November 2022

EnBW Factbook 2022

Overview

1. EnBW at a glance
2. War in Ukraine – impact on EnBW
3. Market environment
4. Sustainable corporate strategy
5. Business segments
6. Key financials and non-financials
7. Capital markets
8. Corporate governance
9. Service

- Key financials
- Key non-financials
- Important shareholdings and regional footprint beyond Germany

EnBW at a glance

Figures 2021

	€ m
Total revenue	32,148
Adj. EBITDA	2,959
Adj. Group net profit	1,203
Retained cash flow	1,784
Total investment	2,809
Net debt	8,786

Generation portfolio 12.7 GW
of which 5.1 GW or 40% renewable energies

Debt repayment potential
20% RCF in relation to net debt

Adjusted EBITDA 2021 per segment

	€ m
Smart Infrastructure for Customers	344
System Critical Infrastructure	1,263
Sustainable Generation Infrastructure	1,540

Balanced risk-return profile

- 71% EBITDA contribution from regulated grid business and renewable energies
- **Solid investment-grade ratings:** Moody's Baa1 stable, S&P A- negative
- Debt repayment potential 2021 - 2025: ⩾12%[1] RCF in relation to net debt
- **Highly ranked sustainability ratings:**
  ISS ESG: B prime; MSCI: A average;
  CDP: B management; Systainalytics: 27.7 medium risk

Stable government-related shareholder structure

		%
NECKARPRI-Beteiligungsgesellschaft mbH[2]	Moody's Investors Service Aaa stable; S&P Global Ratings AA+ stable	46.75
OEW Energie-Beteiligungs GmbH[3]		46.75
Municipal shareholders' associations[4]		4.05
EnBW Energie Baden-Württemberg AG		2.08
Other shareholders		0.39

[1] To maintain solid investment-grade ratings, EnBW regularly checks the target value of at least 12% for the debt repayment potential for managing its financial profile.
[2] 100% subsidiary of NECKARPRI GmbH which is a 100% subsidiary of the federal state of Baden-Württemberg
[3] 100% subsidiary of Zweckverband Oberschwäbische Elektrizitätswerke which is an association of 9 districts with headquarters in Ravensburg
[4] Badische Energieaktionärs-Vereinigung (BEV) 2.45%; Gemeindeelektrizitätsverband Schwarzwald-Donau (G.S.D.) 0.97%; Neckar-Elektrizitätsverband (NEV) 0.63%

Financial and non-financial KPIs and targets

Key financials

KPI	Topic		2021	Target 2025
Adjusted EBITDA	Secure profitability	€ bn	3.0	3.2
Debt repayment potential	Managing the financial profile	%	20.3	⩾12[1]
ROCE	Increasing group value	%	7.0	-[2]
Value spread			-	0.5 - 1.5[2]

Key non-financials

KPI	Topic		2021	Target 2025
Installed output of RE in GW and the share of the generation capacity accounted for by RE	Expand renewable energies (RE)	GW %	5.1 40.1	6.5 - 7.5 >50
CO_2 intensity[3]	Climate protection	g/kWh	478	-15 to -30%[4] (reference year 2018)
LTIF for companies controlled by the Group[5, 6]	Occupational safety		2.3	2.1
LTIF overall[5]			3.3	3.5
People Engagement Index (PEI)[7]	Engagement of employees		82	77 – 83[8]

As of 31 December 2021

[1] Following the transition to the growth strategy, the internal financing capability was replaced by the new key performance indicator debt repayment potential from 2021 onwards. To achieve the unchanged goal of maintaining solid investment grade ratings, EnBW regularly checks the 2025 target value for the debt repayment potential for managing its financial profile.

[2] We will use value spread to measure the increase in the value of the company from 2022 onwards. This performance indicator is more meaningful and is independent of external market influences making it easier to control. It will also improve the comparability of the data. ROCE will thus be replaced by the new key performance indicator value spread. Value spread stood at 2.1% in the 2021 reporting year.

[3] The calculation method for the key performance indicator CO_2 intensity will be restricted in future to include only factors that can be controlled by the company. In contrast to previous years, the share related to redispatch that cannot be controlled by EnBW is no longer included. Using the previous calculation method, the CO_2 intensity for the 2021 financial year would have been 492 g/kWh. This performance indicator still excludes nuclear generation. The CO_2 intensity including nuclear generation for the reporting year was 386 g/kWh (previous year: 268 g/kWh).

[4] The reference year is 2018 because the 2020 reporting year cannot be considered representative for the coming years (due to, among other things, market effects and the COVID-19).

[5] Variations in the group of consolidated companies (all companies with more than 100 employees, excluding external agency workers and contractors, are considered). Companies that were fully consolidated for the first time during the 2021 financial year were not included in the calculations for the LTIF performance indicators.

[6] Excluding companies in the area of waste management.

[7] Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered [except ITOs]). Companies that were fully consolidated for the first time in the fourth quarter of 2021 were not included in the employee surveys for the PEI.

[8] Due to the extraordinary effects relating to the COVID-19 in the year this key performance indicator was introduced, we may need to adjust this target value during the strategy period.

Important shareholdings and regional footprint beyond Germany

Germany

1 **Stadtwerke Düsseldorf AG, Düsseldorf**
- 54.95% capital share
- €230.1 m adjusted EBITDA

2 **VNG AG, Leipzig**
- 74.21% capital share
- €297.2 m adjusted EBITDA

Austria

3 **SMATRICS EnBW GmbH, Vienna**
- 51.00% capital share

Czech Republic

4 **Pražská energetika Holding a.s., Prague**[1]
- 69.80% capital share[2]
- €177.1 m adjusted EBITDA

Denmark

5 **Connected Wind Services A/S, Skødstrup**
- 100% capital share

France

6 **Valeco SAS, Montpellier**
- 100% capital share

Great Britain

Mona Offshore Wind Holdings Ltd., Sunbury-On-Thames
- 50.00% capital share

7 **Morgan Offshore Wind Holdings Ltd., Sunbury-On-Thames**
- 50.00% capital share

Morven Offshore Wind Holdings Ltd., Sunbury-On-Thames
- 50.00% capital share

Sweden

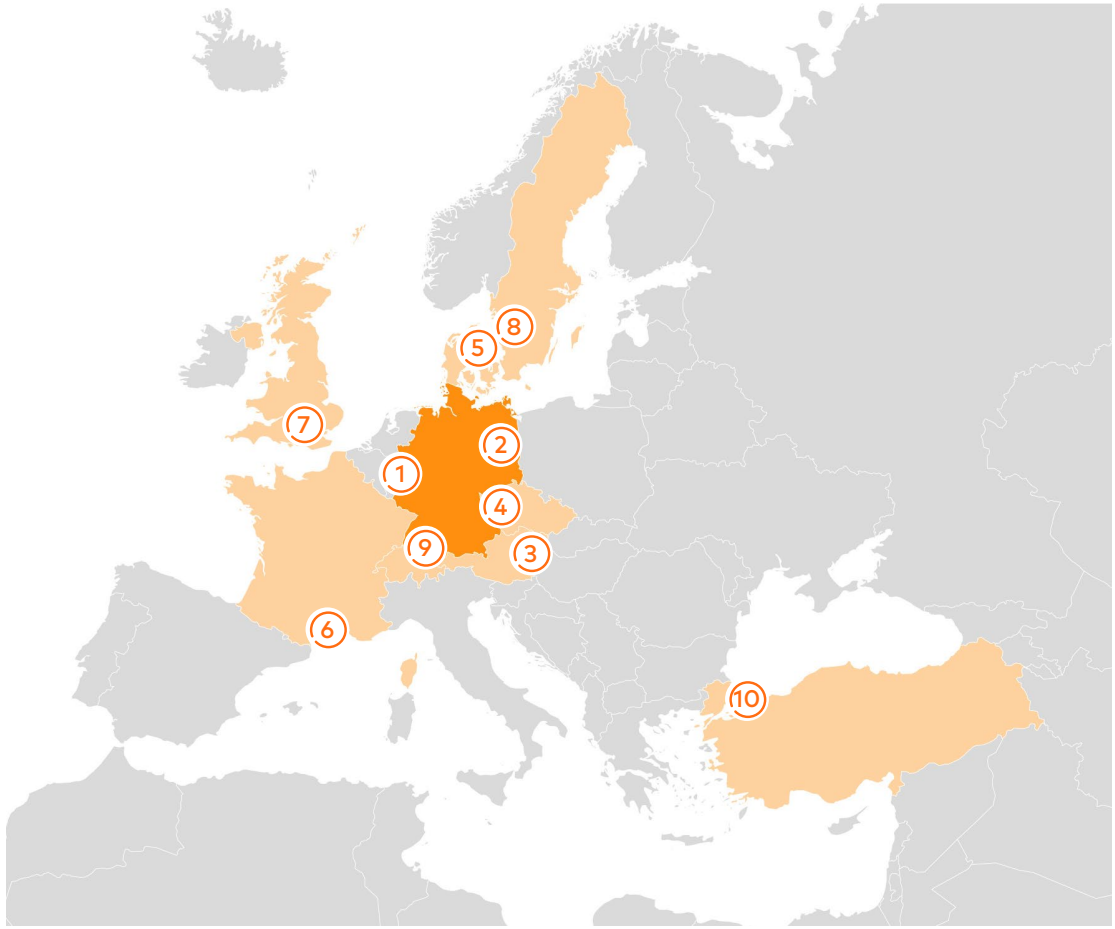
8 **EnBW Sverige AB, Falkenberg**
- 100% capital share

Switzerland

9 **Energiedienst Holding AG, Laufenburg**
- 66.67% capital share
- €93.0 m adjusted EBITDA

Türkiye

10 **Borusan EnBW Enerji yatırımları ve Üretim A.Ş., Istanbul**[3]
- 50.00% capital share



As of 31 December 2021
[1] Directly and indirectly held shares.
[2] Shares held directly and indirectly through Praszka Energetika Holding a.s.; PRE fully consolidated according to a consortium agreement with the City of Prague.
[3] Not fully consolidated, accounted for using the equity method

The full list of shareholdings can be found in the notes to the consolidated financial statements under (37) "Additional disclosures" EnBW Integrated Annual Report 2021, page 251

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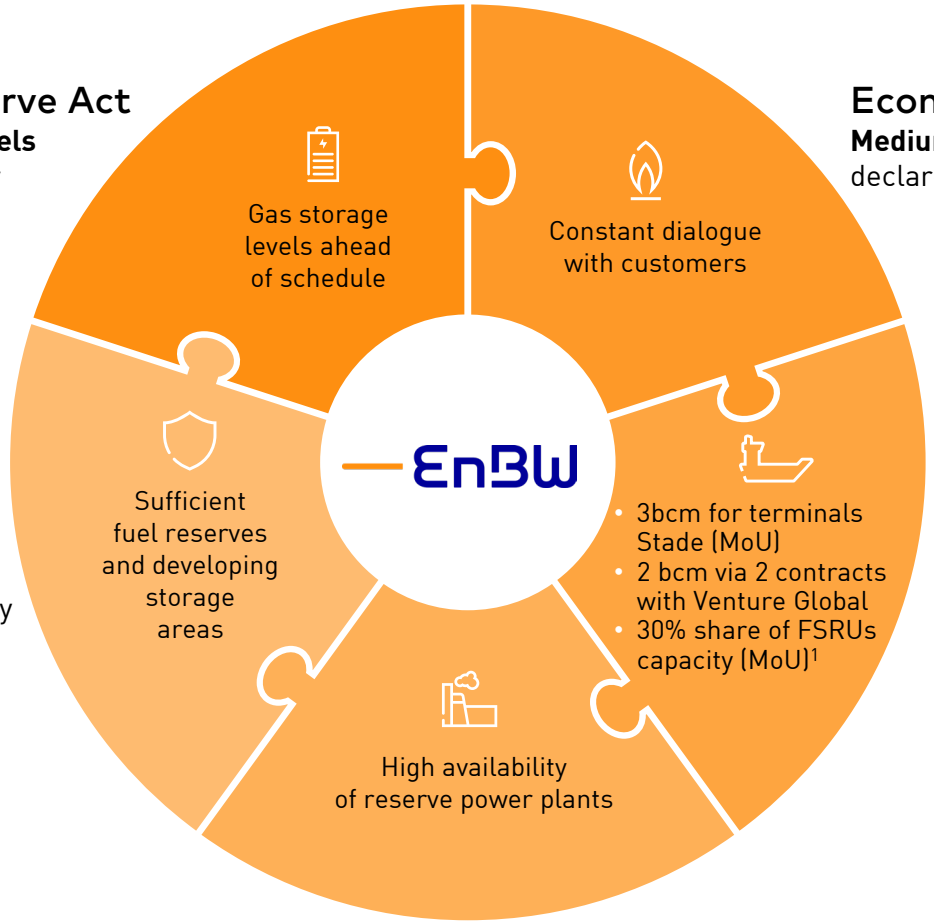
- Current energy framework
- Stabilisation German energy market
- Prevention gas shortage

EnBW delivers on current framework for security of supply and reducing dependence on Russia

National Gas Reserve Act
Minimum gas storage levels
set by Economics Ministry

Economics Ministry gas emergency plan
Medium crisis level "alarm level"
declared on 23 June 2022



Energy Security Act
Fiduciary management and **potential stabilisation of critical infrastructure providers** to safeguard security of supply

LNG Acceleration Act
Five **LNG FSRUs** to be installed in Brunsbüttel, Wilhelmshaven, Stade and Lubmin

Replacement Power Plant Provision Act
Reduction of gas consumption in power sector
by using coal-fired power plants in grid reserve etc.

[1] With Ministry for Economic Affairs and Climate Action, RWE and Uniper

EnBW delivers on current framework for security of supply and reducing dependence on Russia

National Gas Reserve Act

- **Minimum gas storage levels** set by Economics Ministry:
- 1 September: 75%
  1 October: 85%
  1 November: 95%
  1 February: 40%
- Timescale:
  In force since
  1 May 2022

EnBW

- EnBW's gas storage levels ahead of schedule

Economics Ministry gas emergency plan

- **Three crisis levels** (early warning level, alarm level, emergency level) **to safeguard gas supply**.
- Timescale:
  Alarm level declared on
  23 June 2022

EnBW

- Constant dialogue with customers

LNG Acceleration Act

- Five **LNG terminals** to be built in Brunsbüttel, Wilhelmshaven, Stade and Lubmin **by 2024**.
- Timescale:
  In force since
  1 June 2022

EnBW

- MoU with Hanseatic Energy Hub (LNG terminal Stade) on capacity bookings of 3bcm
- Long-term LNG supply contract of 2 bcm with Venture Global
- MoU for the supply of FSRUs Floating Storage and Regasification Units (Ministry for Economic Affairs and Climate Action, EnBW, RWE and Uniper)

Replacement Power Plant Provision Act

- **Reduction of gas consumption in power sector** (by using coal-fired power plants in grid reserve etc.) in case of gas shortage.
- Timescale:
  Passed by Bundesrat (upper house) 8 July
- **In force** since 12 July

EnBW

- EnBW ensures high availability of reserve power plants

Energy Security of Supply Act

- Fiduciary management and **potential stabilisation of critical infrastructure providers** to safeguard security of supply.
- Timescale:
  In force since
  1 June 2022

EnBW

- EnBW ensures sufficient fuel reserves and develops storage areas

EnBW contributes to the stabilisation of the German energy market to mitigate the effects from the Russian war

As of 2023 no more risks under either of the two purchase contracts

- 65 TWh contract with WIEH[1] concluded with a settlement as of 10 October 2022
  - WIEH meets all additional costs of replacement procurement in 2022
  - Early termination of contract effective year-end 2022
- 35 TWh contract with Gazprom Export (GPE)
  - VNG continues to supply customers at agreed prices
  - Mechanism for compensation of replacement procurement costs still in discussion with German government
- Both contracts will run out by year-end 2022 and VNG will not bear any residual exposure beyond that

Coal

- No remaining exposure to Russian coal, all future coal supply sourced from other countries

