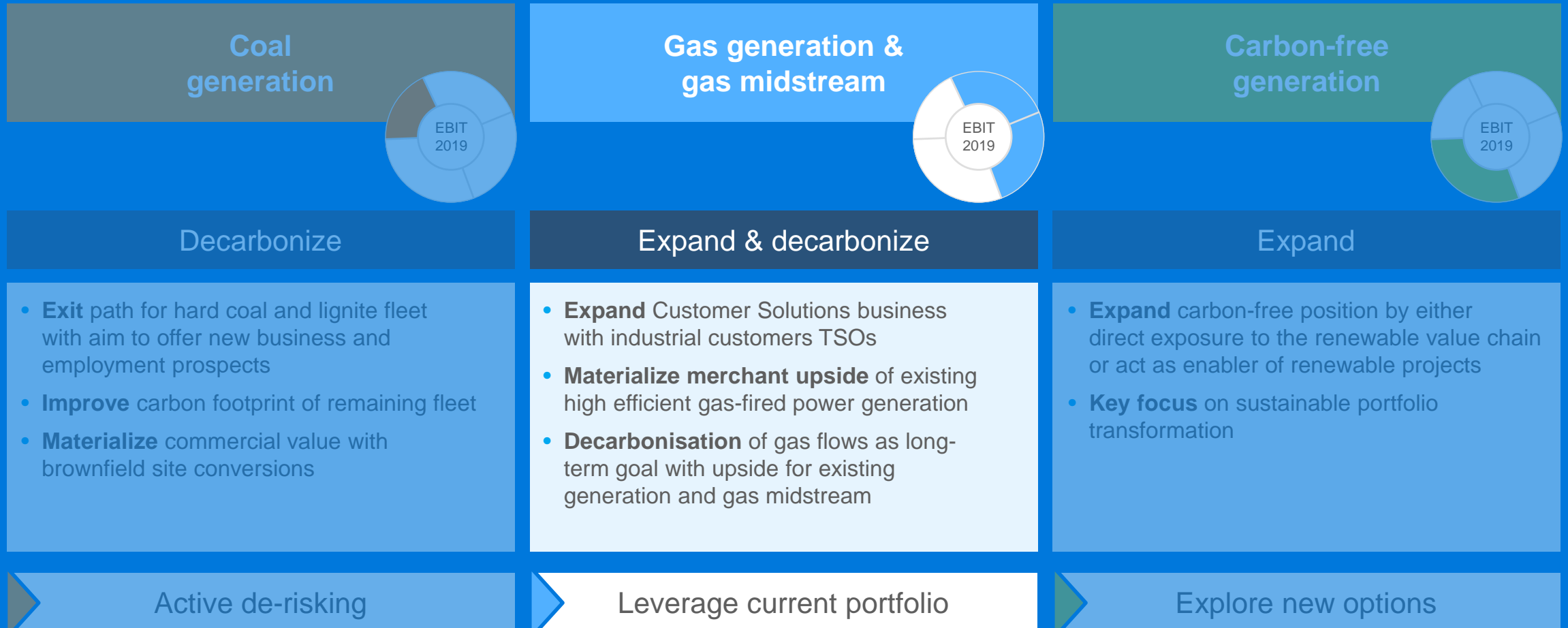


Maasvlakte (1.1GW)
Secure existing customers, generate ICS opportunities, secure future of site and increase flexibility

Wilhelmshaven/Huntorf (0.8GW)
Attract new customers to sites and consider in light of new technologies (hydrogen), also in context of newproposed LNG terminal project nearby

Heyden (0.9GW)
Maximize land value and consider potential grid services beyond coal