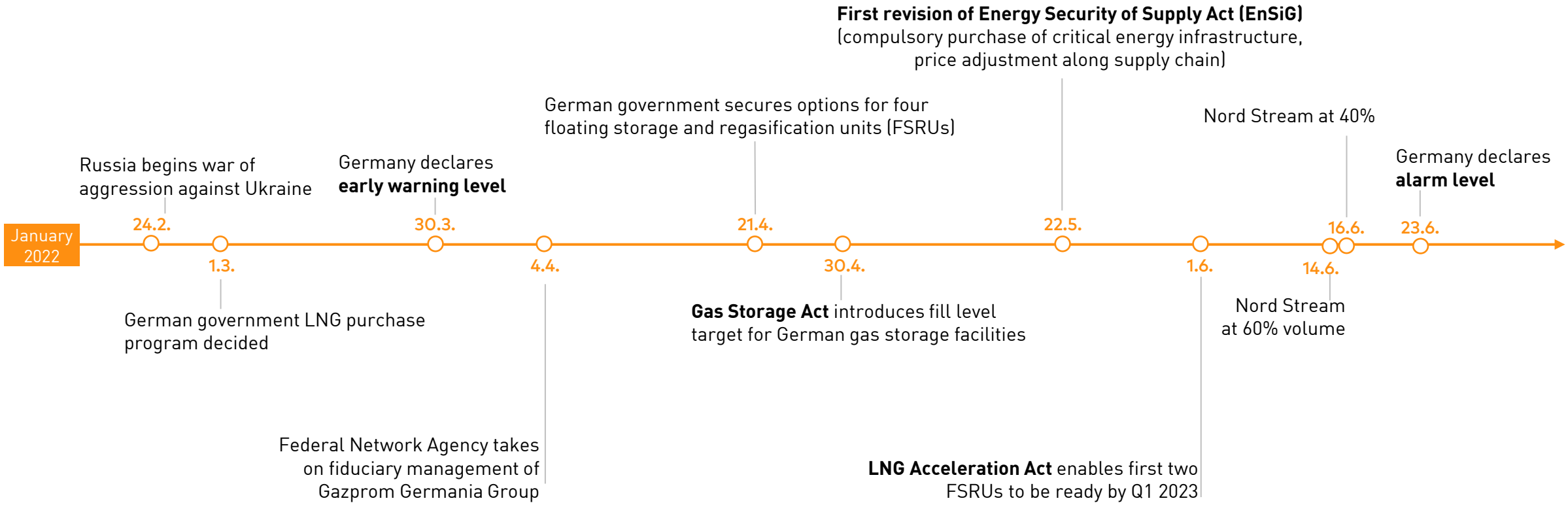
Nuclear

Limited extension for three German nuclear power plants until 15 April 2023

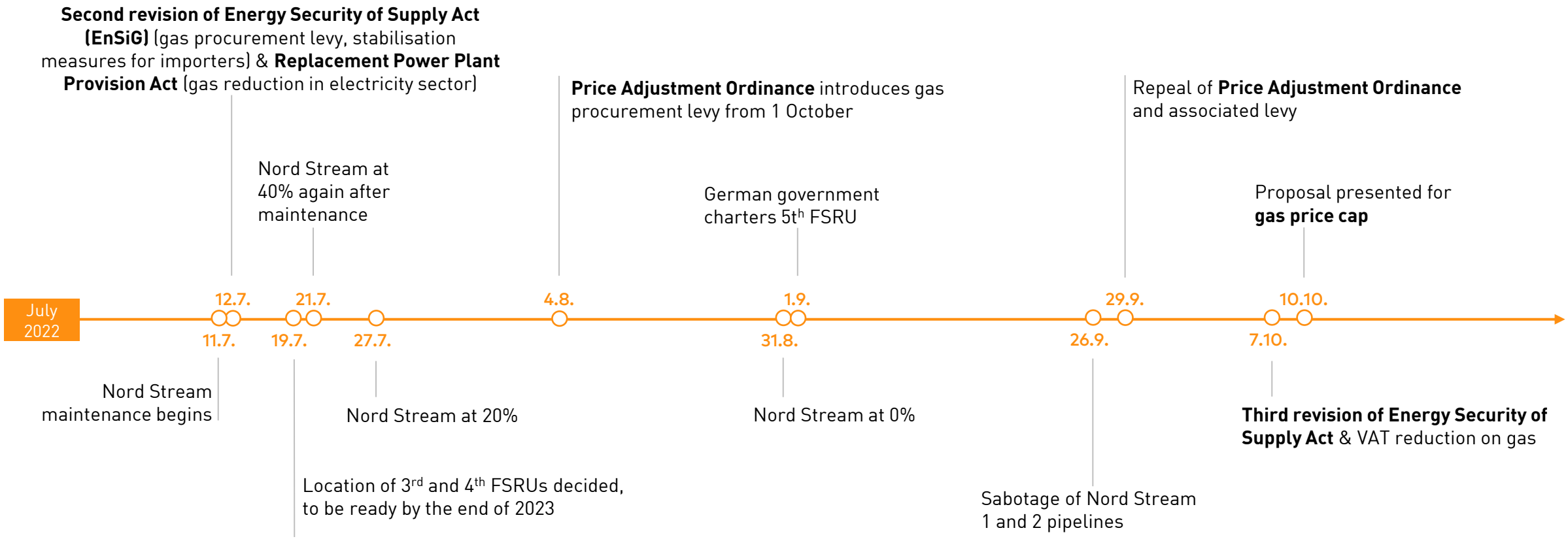
- Includes EnBW's power plant Neckarwestheim 2 (1,400 MW)
- No extension beyond that and no procurement of new fuel rods

[1] A subsidiary of Gazprom Germania, now operating as SEFE, Securing Energy for Europe, under trusteeship of BNetzA

German regulatory adjustments in 2022 to prevent a gas shortage (1/2)

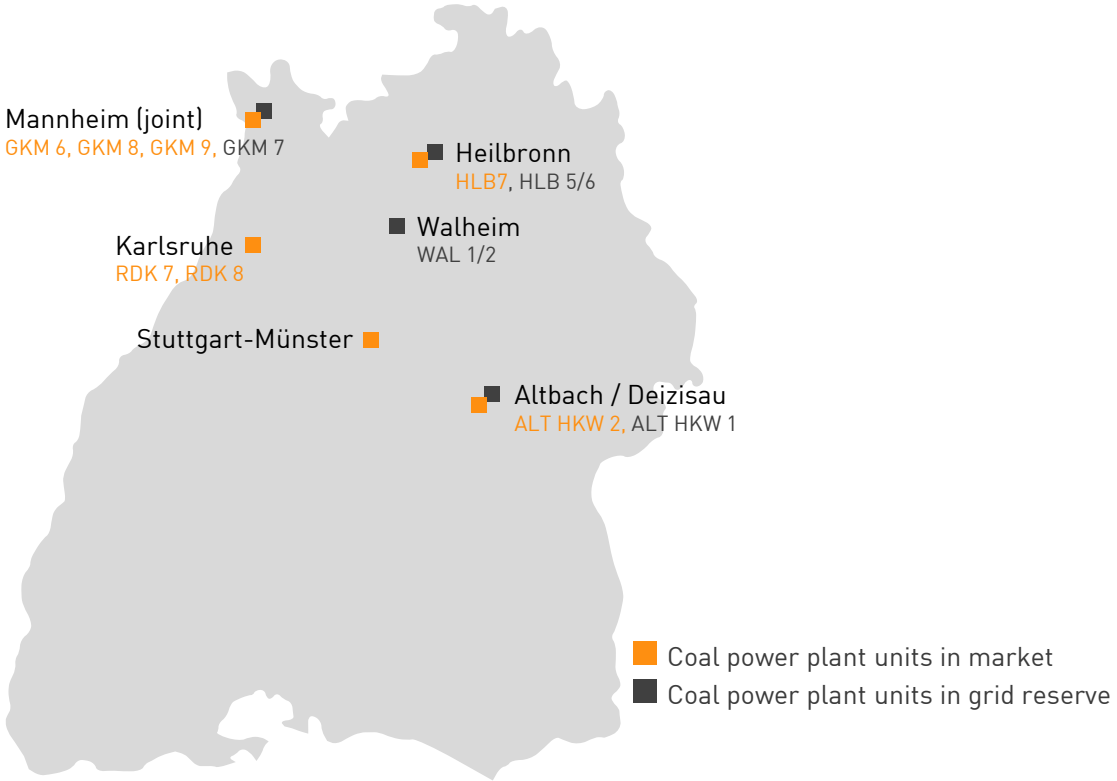


German regulatory adjustments in 2022 to prevent a gas shortage (2/2)



In the event of a gas shortage, coal-fired reserve power plants could temporarily come back onto the market

Overview map of EnBW coal-fired power plants



- Enacted in the wake of the Ukraine war to prevent impending gas shortages: Until 31 March 2024, coal and oil-fired power plants in the grid reserve can temporarily come back onto the market to reduce gas consumption in the power sector if alert level or emergency level declared under gas contingency plan
- Bringing a plant back onto the market is voluntary, with preference given to hard-coal power plants. Lignite-fired power plants come second, in each case by statutory order
- By a further statutory order, if the alert or emergency level is declared, the government can limit the operation of gas-fired power plants for electricity generation for a maximum of 9 months, and gas-fired CHP can then only be operated if there is no alternative on the heat market
- The act imposes far-reaching requirements for fuel stockpiling; this also applies to plants that stay in the grid reserve (except those commissioned before 1970)
- Bringing EnBW's grid reserve plants back onto the market is probably not an option: The age of the plants rules out 'continuous operation' as required by the act, and new stockpiling obligations pose challenges due to difficult inland logistics, stockpiling space issues and low river water

For EnBW's plants it is unlikely that they would come back onto the market

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- Decarbonisation: Regulatory environment
  - EU
  - Germany
- Energy market Germany
  - Elecricity market Germany
  - Gas market Germany
- Regulated grids business
  - Electricity grids Germany
  - Gas grids Germany

Decarbonisation EU: Regulatory Framework

Target architecture status quo

Paris Agreement EU 2050 goals

- Well below +2°C pre-industrial average efforts to limit to +1.5°C in 2100
- Climate neutrality by 2050
- Zero pollution, nature protection

EU 2030 goals

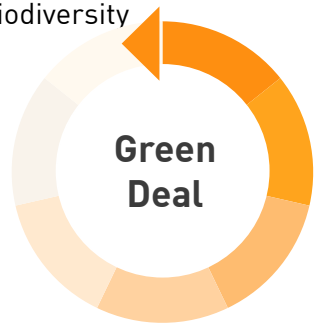
- -55.0% GHG emissions
- 32.0% RE in final energy consumption[1]
- 32.5% Energy savings[2]

The European Green Deal[3]: The new European Commission's core programme

Economic transformation for a sustainable future

- Climate neutrality by 2050
- Clean, safe and affordable energy
- Mobilising research and innovation
- Preserving ecosystems and biodiversity
- Sustainable mobility
- Financing the transition
- Zero pollution target
- Circular economy
- Sustainable farming and food
- Leave no one behind

- **EU as global leader**
- **European Climate Pact**



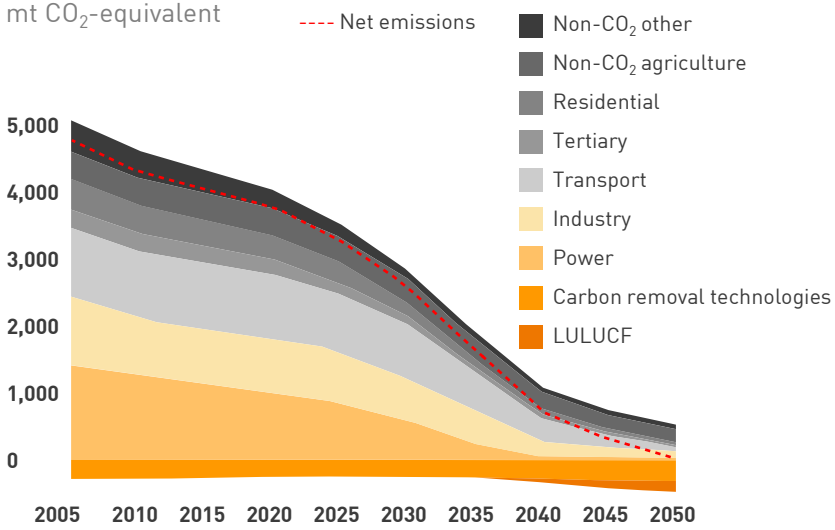
Key goals

- Achieve climate neutrality in Europe by 2050
- Industrial policy to secure sustainable economy and industry in terms of sustainable products and access to natural resources
- Protect habitats

Core climate and energy policy measures

- Climate neutrality by 2050 in law
- 2030 targets raised (emissions –55%)
- Increased sector coupling and decarbonisation of gas sector (hydrogen strategy)
- Offshore wind strategy
- Renovation wave

Emissions per sector in Green Deal scenario[4]



Stricter EU climate law endorsed May 2021 (Climate neutrality by 2050, -55% until 2030); legislation to adapt the legal framework for 2030 ("Fit for 55") in process

[1] Current proposal (Fit for 55 I package + REPowerEU): Renewables share of at least 40%, following REPowerEU proposal of 45% of gross final energy consumption by 2030
[2] Current proposal (Fit for 55 I package + REPowerEU): Increase of 2030 energy efficiency target to 36%-39%, following REPowerEU even 4%age points more, for final and primary energy consumption
[3] Commission Communication: The European Green Deal, COM(2019) 640 final , 11 December 2019
[4] Commission Communication: A Clean Planet for all, COM(2018) 773 final, 28 November 2018

LULUCF: Land use, Land use change and Forestry
GHG: Greenhouse gas RE: Renewable Energy

Decarbonisation EU: Legislation ‘Fit for 55‘ legislative files[1]

‘Fit for 55’-Package I

- **EU Emissions Trading System Directive**
- **Energy Efficiency Directive**
- **Alternative Fuels Infrastructure Regulation**
- **Effort Sharing Regulation**
- **Renewable Energy Directive**
- **Regulation on Land Use, Land Use Change and Forestry**
- **CO_2 Emission Performance Standards Cars Regulation**
- **Social Climate Fund**
- **Carbon Border Adjustment Mechanism**
- **Energy Taxation Directive**
- **RE Fuel Aviation & Maritime Regulations**

EU Emissions Trading System Directive

- More ambitious ETS to achieve emissions reductions of 61% by 2030, previously 43% (base 2005)
- Extension of the ETS to maritime shipping and strengthening of the ETS for aviation
- Introduction of a separate ETS for buildings and road transport from 2026 with a target of -43% by 2030 (base 2005)
- Changes to ETS affecting energy sector and industry lead to significant tightening of emission reduction requirements

Energy Efficiency Directive

- Increase of 2030 energy efficiency targets from 32.5% to initially 36%-39%, following new proposal in May +4%age points, for final and primary energy consumption
- Obligation to annual savings in final energy consumption of 1.5% starting in 2024
- Obligation of Member states to renovate at least 3% of the total area of all public buildings annually
- New requirements for high-efficiency cogeneration
- Requirements for specific heating and cooling systems

Alternative Fuels Infrastructure Regulation

- Set-up and operation of charging infrastructure in competition
- Precise requirements for the mandatory expansion of the publicly accessible e-infrastructure
- Distance based rules for the rollout of the electric infrastructure
- Payment systems for ad hoc charging
- Price differentiation between end customer (ad hoc) and e-mobility provider only with justification

Renewable Energy Directive

- Renewables share of initially at least 40%, following new proposal in May 45%, of gross final energy consumption by 2030 (current legislation 32%)
- Higher targets for heating/cooling, district heating/cooling systems and change of target structure for transport sector
- New target for renewables in the building sector of 49% by 2030
- Industry: indicative target increase to 1.1%age point annual share + mandatory: 50% of H2 (material and energy use in industry) via renewable fuels of non-biological origins (2030)
- Criteria for renewable hydrogen
- Stricter sustainability criteria for biomass

Effort Sharing Regulation

- Increase of GHG reduction target from 29% to 40% (base 2005), for Germany increase from 38% to 50%
- Breakdown on Member states by GDP and cost-efficiency considerations
- New: Establishment of reserve fund (emission contingent) for Member states that fail to achieve targets, only if overall target is secured

Legislative procedures at least until end 2022/beginning 2023

[1] As of 15 July 2021 & REPowerEU proposals as of 18 May 2022

GHG: Greenhouse gas

Decarbonisation EU: Legislation ‘Fit for 55 part 2 - gas package’

EU Gas Directive

Proposals/under negotiation:

- Aim to include hydrogen into the internal European market for gases incl. market design and regulation
- Tightening of the unbundling rules for the operation of hydrogen pipelines (H_2 ITO only until 2030)
- No differentiation of network levels for hydrogen between transmission network and distribution network
- Definition of "low-carbon hydrogen" and “low-carbon gases”
- Range of tasks of gas distribution system operators extended to include "decommissioning”

EU Gas Regulation

Proposals/under negotiation:

- Rules for tariff discounts for climate-neutral gas and hydrogen
- Regulations on the possibility of cross-subsidisation between natural gas and hydrogen
- Determination of possible H_2 admixture rates
- Prioritisation of H_2 use in "hard to abate" sectors

Energy Performance of Buildings Directive

Proposals/under negotiation:

- Aim to make the entire EU building sector climate neutral by 2050 (life cycle approach)
- Binding minimum standards for the private and public sector (gradual increase of energy efficiency classes)
- Ban of fossil fuel-based heating/cooling systems for new buildings – from 2035 complete phase-out for all buildings
- Obligation to install rooftop PV systems in phased sequence for new buildings (>250m^2) from January 2025 and by end of 2030 for all existing buildings
- Promotion of E -charging infrastructure with strict targets and requirements to reduce bureaucratic hurdles

Regulation on methane emissions reduction in the energy sector

Proposals/under negotiation:

- Aim to reduce methane emissions in the energy sector – special focus on gas
- Mandatory requirements for measurement, reporting and verification
- Mandatory requirements for LDAR (Leak Detection and Repair)
- possibility for the regulator to take costs into account in (network) charges
- Prohibition of "venting" (with exceptions) and "routine flaring“
- International transparency efforts on CH_4 emissions (in the energy sector)

EU gas package to significantly (re)shape gas and hydrogen sector and markets towards decarbonisation – legislative procedures at least until mid 2023

[1] As of 15 December 2021

Decarbonisation Germany: Political & regulatory environment

German Climate & Energy Policy Goals:

-65% GHG emissions by 2030 (-88% by 2040)
-50% primary energy consumption by 2050

Climate Protection Act 2021

- Establishes German climate protection targets by 2050 and sets a legal framework
- Climate neutrality by 2045 (instead of 2050) pursued as long-term target. Annual sectoral emission budgets specified through to 2030
- Monitoring process for target attainment by 2030: If sectoral annual emission targets missed, department in charge has to submit an immediate action programme

Climate protection programme

- Target of 80% renewables in 2030 and target ranges specified for specific technologies are now legislated within the Renewable Energy Act 2023 (EEG 2023)
- Coalition agreement: Coal phase-out ideally by 2030 as a target
- National CO_2 pricing system in transport and heating (BEHG) started in 2021 with fixed prices followed by a cap-and-trade system from 2026

**New emergency climate programme was announced for 2022 but is still in consultation within the government.
Disagreements about the substance of potential amendments to the sectoral target system are delaying the planned revision of the Climate Change Act.**

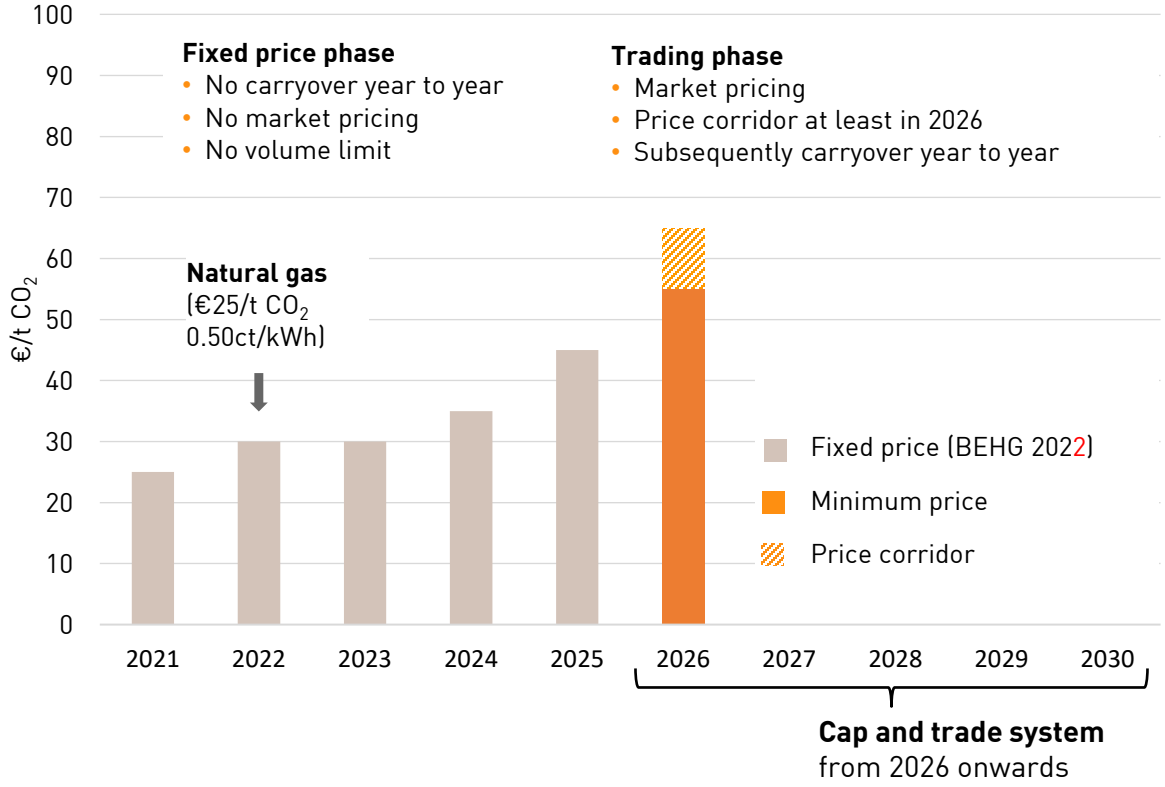
EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)
BEHG: Brennstoffemissionshandelsgesetz (Fuel Emissions Trading Act)
GHG: Greenhouse gas

Decarbonisation Germany: CO_2 pricing in transport and heating sector

New installations and measures needed for 65% target

Putting a price on CO_2 emissions in heating and transport sectors

- Act introducing national CO_2 pricing in transport and heating sector was adopted in autumn 2019 (Fuel Emissions Trading Act, known by its German abbreviation BEHG) and entered into force on 1 January 2021
- Parties placing fossil fuels on the market have to pay a fixed price per ton of CO_2 until 2025, after which certificate trading will be phased in with a price corridor and volume limit
- The revenues from the BEHG flow entirely into the Climate and Transformation Fund, from which, among other things, the complete abolition of the EEG surcharge from 1 July 2022 and thus the reduction in electricity costs will be refinanced
- EnBW supports introduction of cross-sectoral CO_2 pricing system and implementation of higher price path in the Act
- In the 2022 amendment, it was decided to price further fuel emissions from coal (from 2023) and waste incineration (from 2024) under the BEHG. Due to the currently high energy price level, the increase in the CO2 price actually due on 1 January 2023 was postponed by one year, and the further price path until 2025 was also lowered



National CO_2 pricing adds incentives for sector coupling by increasing price for fossil fuels while cutting cost of climate-friendly electricity applications

Decarbonisation Germany: Regulatory framework renewable energy

Onshore wind

Renewable Energy Sources Act, Federal Nature Conservation Act, Onshore Wind Energy Act

- Better economic conditions for low wind yield regions and bonus scheme for projects in the south
- German states must designate an average of 2% of territory for wind energy use
- Significant reduction in previous species conservation obstacles

Photovoltaics

Renewable Energy Sources Act

- Extension of eligible areas for ground-mounted solar
- Major improvements for small-scale solar and solar prosuming
- Introduction of new definition of storage and increased feed-in tariffs for full feed-in and surplus feed-in

Offshore wind

Offshore Wind Energy Act

- Different tendering conditions for auctions of sites that have and have not been subject to preliminary investigation
- Auction design requires uncapped payment by operator to state when bidding
- Project implementation deadlines are rigid and challenging as to time

Beyond adopted measures, further legislative adjustments needed to achieve renewables expansion targets

Decarbonisation Germany: The energy system in 2045 under the Green Deal scenario

Renewable energy

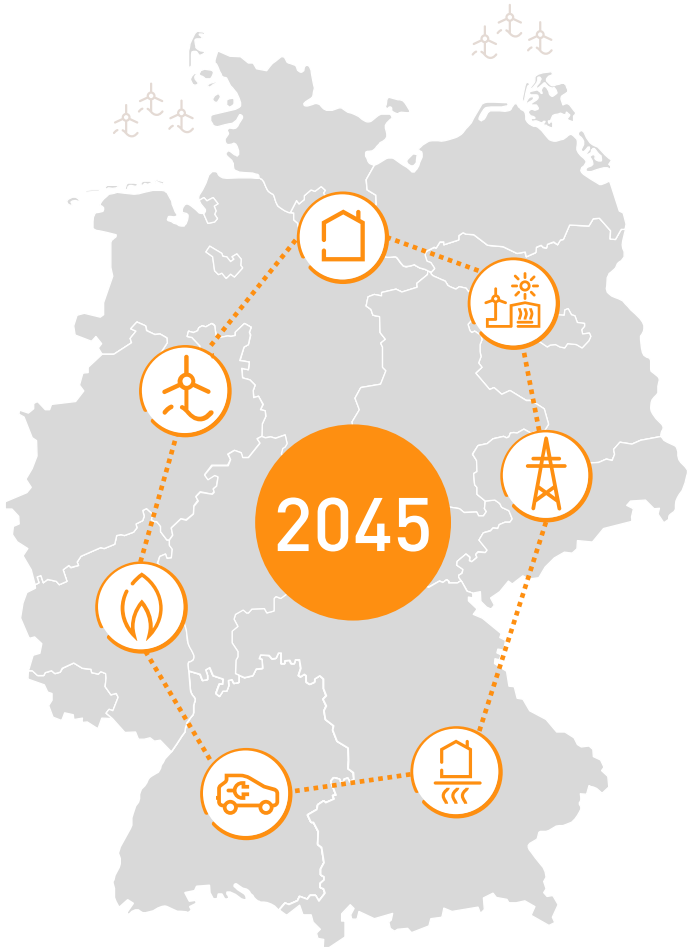
- … provides climate-neutral power generation
- Installed RE capacity: approx. 600 GW (today approx. 145 GW), of which 210 GW wind, 380 GW solar plus 8 GW hydro and 5 GW biomass

Security of supply

- … ensured by gas-fired power plants running on hydrogen, battery storage and hydropower (pumped storage): 65 GW gas turbines and CCGT (2021: approx. 30 GW); 15 GW battery storage

Transport and mobility

- Electric power standard for passenger cars, approx. 40 m electric vehicles, mainly passenger cars and delivery vans
- Heavy/long-distance transport powered by H_2, biogenic fuels or battery electric



Electricity consumption

- …increases to approx. 820 TWh due to high level of electrification in all sectors (currently approx. 500 TWh)
- Energy efficiency reduces conventional consumption to ~400 TWh
- New consumption from 2025 (~200 TWh by 2045) due to sector coupling

Grids (electricity)

- Massive expansion by 2045
- €110 bn in investment needed in the transmission grid (€75 bn by 2030)
- €75 bn in investment in distribution grids (€30 bn by 2030). €75 bn to connect offshore wind farms

Heat supply

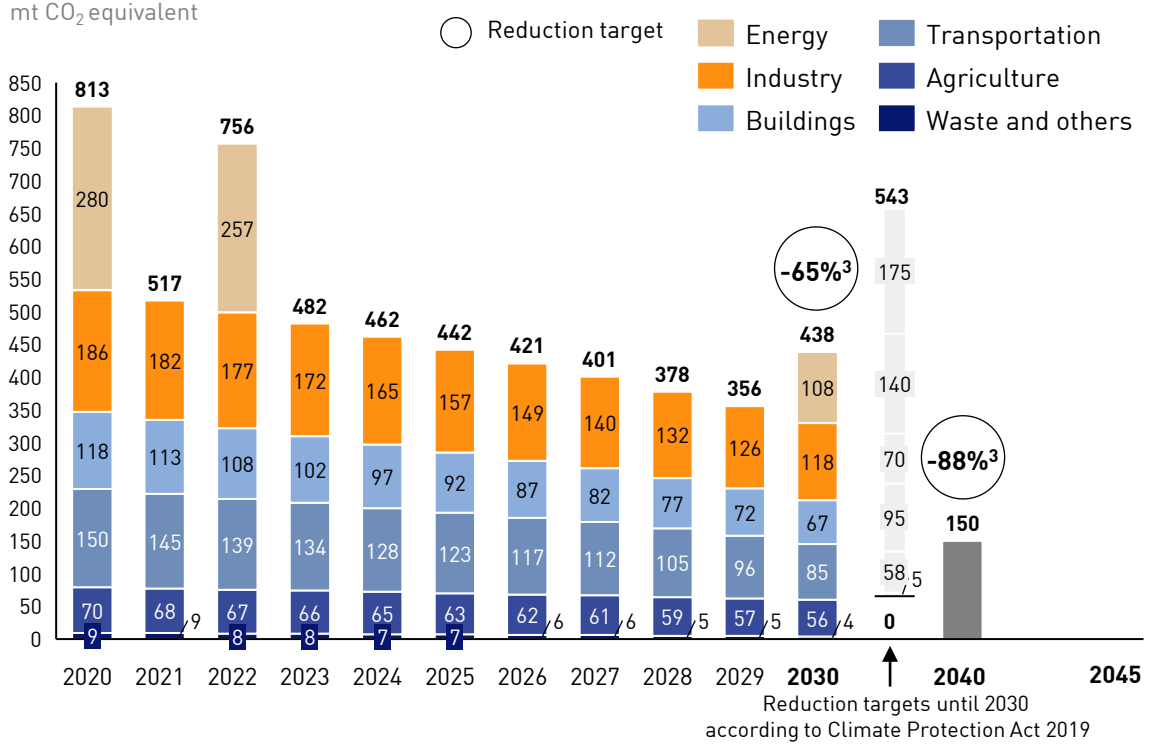
- … predominantly electric or with green gases
- Heat demand to fall by 1/3
- H_2 with ⩽20% market share

Sources: BMWK, Prognos, BCG, own analysis

Decarbonisation Germany: GHG emissions and climate protection targets

German GHG emissions and emission targets by sector

Maximum annual emissions
mt CO_2 equivalent



Energy industry must provide the largest share of GHG reductions (-77% compared to 1990), energy sector expected to be almost net carbon-neutral by 2040

Sector targets for GHG emissions according to the Climate Protection Act 2021

Sector	1990 (mt CO_2-eq.)	2020[1] (mt CO_2-eq.)	2030 (mt CO_2-eq.)	2030 (reduction compared to 1990)
Energy	466	280	108	77%
Industry[2]	284	186	118	58%
Buildings	210	118	67	68%
Transportation	163	150	85	48%
Agriculture	90	70	56	38%
Subtotal	**1,213**	**804**	**433**	**64%**
Waste and others	38	9	5	87%
Total amount	**1,251**	**813**	**438**	**65%**

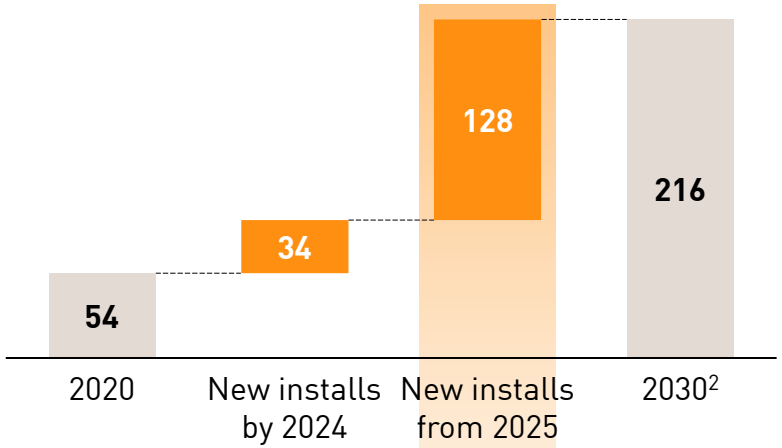
An accelerated expansion of renewables and entry into an international hydrogen market is needed

[1] Estimation [2] Manufacturing companies [3] Base year 1990
Source: German Federal Environmental Agency GHG: Greenhouse gas