Strategy: Clear transition agenda



Uniper's gas business at a glance

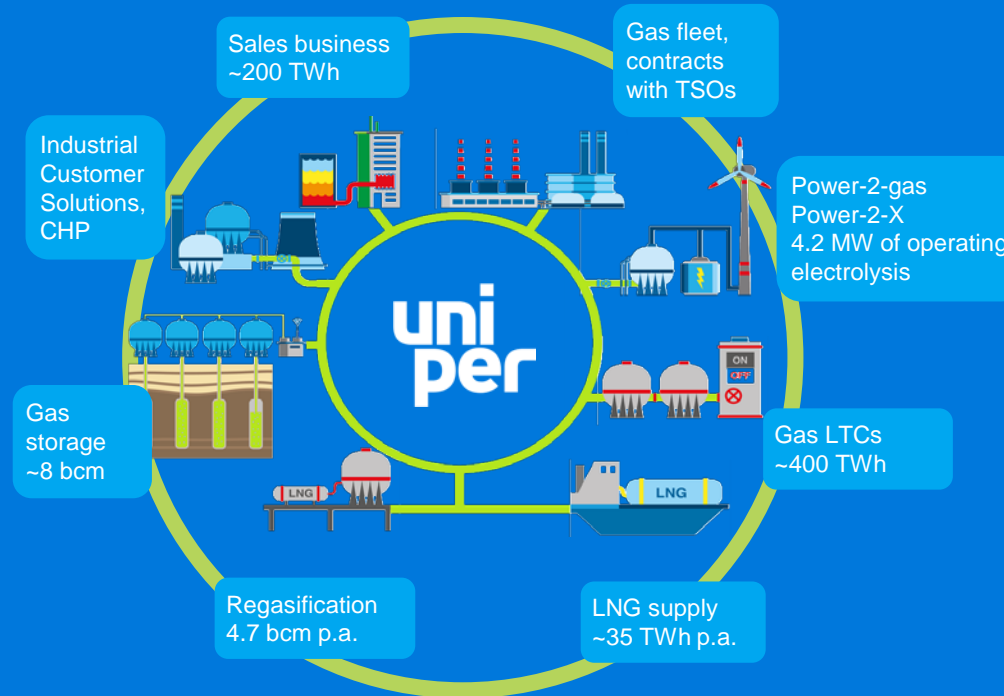
Gas generation

~9 GW

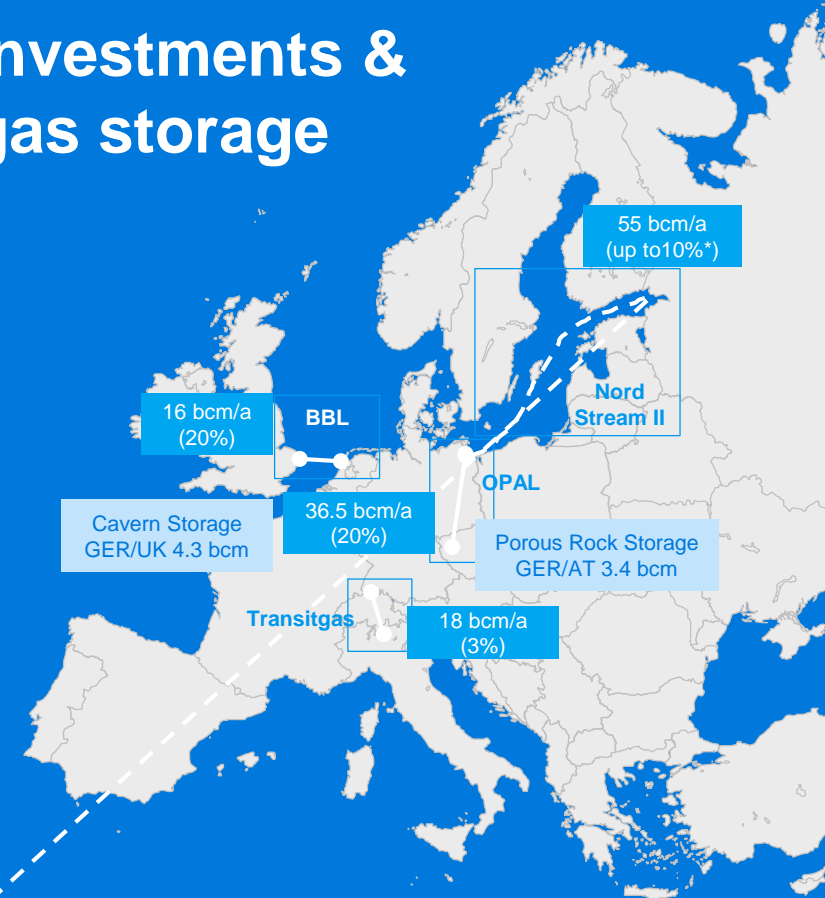


Excluding Russia

Gas midstream



Gas infrastructure investments & gas storage



*financial commitment

Security of supply, customer centricity & decarbonization of our own fleet

Solutions for TSO customers

- **Killingholme & Grain:** four 6-year contracts to deliver innovative grid stability services
- **Irsching 6:** Building new gas power plant



Solutions for industrial customers

- **Scholven:** Converting from coal to gas, providing other energies (e.g. heat and pressure) to customers in the region