Decarbonisation Germany: Renewable expansion targets 2030

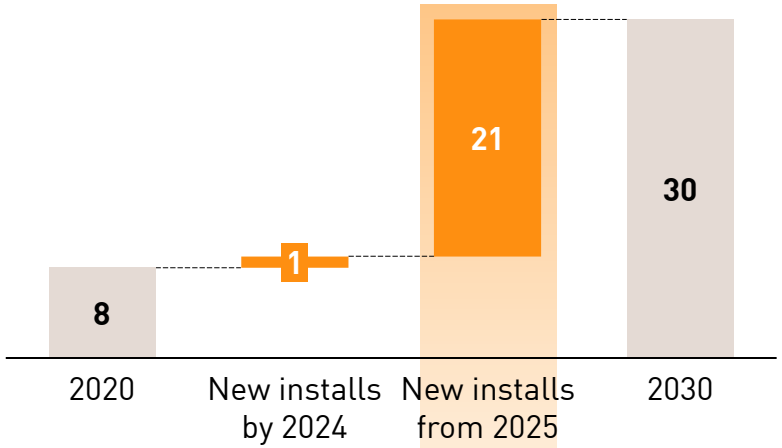
Solar
Installed capacity/new installs[1]

in GW



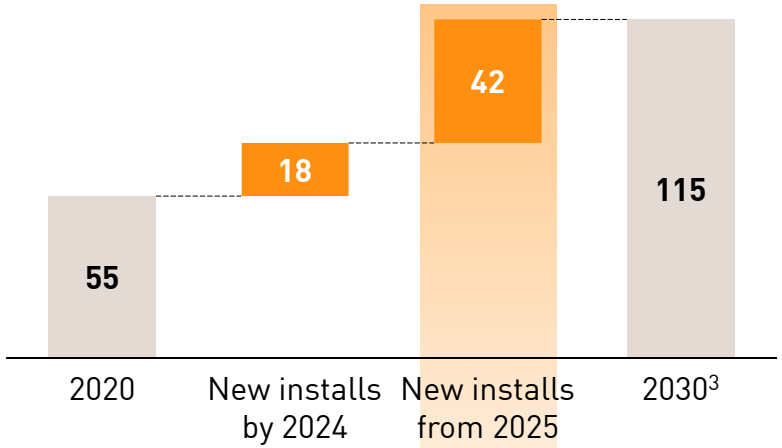
Offshore wind
Installed capacity/new installs[1]

in GW



Onshore wind
Installed capacity/new installs[1]

in GW



Required new installs per working day (from 2025)[1]

90 MW Solar
... approx. half the output of Weesow/day

+

15 MW Offshore
... a wind farm like He Dreiht approx. every two months

+

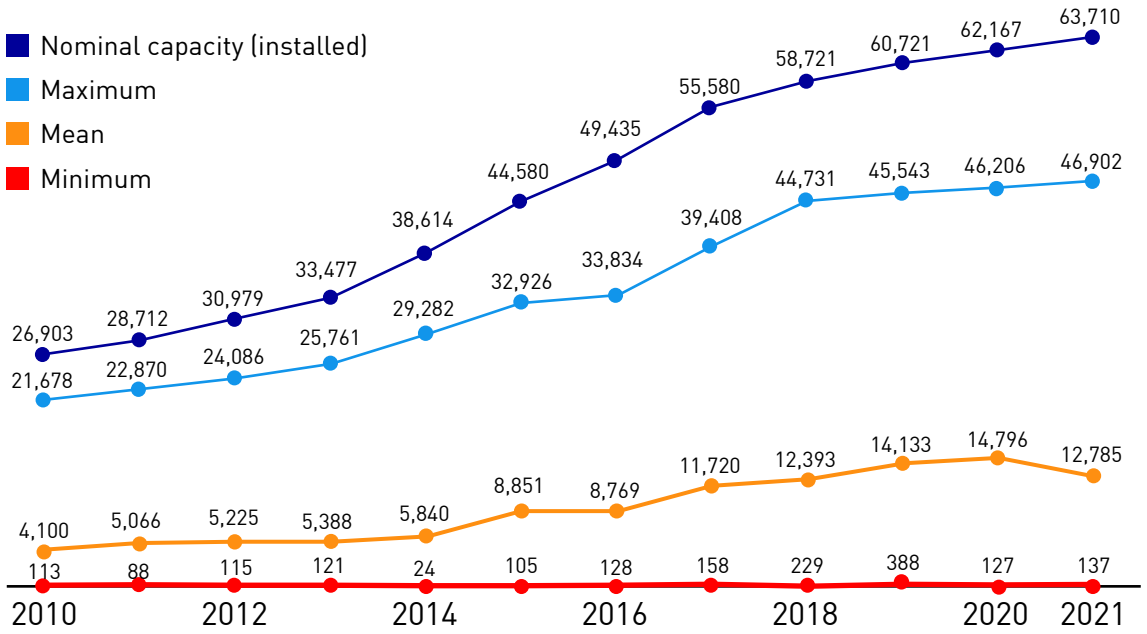
30 MW Onshore
... approx. 7 turbines/day

[1] New installs from 2022 based on expansion targets for 2030 under German government's Easter package [2] Originally 200 GWh under coalition agreement [3] Originally 100 GWh under coalition agreement

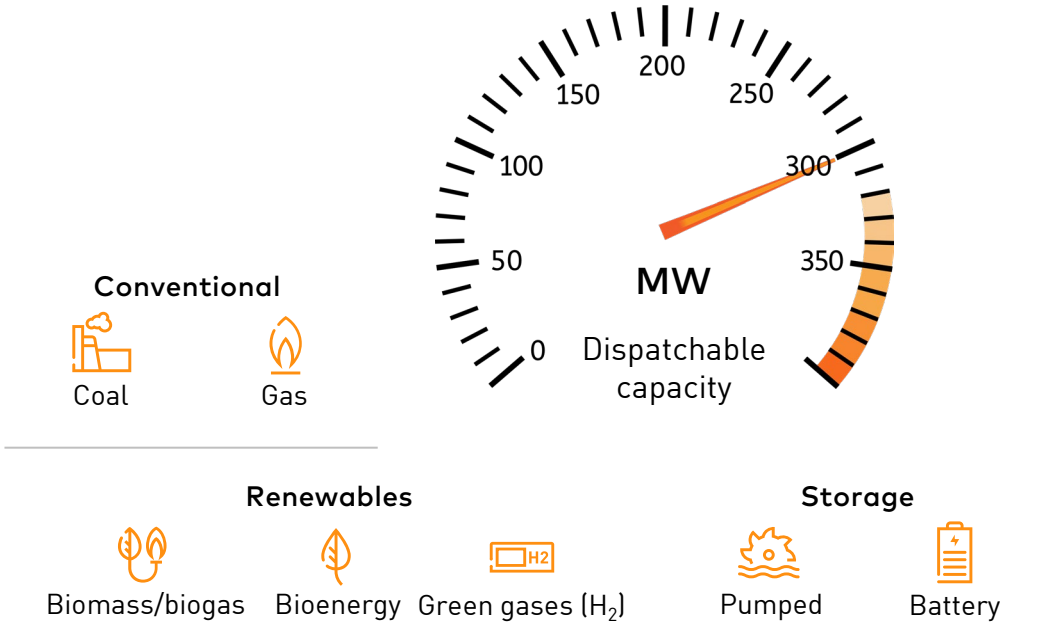
Decarbonisation Germany: Expansion of renewables increases demand for dispatchable power

Wind power generation in Germany, 2010 to 2021

in MW



Future options for dispatchable power generation



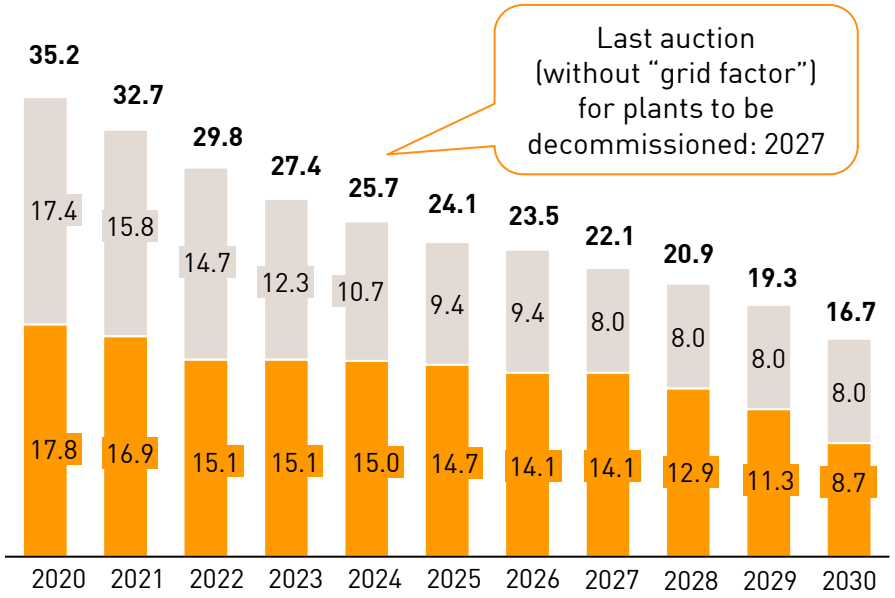
Source: "VGB Powertech: Windenergie in Deutschland und Europa. Status quo, Potenziale und Herausforderungen in der Grundversorgung mit Elektrizität Teil 2: Europäische Situation im Jahr 2017" (Wind Energy in Germany and Europe. Status quo, potentials and challenges in the basic supply of electricity Part 2: European situation in 2017)

Decarbonisation Germany: Coal phase-out

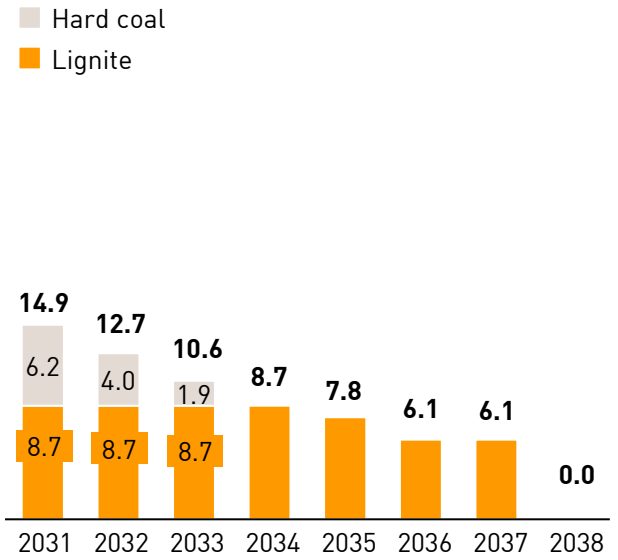
Exit paths for lignite and hard coal: Capacity targets in each target year

market capacity in GW

Competitive bidding for plants to be decommissioned



Statutory reduction mostly without state compensation



1. The new German government has announced that it will "bring forward, ideally to 2030" the current statutory provisions for phasing out coal-fired power generation (see left, completion by 2038)
2. No draft legislation has yet been published; the first step is a feasibility assessment for early coal phase-out
3. The governing coalition has agreed not to pay any new compensation to companies if coal phase-out plans are accelerated
4. However, in the wake of the gas supply crisis due to the Ukraine war, the legislated decommissioning of some plants has been temporarily postponed or suspended. Power plants that would come under a ban on coal-fired generation in 2022/2023 or are held in the grid reserve can temporarily come back onto the market until 31 March 2024

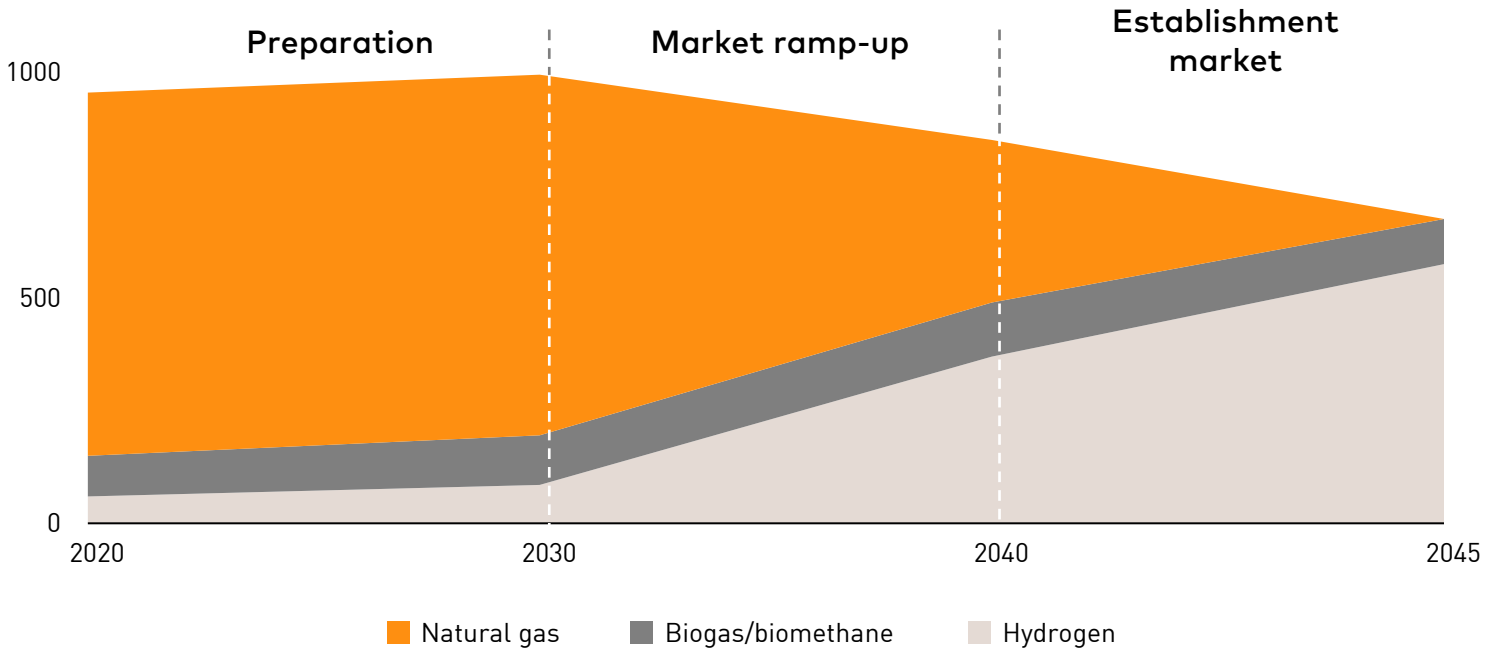
The governing coalition has announced a revision of the coal phase-out legislation to bring the phase-out forward, ideally to 2030

[1] In bidding for target year 2027, bid volume to be determined = difference between starting level for target year 2027 and 2030 target level for hard coal capacity in electricity market.
Grid factor: Assessment by grid operators based on the so-called network factor whether the respective plants are network-relevant, in order to then determine the order of awarding.

Decarbonisation Germany: Natural gas gradually being replaced by climate-neutral gases

Expected gas demand in Germany (incl. feedstock use)[1]

in TWh



Explanatory notes

- EU climate neutrality requires fossil fuels to be replaced in all sectors by 2050[1]
- Time to 2030 should be used for setting up the market and improving the technologies
- Three aspects are particularly important:
  - Rapid establishment of a universal hydrogen infrastructure
  - Creation of an appropriate market regulatory framework (such as certification of origin for green hydrogen)
  - Creation of incentives promoting demand for climate-neutral hydrogen

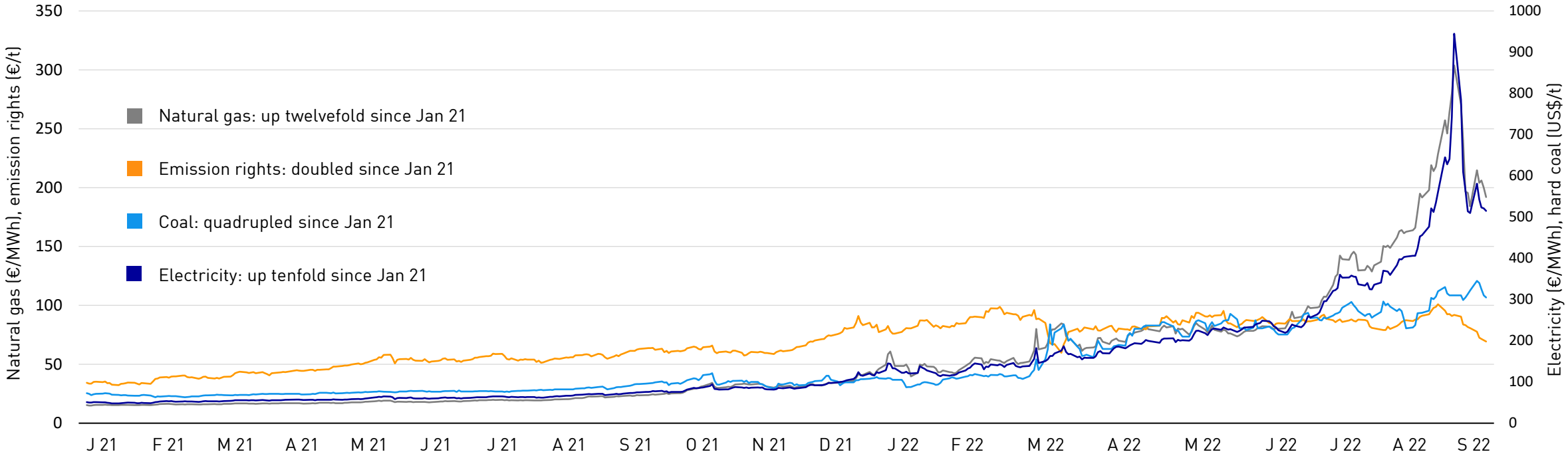
Conversion from natural gas to hydrogen will accelerate from 2030 onwards

[1] Assumption: Green Deal consistently implemented by 2050

Energy market Germany: Price development since 2021 for delivery in 2023

Prices for delivery 2023

(Jan 21 vs. Oct 22)

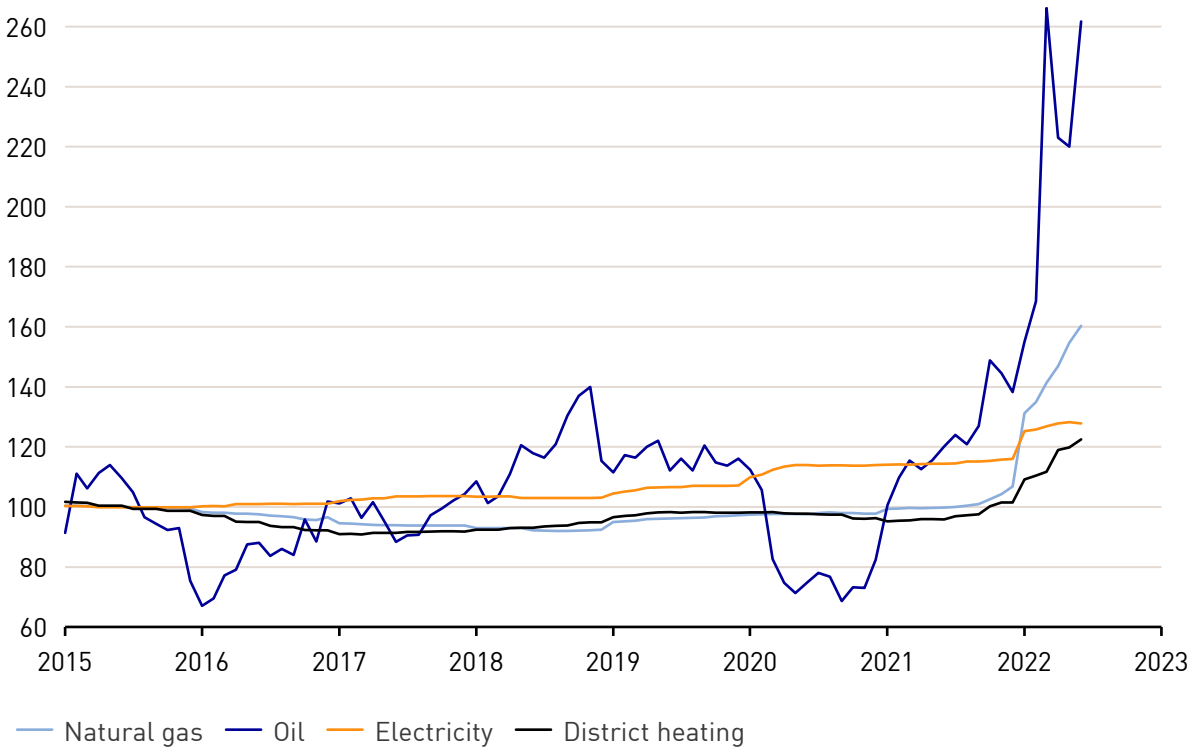


Prices on upward trend since 2021, Russian war of aggression in Ukraine caused further price rises, and fall in Russian gas supplies in summer 2022 caused highs in late August

Energy market Germany: Development of private household energy prices and electricity consumption

Energy prices in Germany

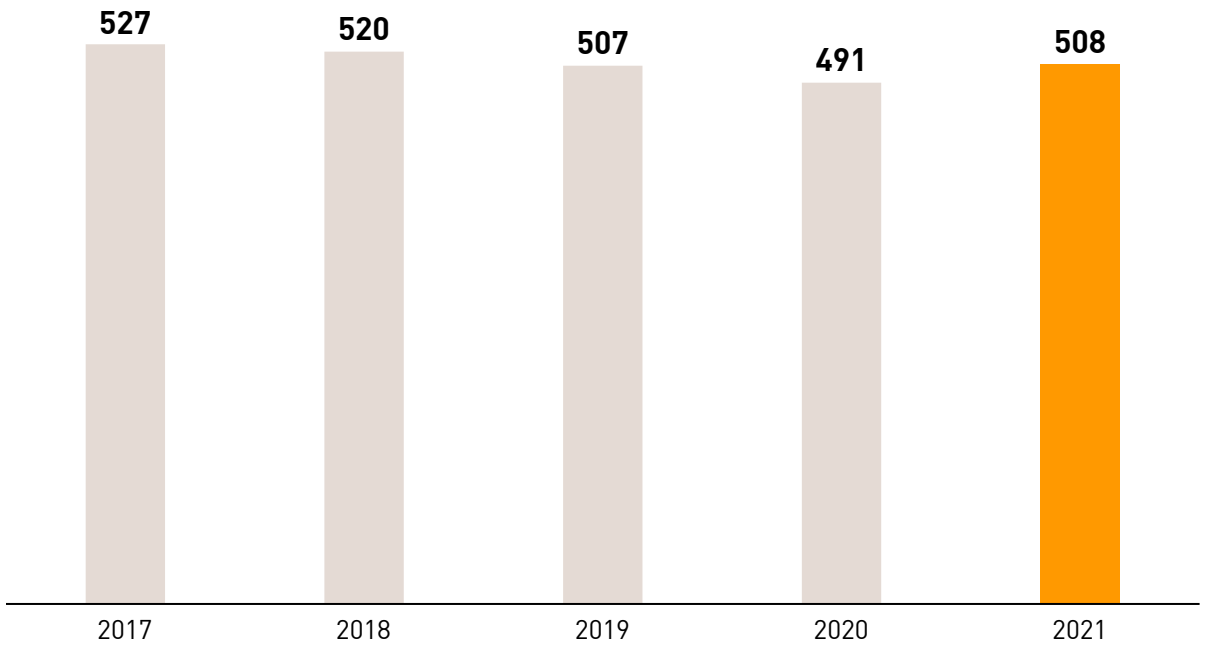
Index 2015=100



Figures as of April 2022
Source: Federal Statistical Office (FS 17, R 2), BDEW (electricity 3,500 kWh/a)
The chart shows the development of prices (indexed rates of increase, not absolute fuel prices) for heating oil, gas, electricity and district heating for households since January 2015 relative to the 2015 base year (annual average).

Electricity consumption in Germany

in TWh



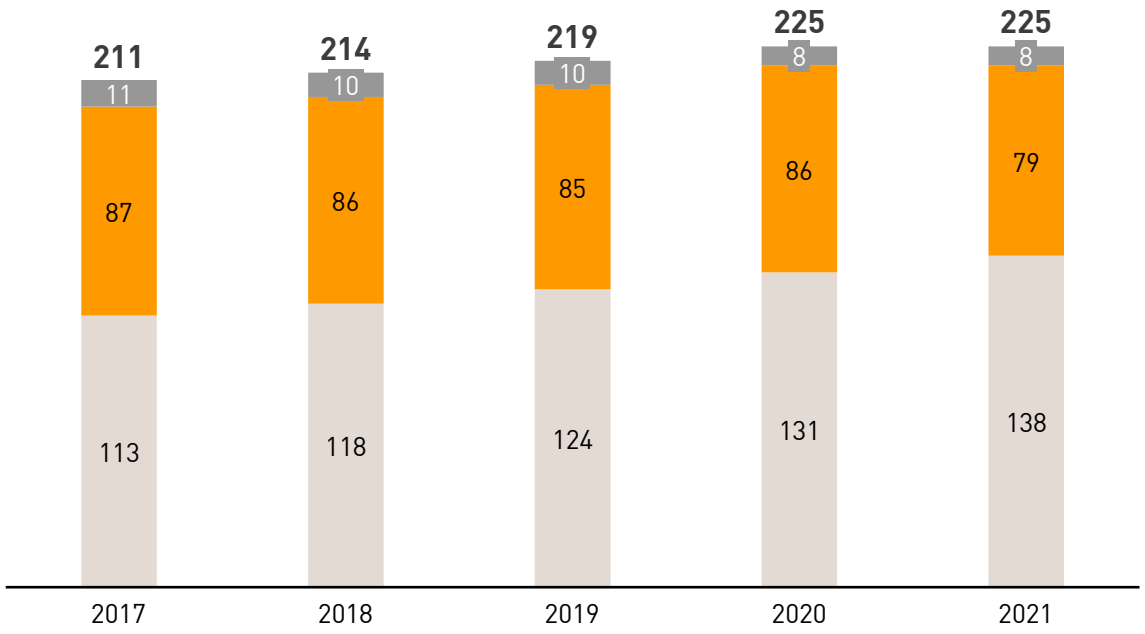
Net electricity consumption increases in 2021 mainly driven by the end of the pandemic lockdowns and the rising industrial production

Figures as of May 2022
Source: BDEW

Electricity market Germany: Installed capacity and generation

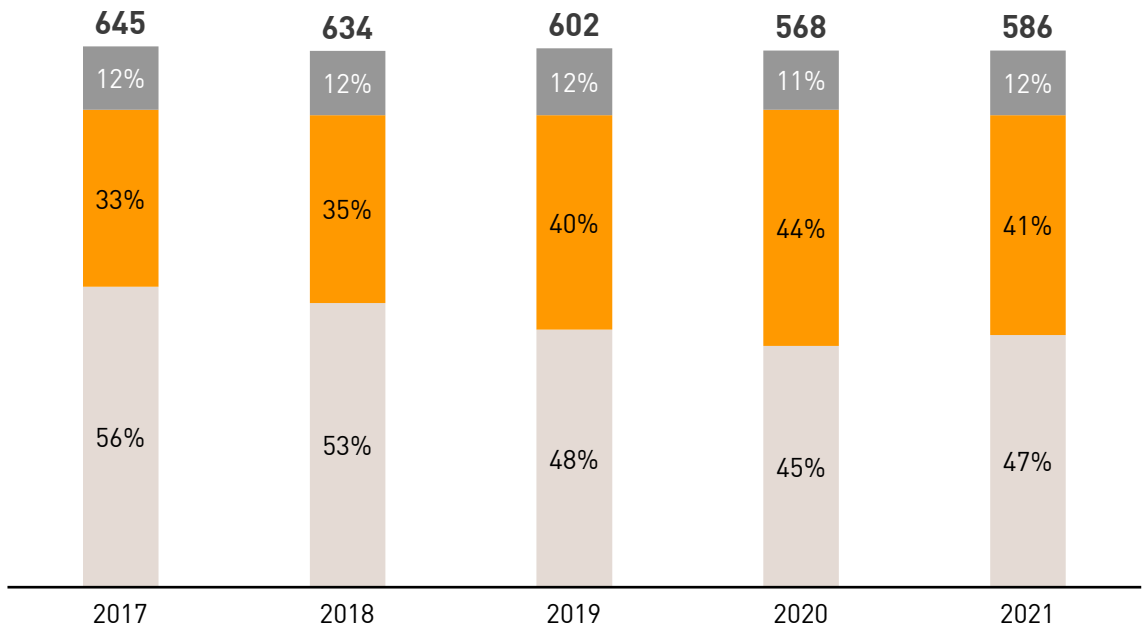
Installed capacity

in GW



Generation[1]

Gross power generation in bn kWh



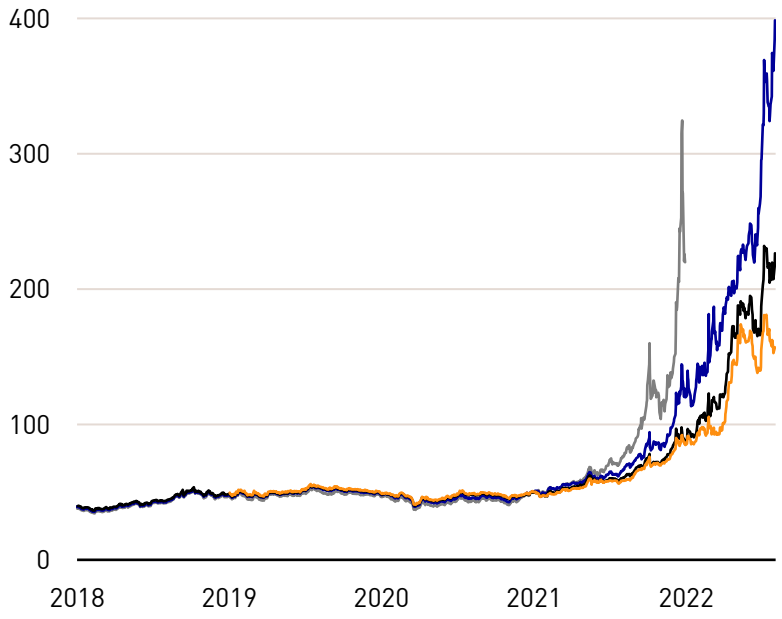
Nuclear power Conventionals Renewables

Source: BDEW April 2022

[1] May not add up to 100% due to rounding

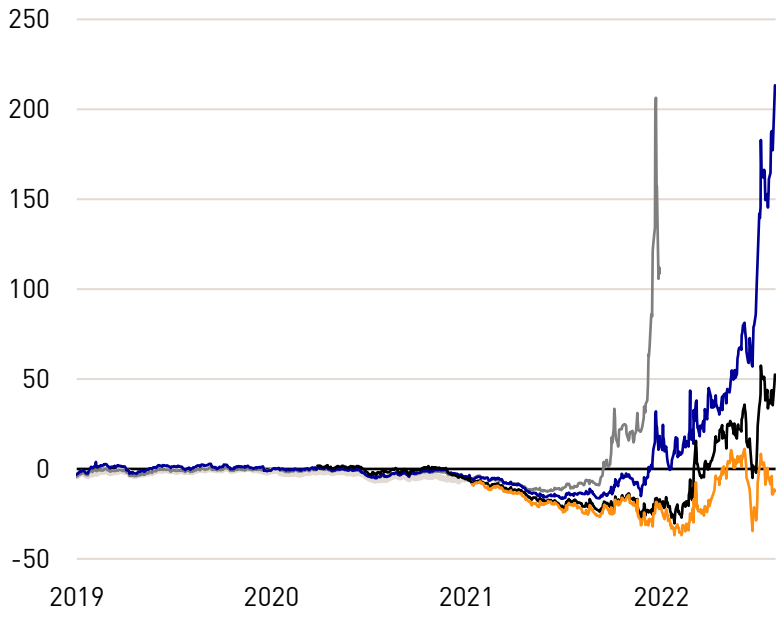
Electricity market Germany: Front month price and spot market development