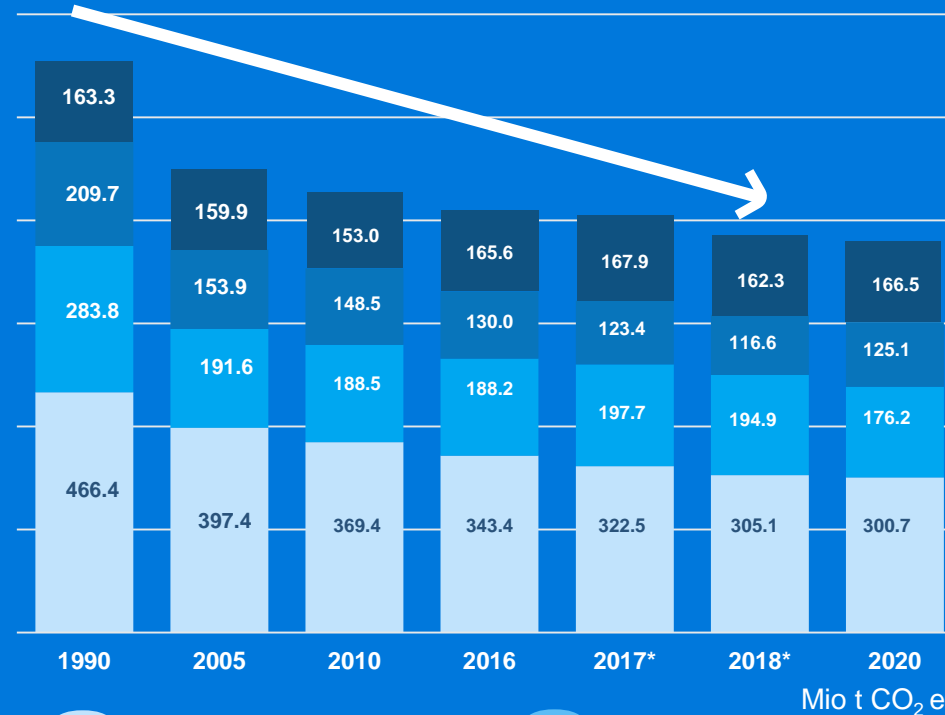
Decarbonization (Making Net Zero Possible)



SIEMENS
ENERGY

Decarbonization requires sector coupling

Energy sector has lowered emissions by 35%



Energy sector



Industry



Buildings



Transportation

European Green Deal:

Net-zero greenhouse gas emissions by 2050

Electrification and hydrogen needed



Hydrogen imports will be needed

H₂

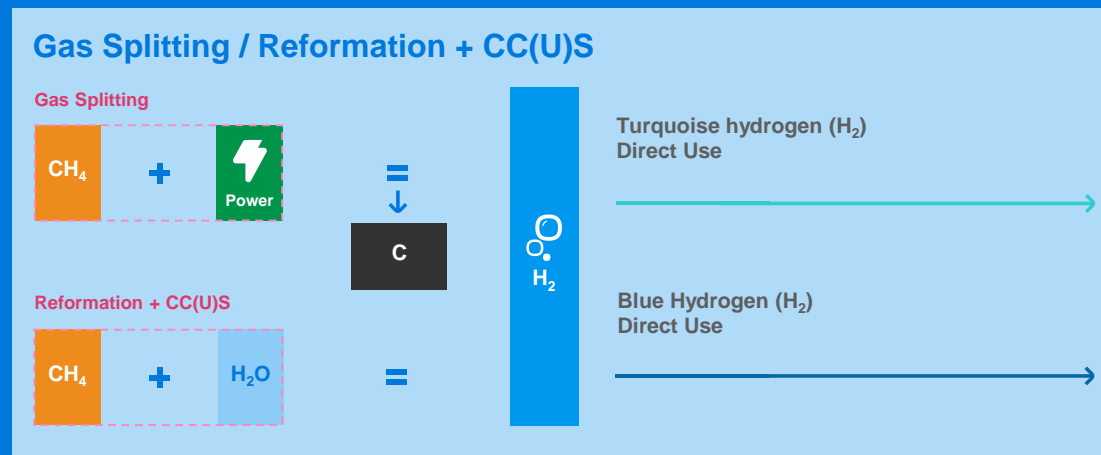
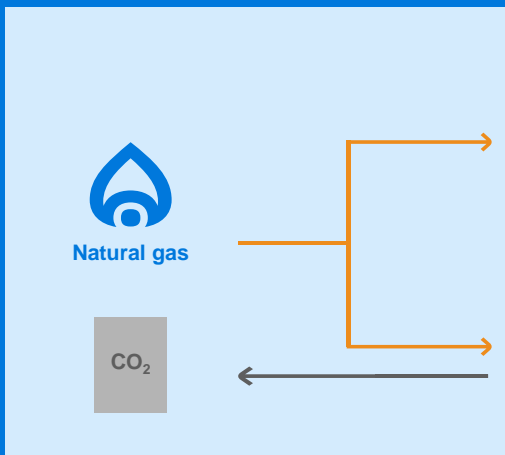
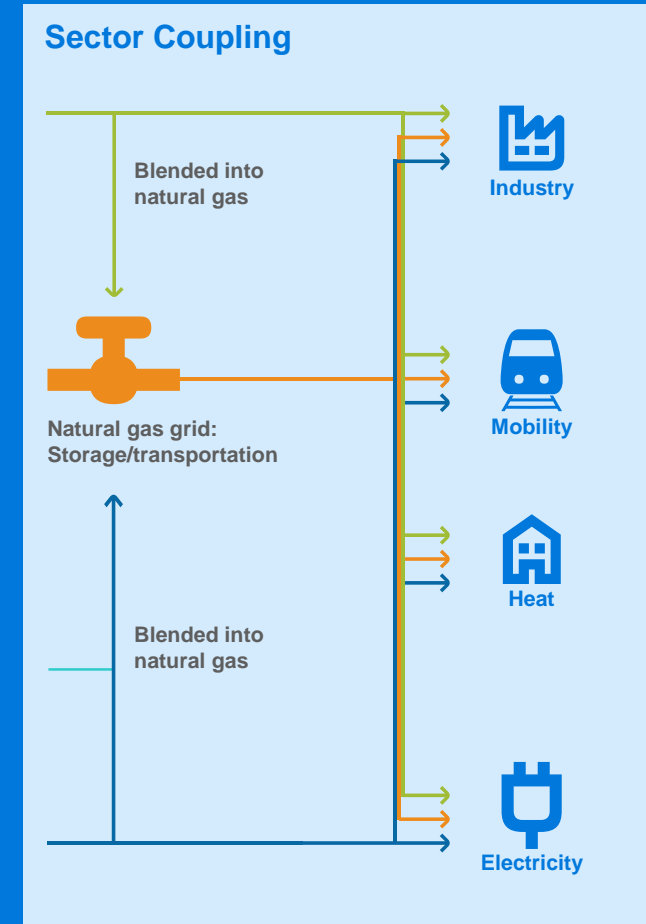
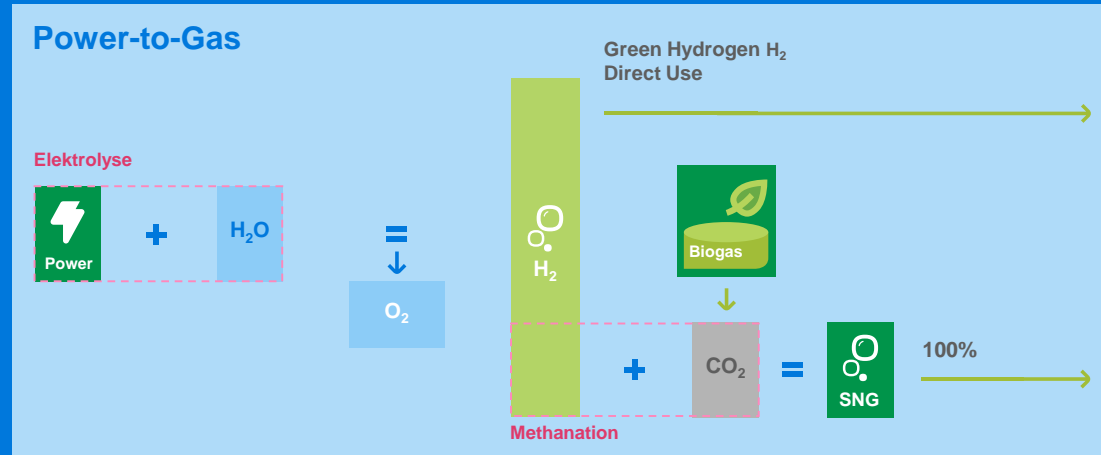
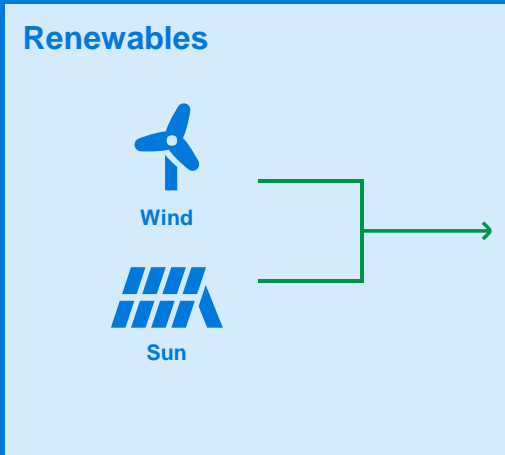
German green hydrogen production planned to be at **14 TWh**

German Hydrogen demand is projected at around **90-100 TWh**

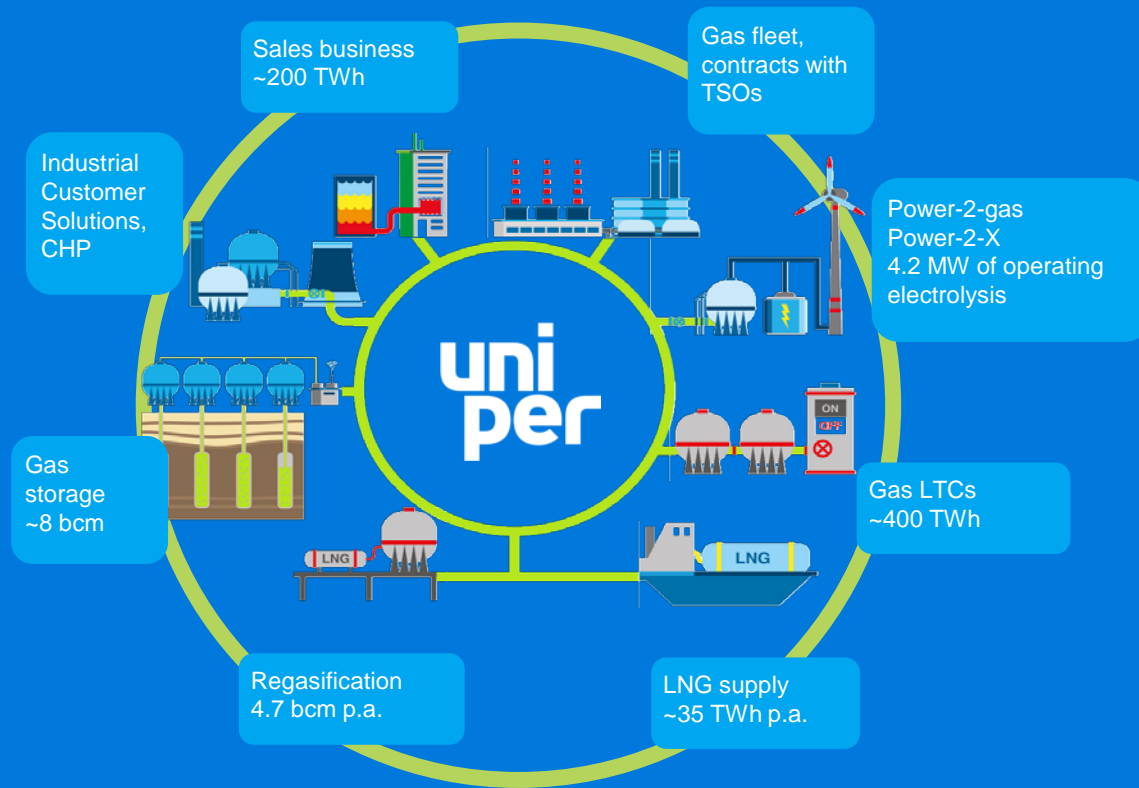
Gap 2030 \geq 76 TWh

Technology openness is key

Gas generation & gas midstream



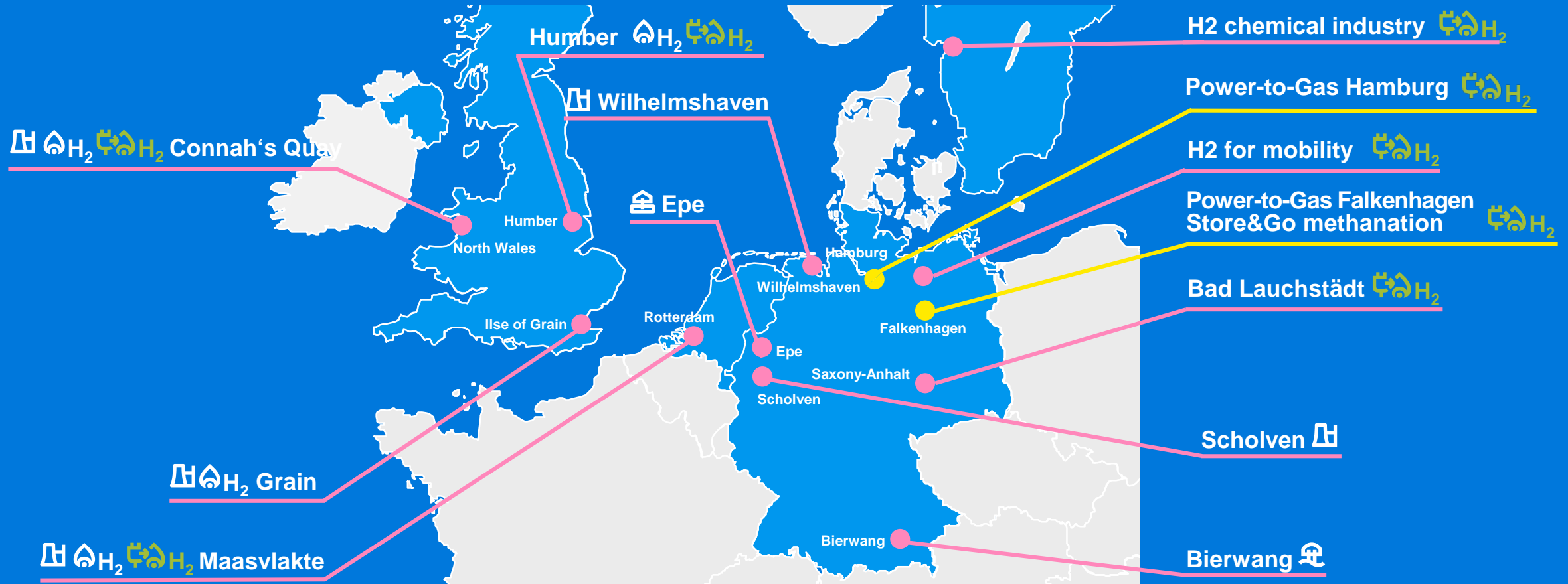
Uniper's infrastructure and trading skills ideal to meet (import) demand for the switch to hydrogen