Forward price for baseload electricity
in €/MWh



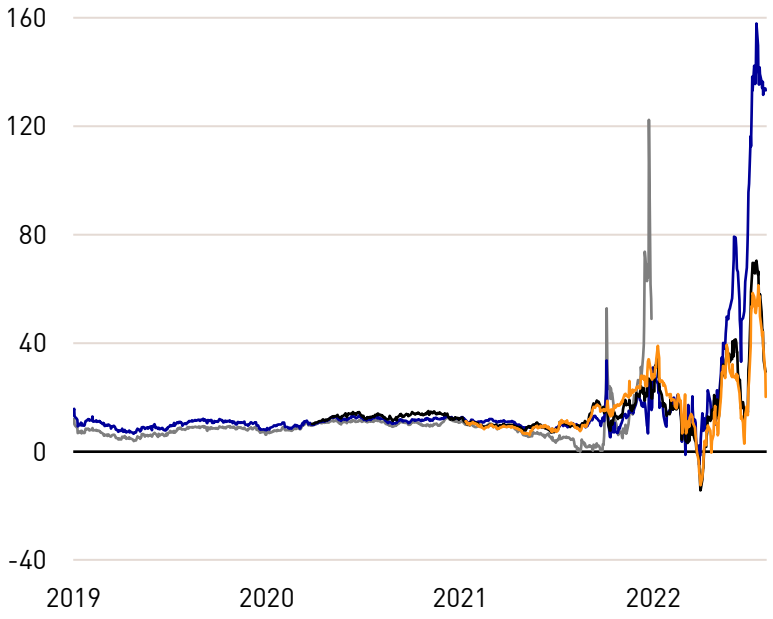
Clean-dark-spread base[1]
in €/MWh

- Gross margin of a coal-fired power plant (plant efficiency: 36%)



Clean-spark-spread peak[2]
in €/MWh

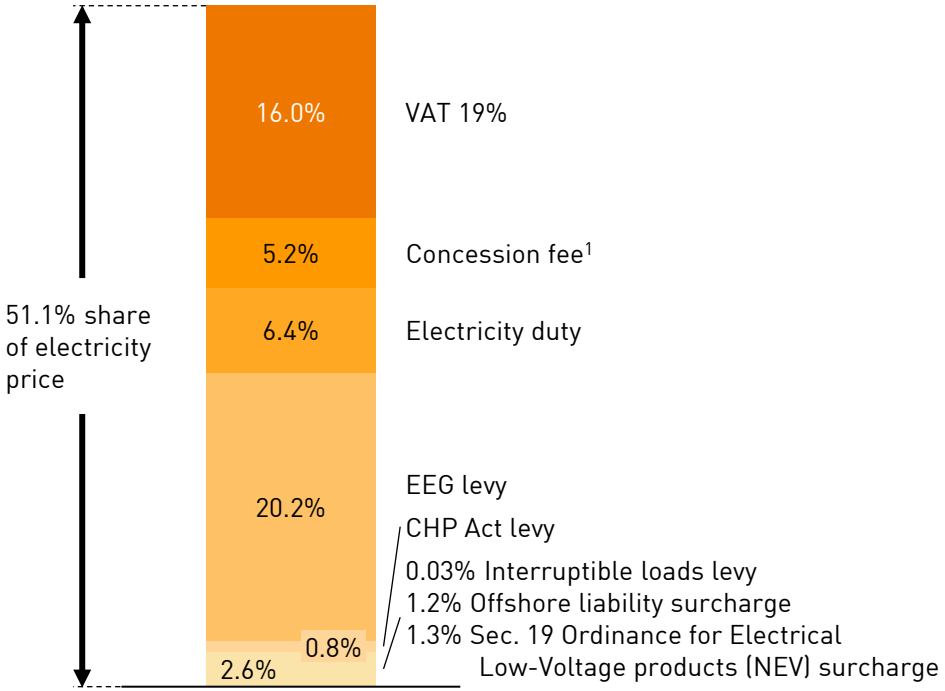
- Gross margin of a gas-fired power plant (plant efficiency: 50%)



[1] Clean-dark-spread is the corresponding indicator for coal-fired generation of electricity
[2] Clean-spark-spread represents the net revenue a generator makes from selling power, having bought gas and the required number of carbon allowances

Electricity market Germany: Private household price

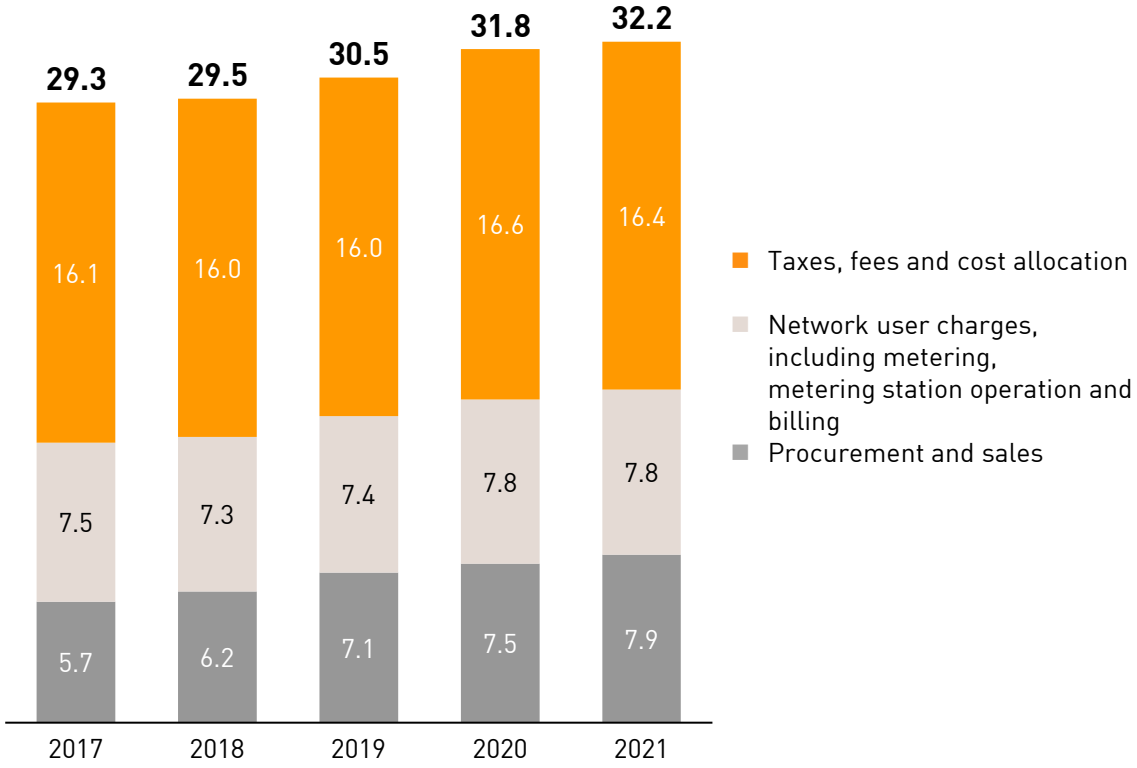
Taxes, fees and cost allocation for private households 2021



Source: German Federal Association of Energy and Water Management (BDEW), figures as of April 2022
EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)
CHP: cogeneration combined heat and power
[1] Average concession fee; varies according to size of community

Average electricity price for a 3-person household

Annual consumption of 3,500 kWh - € cents/kWh

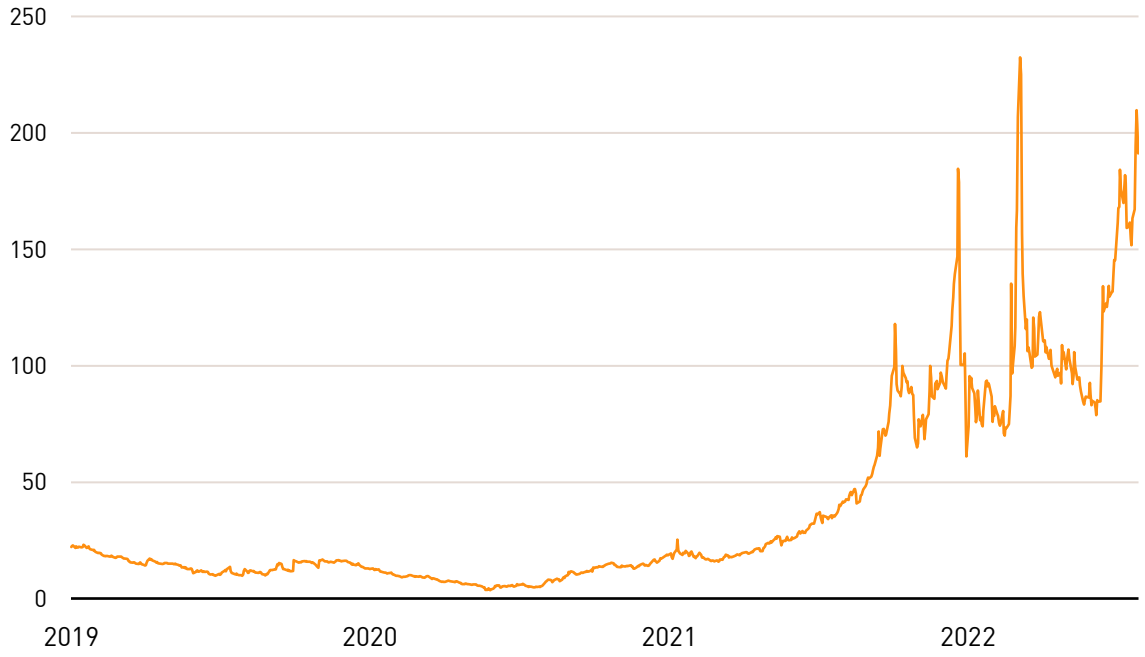


Figures as of April 2022
Source: BDEW

Gas market Germany: Front month price and spot market development

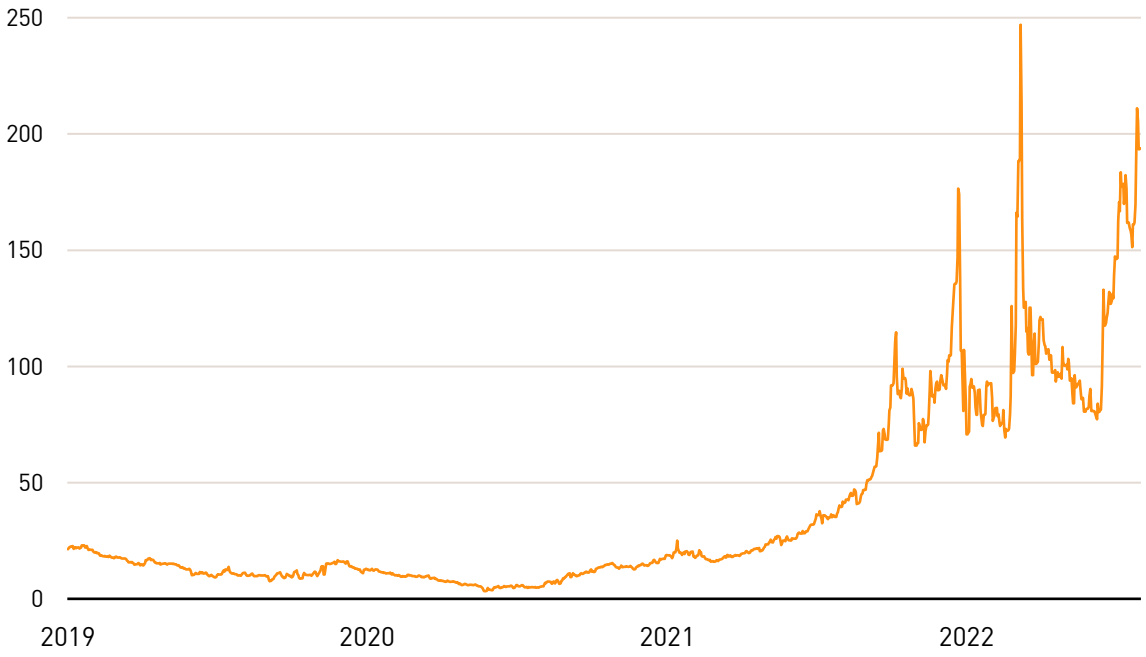
Front month reference prices[1]

in €/MWh



Spot market reference prices[1]

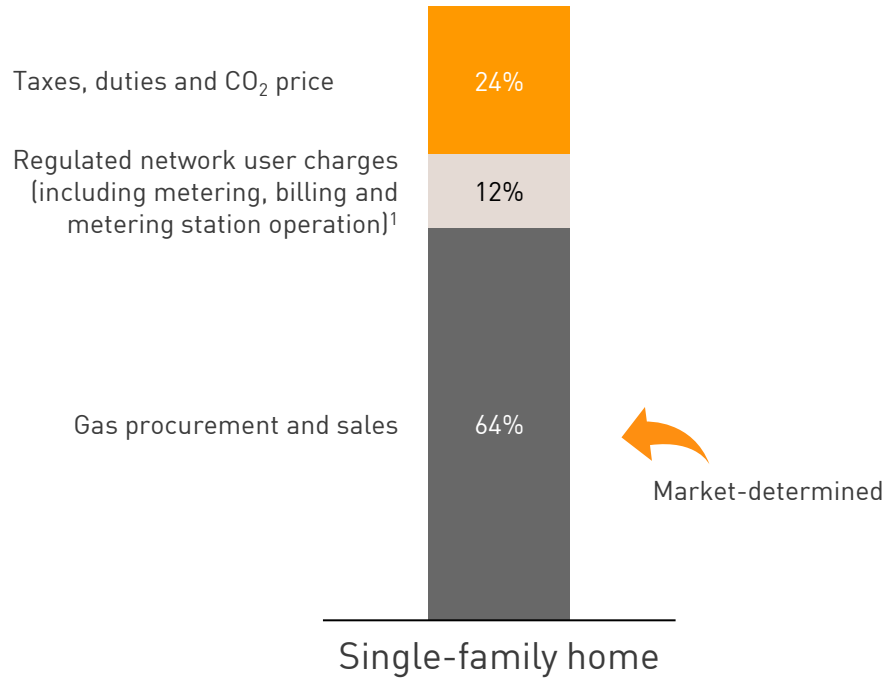
in €/MWh



[1] Average of Gaspool and NetConnect Germany (NCG); starting 1. October 2021 Trading Hub Europe (THE)

Gas market Germany: Private household price

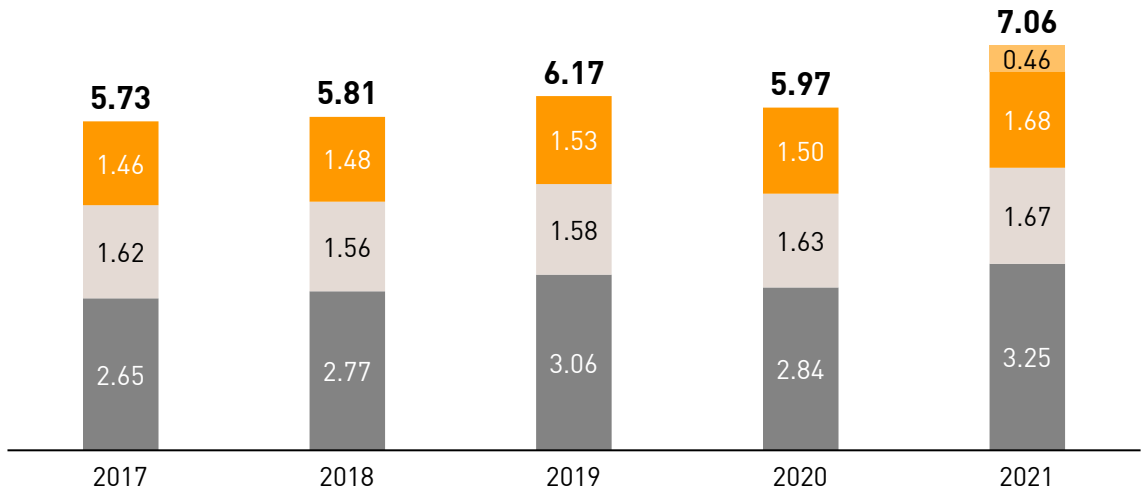
Gas price for single-family home 2021



Single-family home, gas central heating

Single-family home, gas central heating including hot water, customer on contract with regional default supplier[2] (annual consumption 20,000 kWh)

€ cents/kWh



[1] Average net network user charge including charges for metering, metering station operation and billing, subject to large regional variation, figures as of April 2022; Source: BDEW

[2] Most heating gas customers are customers on contract with the regional default supplier with a reduced concession fee (0.03 ct/kWh); figures as of April 2022; Source: BDEW