- **Global Origination** team well positioned to commercialize hydrogen activities
- **Infrastructure** can deal with an increasing amount of hydrogen today
- Already substantial experience in **operating hydrogen facilities** in MW class
- Current projects envisage **multi-MW electrolyser** and blue hydrogen assets and storing hydrogen in underground **cavern storage**

Our hydrogen project pipeline

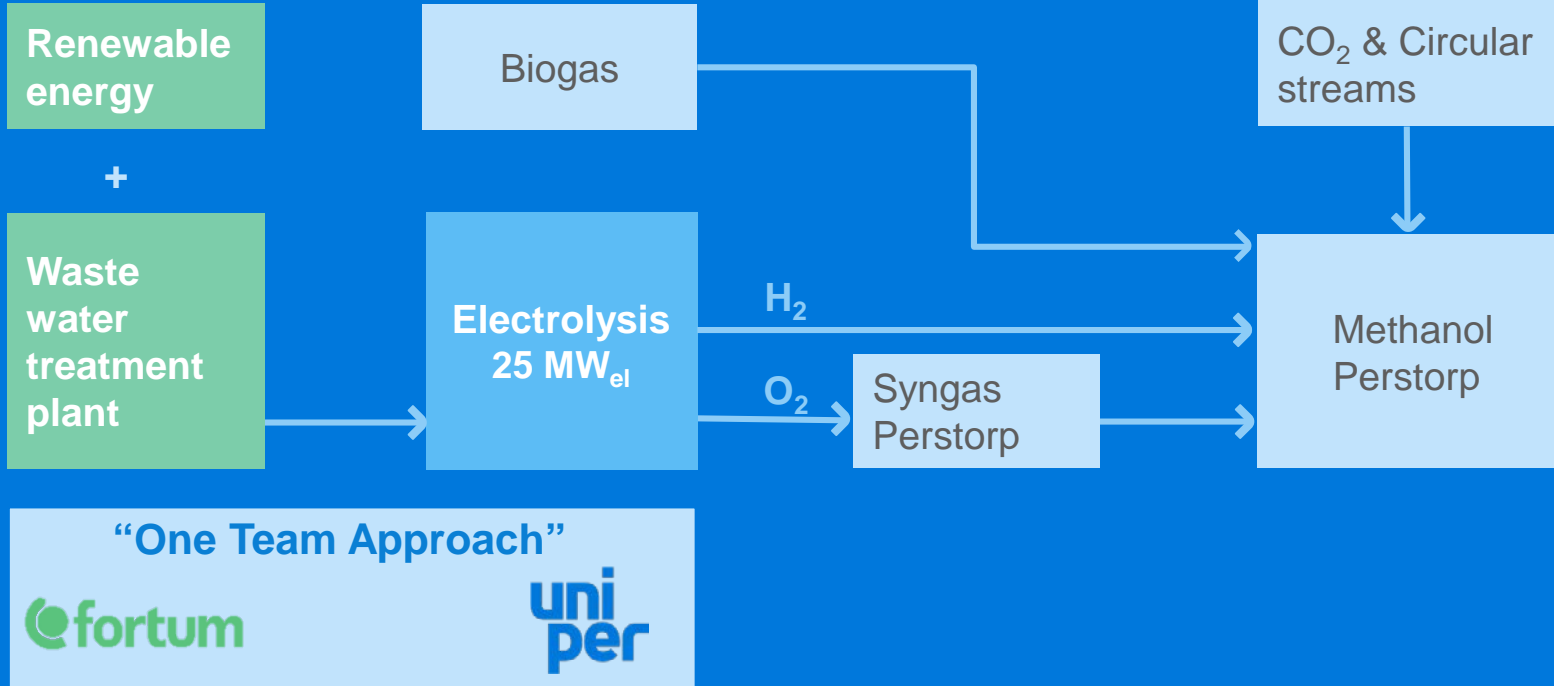
Gas generation & gas midstream



- Existing plant
- Planned project
- 🌿 H₂ Green hydrogen
- ⚙️ Porous rock storage
- 💧 H₂ Blue hydrogen
- ⚡ Power plant
- 🏠 Cavern storage
- 🔧 Power-to-Gas-to-Fuels

First-of-a-kind large scale commercial size project – largest hydrogen electrolysis unit installed in the Chemical sector¹

Gas generation & gas midstream



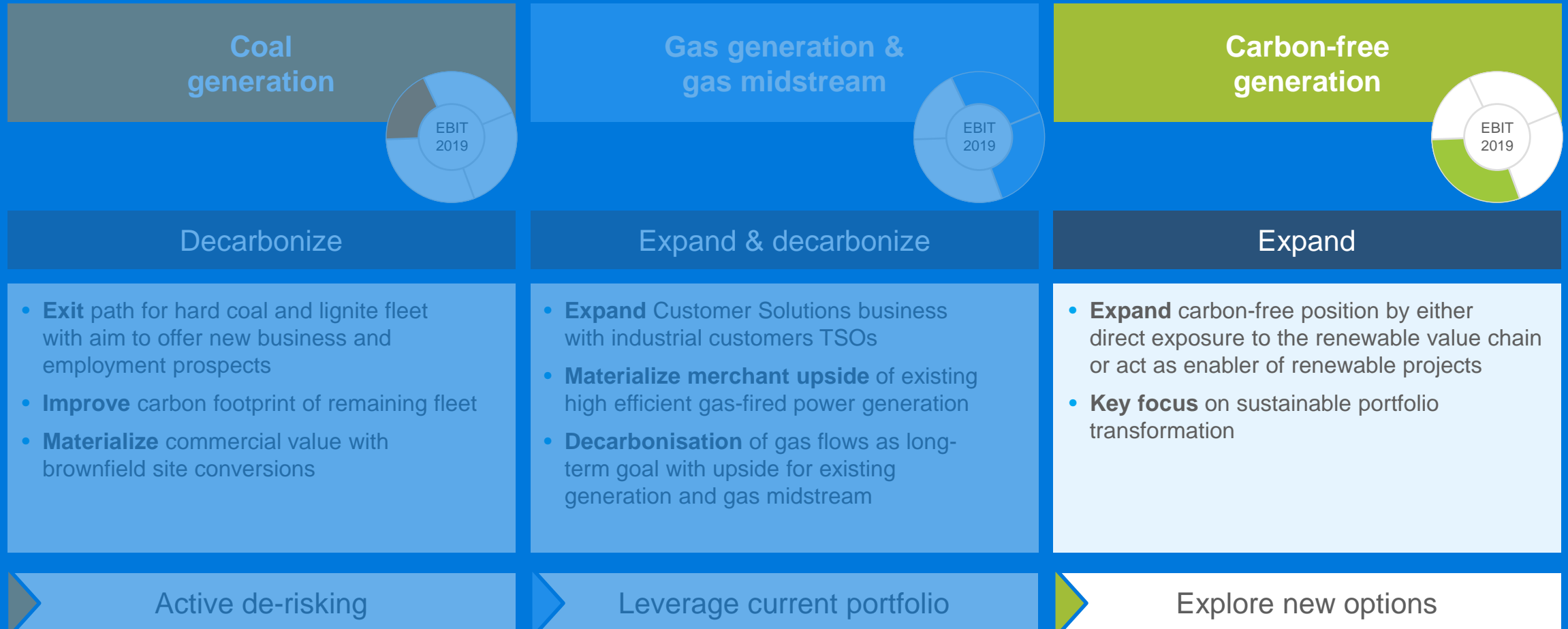
H₂ Supply: 3500 tonnes/annum
GHG reduction²: 500 kt_{CO2}/annum

Production of renewable methanol using renewable hydrogen, biogas, CO₂ and residue streams. First large-scale plant in the world that uses recycled wastewater to produce hydrogen.



¹It is probably the world's largest plant. We are investigating it.
²GHG reduction for entire project, including CCU and residue streams

Strategy: Clear transition agenda



Grow CO₂-free power generation

Maintain & optimize

Nordic hydro and physical trading optimization.
Cooperation with Fortum creates value and benefits for both companies, O&M savings: “One Team Approach”



1.4 GW

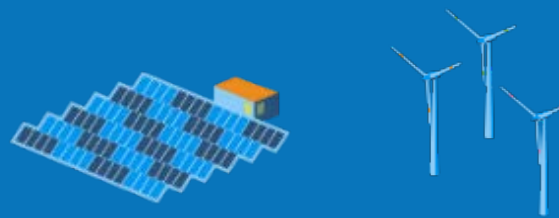


3.6 GW

uni
per

Enter & expand

Kickstart a large-scale sun and wind power generation portfolio, capturing the potential on owned sites. Cooperating with Fortum brings additional expertise and resources benefiting both companies: “One Team Approach”