[3] The CO_2 price reflects the cost of purchasing CO_2 emission trading certificates in accordance with the Fuel Emissions Trading Act (BEHG) and is fixed by law until the end of 2025

Regulated grids business: Framework of regulated grids business

Regulatory environment

- Electricity and gas transmission as well as distribution grids remain regulated, including in the long term, as a natural monopoly
- Regulatory risks manageable due to the increasing stability of the regulatory framework
- Revenue cap regulation enables grid revenues to remain independent of consumption fluctuations
- Inflation protection through link of revenue cap to consumer price index
- Pressure to be as efficient as possible ongoing due to regulation
- Diminishing investment conditions for transmission and distribution grids in the mid term
- In accordance with the Incentive Regulation Ordinance and electricity/gas Network Charges Ordinance, lower equity return rates will be set as of the fourth electricity regulatory period (from 2024) and gas (from 2023)
- Further amendments of Incentive Regulation Ordinance generally lead to no substantial change in the regulatory framework for transmission and distribution grid operators

Challenges for grids in Europe

Main challenges for electricity and gas grids

- Electricity generation is becoming increasingly uneven – fluctuations have an impact on grid stability
- Connection of decentralised renewable electricity generation to the grid requires extensive grid expansion measures for the next decades
- Reduction of Russian gas imports leads to altered gas flow directions and transport capacities to serve moderately growing gas demand in the mid term
- Germany as a transit country – large proportion of cross-border trading

EnBW's approaches to solutions

- **TSOs:** New electricity transmission lines can bridge the distance between focal points of production and consumption centres; use of HVDC transmission lines and underground cables. Expansion of the gas transport network to cover capacity requirements
- **DSOs:** Expansion of the grids to integrate renewables and charging infrastructure for electric cars, smart expansion of distribution grids, efficient and swift expansion of the distribution grids by municipal partners

TSO: Transmission system operator
DSO: Distribution system operator
HVDC: High-voltage direct current transmission technology

Regulated grids business Germany: Incentive regulation

Introduction of incentive regulation as of 1 January 2009

Gas

1st regulatory period					2nd regulatory period					3rd regulatory period					4th regulatory period					
2008	2009	**2010**	2011	2012	2013	2014	**2015**	2016	2017	2018	2019	**2020**	2021	2022	2023	2024	**2025**	2026	2027	2028
		Base year for 2nd regulatory period					Base year for 3rd regulatory period					Base year for 4th regulatory period					Base year for 5th regulatory period			

Electricity

1st regulatory period						2nd regulatory period					3rd regulatory period					4th regulatory period				
2008	2009	2010	**2011**	2012	2013	2014	2015	**2016**	2017	2018	2019	2020	**2021**	2022	2023	2024	2025	**2026**	2027	2028
			Base year for 2nd regulatory period					Base year for 3rd regulatory period					Base year for 4th regulatory period					Base year for 5th regulatory period		

- Following the introduction of incentive regulation in 2009, grid operators are called upon to continuously improve the efficiency and cost-effectiveness of grid investment and grid operation
- Key regulatory parameters such as return on equity and the costs recognised for a network operator are set for a five-year regulatory period
- The costs to be recognised for grid operators are determined in each base year for the following regulatory period

Regulated grids business Germany: Return on new systems for the 3rd regulatory period

Equity-I ≤40%

Return on Equity-I: **5.64% after** corporate tax, **after** trade tax

- Base rate: **2.49%**
- Risk premium: **3.15%**

Factor accounting for **corporate tax**: **1.225**

Return on Equity-I: **6.91% before** corporate tax, **after** trade tax

Factor accounting for **trade tax**: **1.1365**[1]

Return on Equity-I: **7.85% before** corporate tax, **before** trade tax

40%

Weighted rate of return before corporate tax, before trade tax

- **5.21%**
- **5.00%**

60%

Equity-II >40%

Return on Equity-II: **Before** corporate tax, **after** trade tax

- **3.03%**
- **2.72%**

10-year average over Bundesbank interest rate series

Factor accounting for **trade tax** : **1.1365**[1]

Return on Equity-II: Before corporate tax, before trade tax

- **3.44%**
- **3.09%**

- Irrespective of the actual financing structure, a maximum of 40% of capital employed is subject to the Equity-I rate of return as this is capped at 40% of equity by law (Electricity/Gas Network Charges Ordinance)
- Capital employed in excess of this amount is subject to the Equity-II rate of return

[1] At tax rate 3.50% and multiplier 3.90%

Gas Electricity

Regulated grids business Germany: Return on new systems for the 4th regulatory period

Equity-I ≤40%

Return on Equity-I: **4.13% after** corporate tax, **after** trade tax

- Base rate: **0.74%**
- Risk premium: **3.39%**

Factor accounting for **corporate tax**: **1.225**

Return on Equity-I: **5.07% before** corporate tax, **after** trade tax

Factor accounting for **trade tax**: **1.1365**[1]

Return on Equity-I: **5.76% before** corporate tax, **before** trade tax

40%

Weighted rate of return before corporate tax, before trade tax

- **3.70%**
- **3.48%**

60%

Equity-II >40%

Return on Equity-II: **Before** corporate tax, **after** trade tax

- **2.04%**
- **1.72%**

10-year average over Bundesbank interest rate series

Factor accounting for **trade tax** : **1.1365**[1]

Return on Equity-II: Before corporate tax, before trade tax

- **2.32%**
- **1.95%**

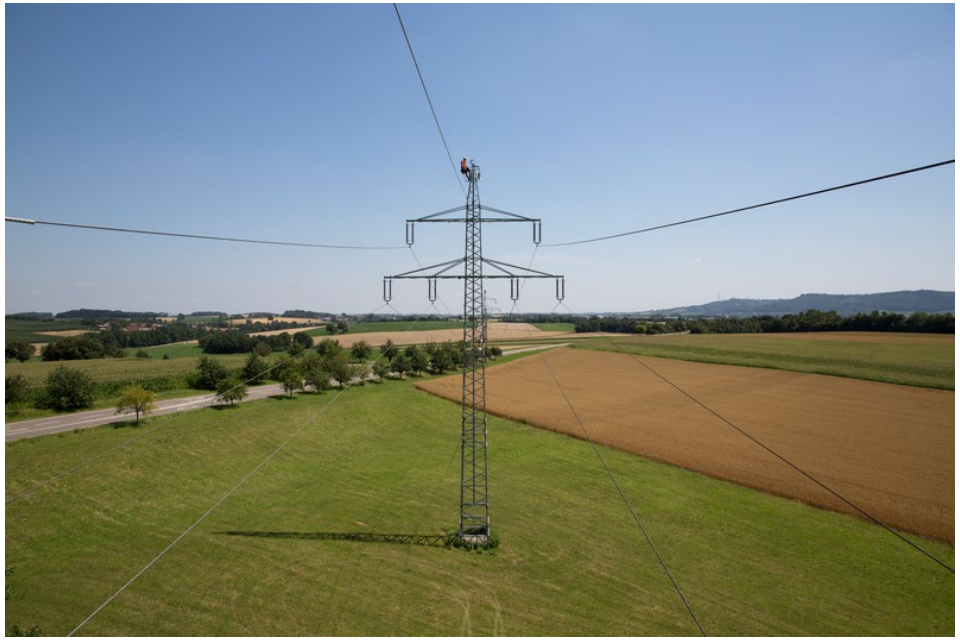
- Irrespective of the actual financing structure, a maximum of 40% of capital employed is subject to the Equity-I rate of return as this is capped at 40% of equity by law (Electricity/Gas Network Charges Ordinance)
- Capital employed in excess of this amount is subject to the Equity-II rate of return

[1] At tax rate 3.50% and multiplier 3.90%

Gas Electricity

Regulated grids business Germany: Time-lags between spending and remuneration are addressed

- Due to the base year concept, investments can be taken into account in the revenue cap with a three year time-lag at best and a seven year time-lag at worst
- Investment measures (IMAs) are a regulatory mechanism introduced to compensate transmission grid operators (TSOs) for such time-lags and to avoid any investment barriers
- IMAs only apply to grid expansion investments and require approval by the BNetzA
- Capex approved by BNetzA on plan basis is recognised in the revenue cap without time-lag
- Commissioning of the respective grid expansion terminates the IMA phase and the investments are rolled over to the "regular" cost base and become subject to the general incentive regulation
- The regulator additionally allows for an Opex-lumpsum on the CAPEX during the IMA phase that flows directly through the revenue build-up



Regulated grids business Germany: Revenue risks due to reduced gas supply are averted

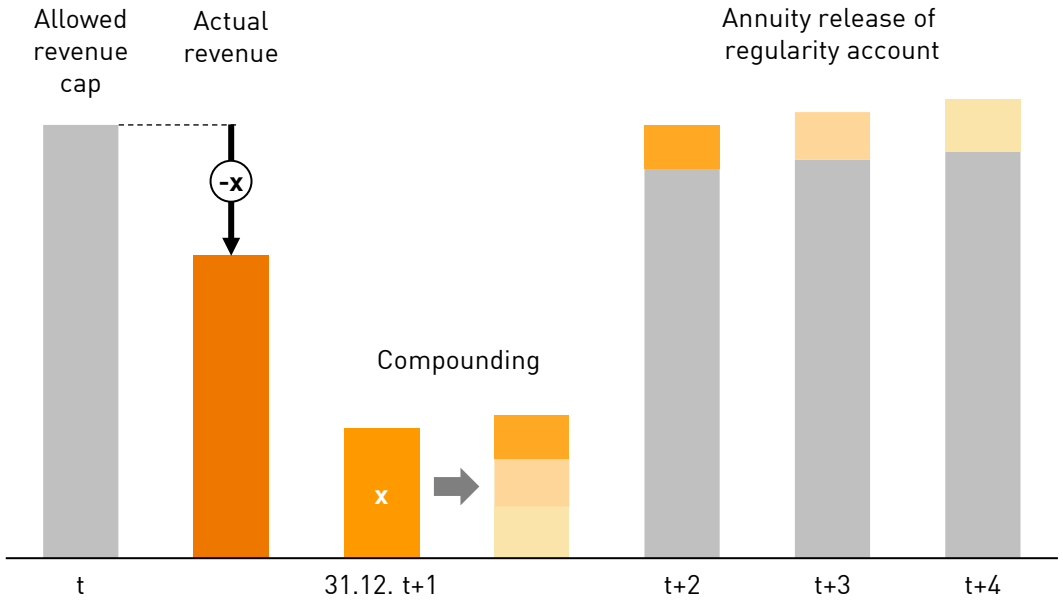
The currently reduced natural gas supply to Europe poses a volume risk to grid operators

Grid tariffs are based on volume forecasts and adjusted on an annual basis

In case of a gap between actual revenues and allowed revenue cap (i.e. due to delta in volumes), differences will be settled in upcoming periods

The regulatory account ensures that volume risks pose no revenue risks to grid operators

Regulatory account of electricity and gas grids



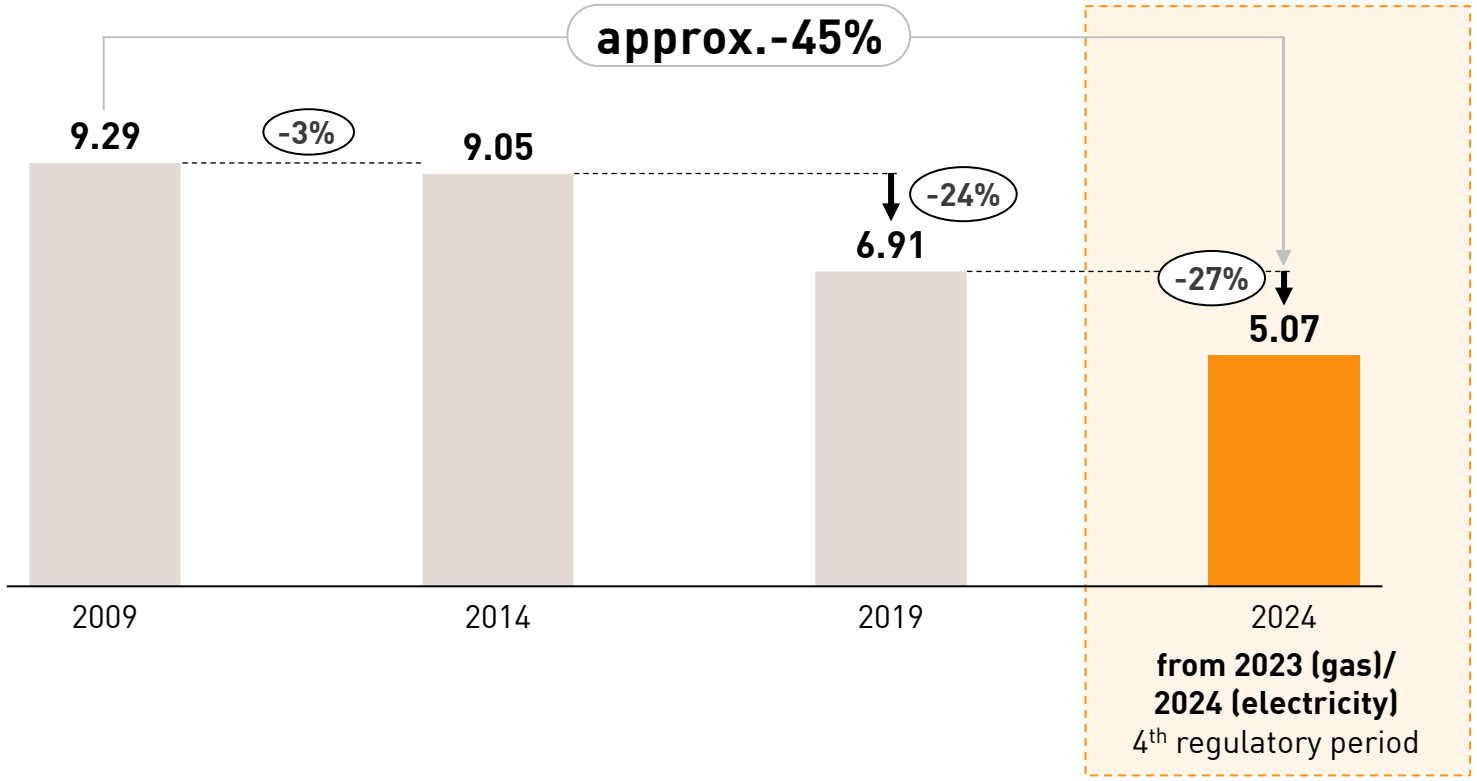
Mechanism to settle differences between allowed and actual revenue

- The regulatory account is used to compensate for:
  1. Deviations between allowed revenue cap and actual grid revenue
  2. Actual vs. budgeted difference for certain cost components in the revenue cap
  3. Other deviations such as refunding the investment measures clawback
- Account balance is determined annually by the end of the following year (t+1) and is released on an annuity basis over 3 years with interest being paid on the balance (interest rate determined based on ten year trailing average of domestic bearer bonds)
- The balance of the regulation account must be approved by Bundesnetzagentur and the release can lead to an increase or decrease of the revenue cap

Regulated grids business Germany: Regulatory return needs to be revised from 2023/24

Development of the regulated equity interest rate for electricity and gas in Germany (new installations)

in % (before tax)



- Return on equity set at 5.07% by federal regulatory agency (Bundesnetzagentur) for the 4th regulatory period – decreasing return on equity for investments in grids from 2023 (gas) and 2024 (electricity) respectively
- EnBW sees technical shortcomings in the setting of return on equity – among other things, divergent assumptions for the risk premium within the federal regulation authority
- Adjustment would lead to return on equity of 6 – 6.5%
- The current development at the capital markets is not reflected at all in these calculations

Electricity grids Germany: Comparison of transmission and distribution grids

	Transmission grids 380 kV, 220 kV (ultra high voltage)	Distribution grids up to 110 kV (high/medium/low voltage)
Organisation	• 4 operators: 50Hertz, Amprion, TenneT, TransnetBW[1] • Grid length: ~37,500 km[2] • Grids owned by operators	• 875 operators[1] • Grid length: ~1,883,200 km[1] • Franchises issued by municipalities • Competition for franchises
Tasks	• Ensuring balance between generation and consumption • Using balancing power	• Connecting consumers and local providers • Recording incidents and troubleshooting
Challenge of the energy transition	• Transport of wind-generated electricity from northern to southern Germany • Building new high voltage direct current transmission lines using underground cables • Connecting offshore wind farms	• Connection of decentralised renewables (e.g. photovoltaics, wind) • Integration of charging infrastructure for electric cars • Use of smart grid tech and digitisation of metering operation (e.g. smart meters)
Unbundling regulations	• Ownership unbundling, independent system operator, independent transmission operator	• Functional and financial unbundling of the grid business and obligation as to non-discriminatory use of grid information