≥1-3 GW
in the midterm

Continue to expand

Subsidy-free market in Europe offers growth opportunities in PPAs



Contractual
Assets
Greener focus

5 TWh p.a.
by 2023

Uniper is developing a renewables portfolio

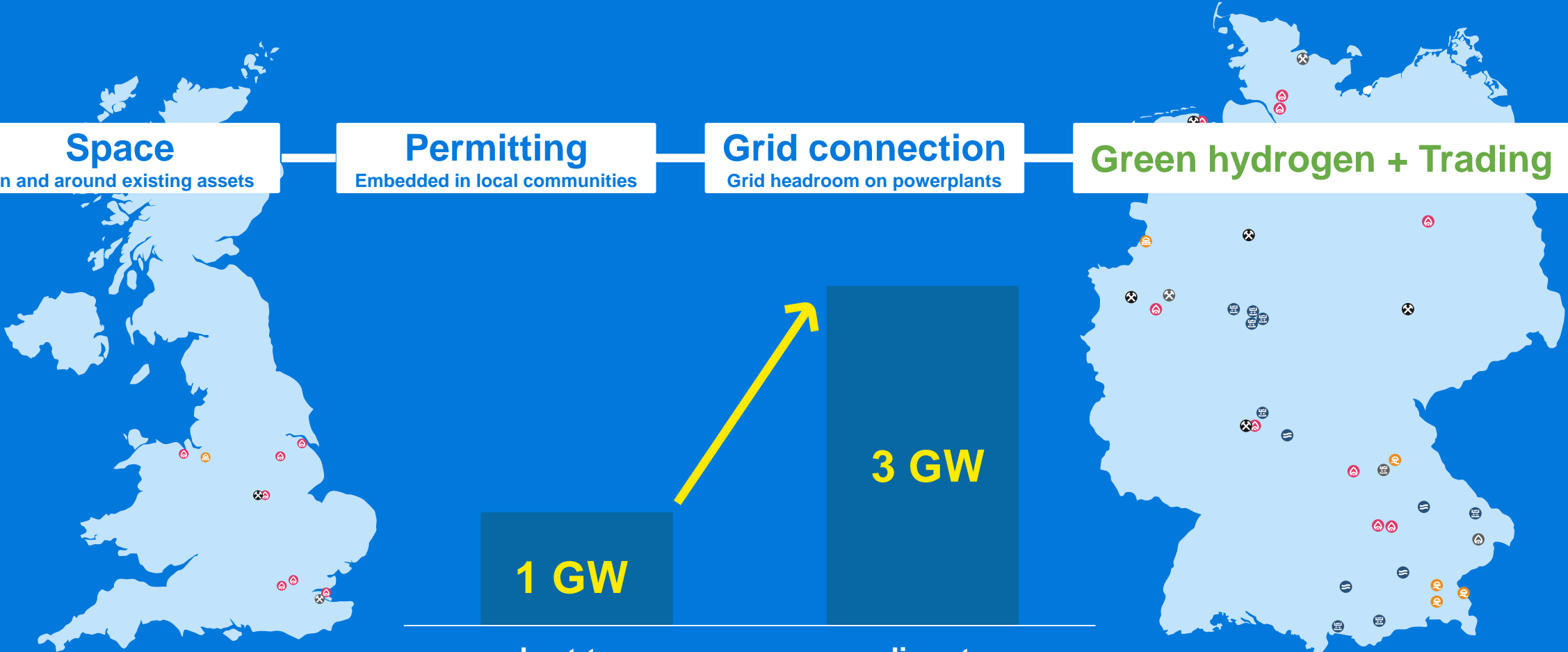
Carbon-free generation

Space
On and around existing assets

Permitting
Embedded in local communities

Grid connection
Grid headroom on powerplants

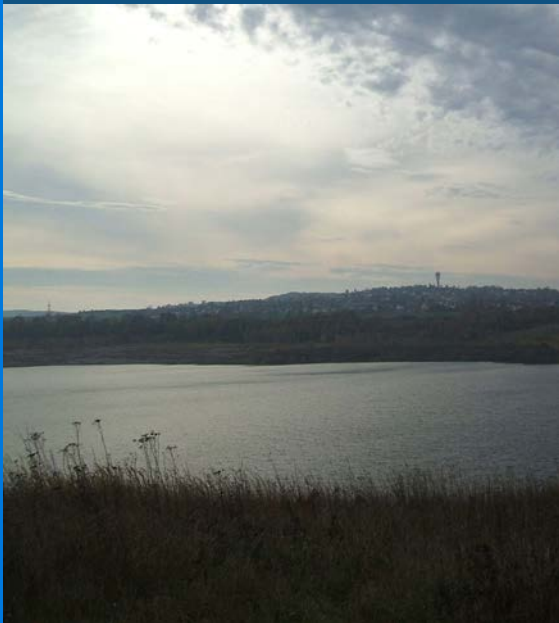
Green hydrogen + Trading



Deutsche Bahn and Uniper assessing decarbonization options in addition to today's CO₂-free hydro power supply

From coal...

Opencast lignite mine closed in 1988



...to renewables...

Re-naturalisation and re-purposing

- Assessing the installation of a 20-40 MW floating photovoltaic system



...and more

Enabler of sector coupling

- Testing potential for **hydrogen** reconversion in several existing locations



- Exchange on strategic orientation in the field of **e-mobility**.



Empowering Energy Evolution: Wilhelmshaven potential

From coal...

Shutdown of coal site by 2022



...to Gas...

Security of supply

- **LNG/H2 terminal** planned
- Nearby **gas storage** in Etzel

Gas connection

- Already existing **gas network** nearby
- Existing **hydrogen pipeline** to Scholven

...to Hydrogen

Enabler of sector coupling

- **Technology partnerships** for H2 – like the Salzgitter/Rhenus cooperation for the direct reduction of iron ore.
- Arrange **H2 infrastructure** to supply the Wilhelmshaven/Huntorf region in cooperation with regional partners (e.g. EWE).
- Enable long term **H2 import** opportunities via deep seaport connection.



**Empower
Energy
Evolution**