[1] TransnetBW is a 100% subsidiary of EnBW
[2] Source: "Monitoringbericht 2021" as of 15 March 2022, BNetzA

Electricity grids Germany: Backbone of the energy transition

Electricity grids

General

- The electricity grid business has become a growth business due to the remodelling of the energy market
- Changes in legislation have simplified reimbursement for costs of investment in grids: e.g. revision of the Incentive Regulation Ordinance (ARegV)

Transmission grids

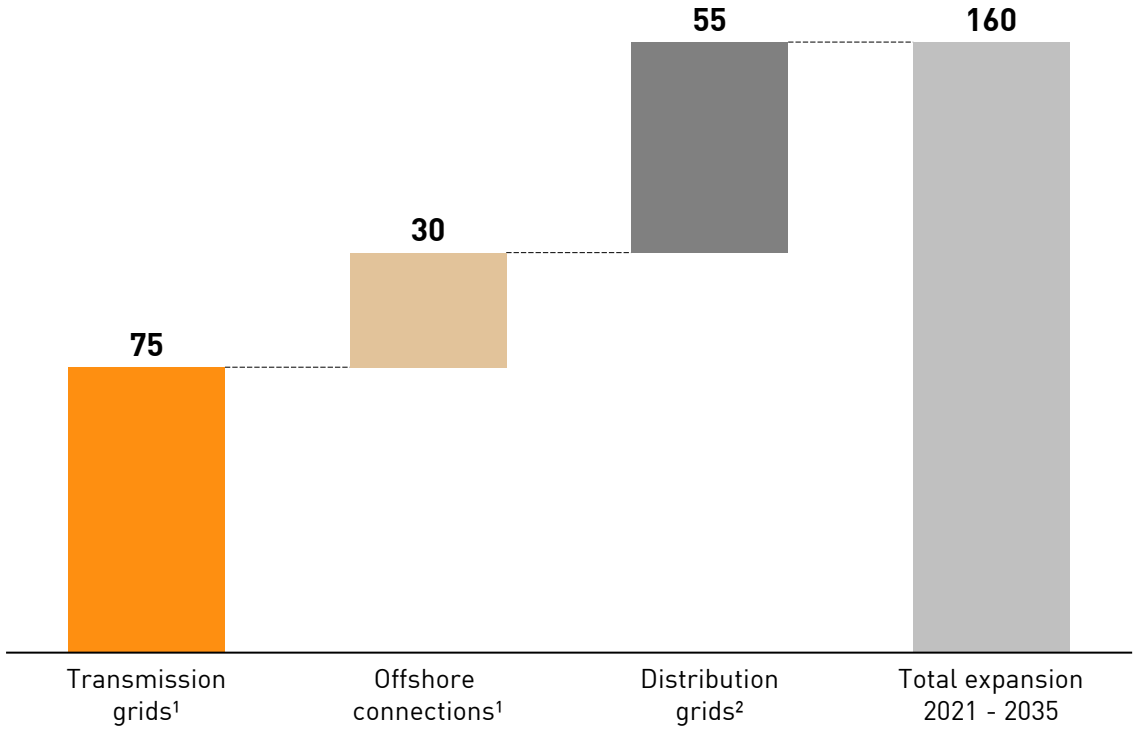
- Growing geographical imbalance between generation and consumption as main driver for transmission grids – primarily construction of high voltage direct current transmission lines and connection to offshore wind farms

Distribution grids

- Feed-in growing due to local generation
- Growing demand of electric cars and electric heating systems

Capex for expansion of electricity grids 2021 - 2035

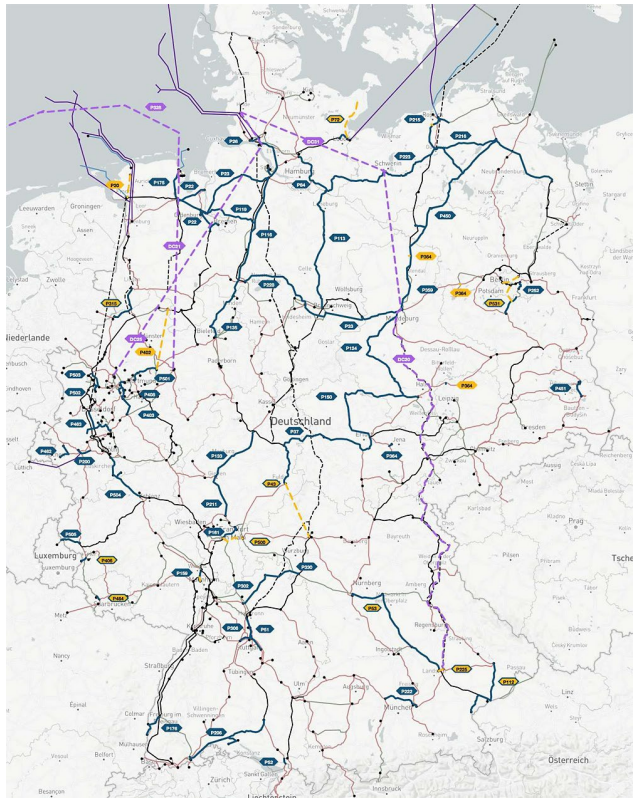
in € bn



[1] "Netzentwicklungsplan Strom 2035, Version 2021", Szenario B 2035, approved by BNetzA in January 2022
[2] Own Estimation based on "Verteilernetzstudie 2014", Federal Ministry of Economics and Technology (BMWi)

Electricity grids Germany: Transmission grid expansion

Approved ultra high voltage new lines, rewiring and reinforcement 2021 - 2035[1]



7,240 km upgrading in existing line routes[2]

- AC – rewiring and reinforcement: 6,360 km
- DC – rewiring and reinforcement: 880 km

4,945 km grid expansion in new line routes[2]

- AC – new lines: 1,020 km
- AC – new inter connector lines: 235 km
- DC – new lines: 3,430 km
- DC – new inter connector lines: 260 km

- **Existing transmission grid to be expanded by about one third (~12,000 km) until 2035 over current grid length (37,500 km)**

[1] https://www.netzentwicklungsplan.de/en/projects
[2] "Netzentwicklungsplan Strom 2035, Version 2021", Szenario B 2035, approved by BNetzA in January 2022
AC: Alternating current DC: Direct current

Gas grids Germany: Comparison of transmission and distribution grids

	Transmission grids	Distribution grids
Organisation	• 16 grid operators[1] • Grid length: ~41,600 km[1] • Grids owned by operators • One market area	• 703 grid operators[1] • Grid length: ~554,500 km[1] • Franchises issued by municipalities • Competition for franchises
Tasks	• Transport gas from import to export points (transit) and vice versa (DSOs and industry or other market areas)	• Connecting consumers and local providers • Recording incidents and troubleshooting
Challenge of the energy transition	• Long term: potential use of synthetic gas (i.e. hydrogen) as storage medium for fluctuating electricity generation	• Integration of biogenic and synthetic gases • Degree of utilisation decreases if electric heating systems and district heating systems increase
Unbundling regulations	• Ownership unbundling, independent system operator, independent transmission operator	• Functional and financial unbundling of the grid business and obligation as to non-discriminatory use of grid information

[1] Source: "Monitoringbericht 2021" as of 15 March 2022, BNetzA
DSO: Distribution system operator

Gas grids Germany: Another major element of the energy transition

Gas grids

Transmission grids

- The reduction of Russian natural gas imports via pipeline and their substitution by LNG via ship have significant impact on transmission grid flow directions and capacities
- Investigation of consequences regarding future grid development plans and corresponding CAPEX requirements not finalised yet

Distribution grids

- Smaller scale of expansion compared to electricity grids
- Growth potential due to the connection of new gas fired power plants

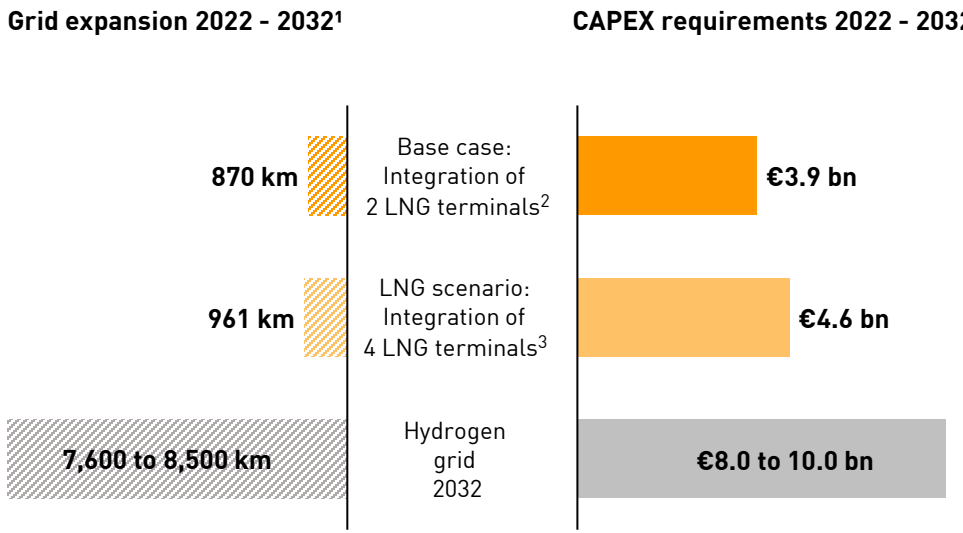
Hydrogen grids

- Hydrogen grids for at least industry and transportation intended by the EU
- Regulatory framework to be defined

Further development of German gas transmission grid

Transmission grid operators completed first estimations of CAPEX requirements

- to integrate LNG supplies into the existing German transmission grid to partially substitute Russian gas imports
- to develop a hydrogen grid supplying 150 TWh to German demand clusters in 2032 predominantly from already existing natural gas pipelines



[1] "Netzentwicklungsplan Gas 2022–2032, Zwischenstand" (Grid development plan gas 2022-2032, interim) as of 6 July 2022, German Transmission System Operators (TSO)
[2] According to natural gas grid expansion option "Basisvariante" in "Netzentwicklungsplan Gas 2022-2032, Zwischenstand"
[3] According to natural gas grid expansion option "LNG-Versorgungsvariante 1" in "Netzentwicklungsplan Gas 2022-2032, Zwischenstand"

Overview

1. EnBW at a glance
2. War in Ukraine – impact on EnBW
3. Market environment
4. **Sustainable corporate strategy**
5. Business segments
6. Key financials and non-financials
7. Capital markets
8. Corporate governance
9. Service

- Corporate strategy
  - Climate neutrality
  - Strategic view on business segments
  - Research and development
- Sustainability/ESG
  - Supply chain sustainability
  - Sustainability ratings
- HR strategy

Strategy EnBW 2025 determined by market trends

Power and gas grids

e-mobility
smart grids
volatile electricity generation
HVDC
grid stability
transmission grids
electricity distribution grid
Baden-Württemberg
higher demand
hydrogen infrastructure

Generation and trading

coal phase-out
increased CO_2 prices
renewable energy
conventional power back-up
solar and offshore wind in Germany
high commodity prices
increasing electricity demand
fuel switch

Customers

energy prosumer
connected home
digital services
eco-oriented providers
sustainability
autarchy
heat transition
price increases
increasing customer expectations
green energy tariffs
upward trend in e-mobility

- **Technological developments:** More diversity, modularity and granularity in the energy system
- **New market participants:** More competition and fragmentation of the value chain
- **Regulatory framework:** Constant change following the transformation of the energy system

HVDC: High-voltage direct current transmission technology

Competitors along EnBW's business segments

EnBW positioning

Further development from an integrated energy supplier to a sustainable and innovative infrastructure partner
Focus on growth in renewable energies, grids and customer solutions (e-mobility, telecommunications and broadband)
Active in Germany and selected foreign markets

Selection of international, national and regional competitors

National and international	Regional	Commodity suppliers, solution suppliers, start-ups	Renewable energies	E-mobility, telecommunications and broadband	Financial investors
ALPIQ, EDF, EDPR, Enel, Engie, E.ON, Equinor, EVN, Fortum, Iberdrola, Ørsted, RWE, Vattenfall, Verbund	Badenova, Entega, EWE, Mainova, MVV, NErgie, SWM, Thüga	1komma5°, enpal, Lichtblick, NEXT Kraftwerke, octopus energy, ostrom, Sonnen, Thermondo, Tibber	BayWa r.e., bp, Encavis, ENERTRAG, PNE Wind, Shell, theolia, Total Energies, wpd	1&1, Allego, aral pulse, Deutsche Glasfaser, Deutsche Telekom, Ecotel, Fastned, Google, Ionity, Shell, Tesla, VW	Private equity, infrastructure and pension funds as well as insurance companies

Challenges

- Increasing competition due to entry of new market participants in the core business
- New competition due to market entry of EnBW in new business fields
- Optimal positioning with respect to the regulatory environment and highly competitive market

As of 30 June 2022

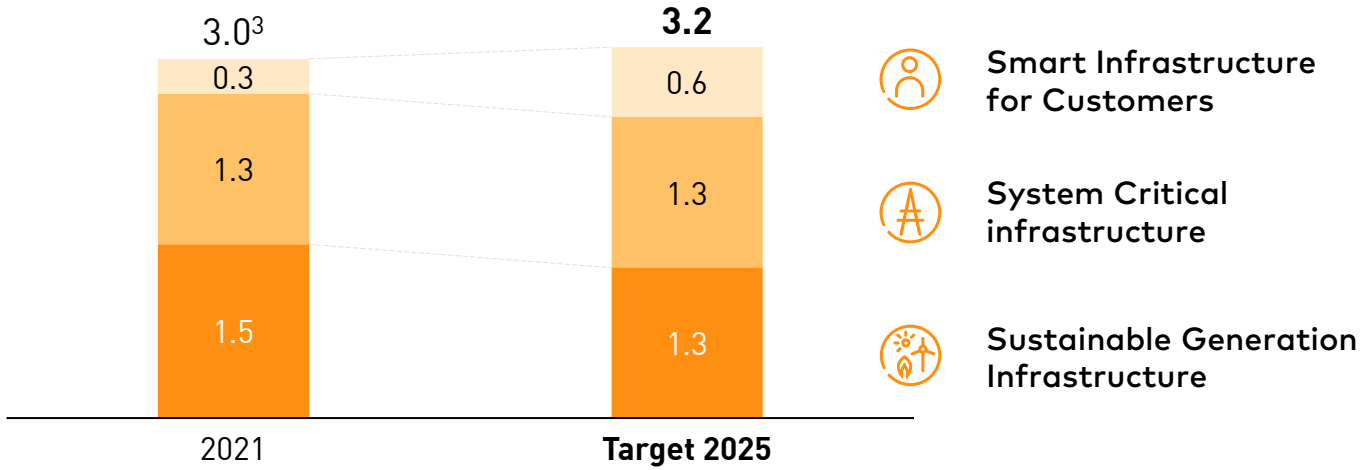
Strategy EnBW 2025 – sustainable and innovative infrastructure partner with climate neutrality in 2035

Climate neutral EnBW 2035

Base year	-50%	-100%
2018 →	CO_2 emissions[1] 2030 →	CO_2 emissions[1,2] 2035

Adjusted EBITDA growth

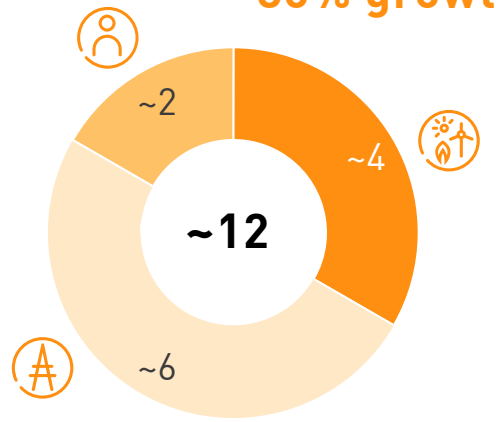
in € bn



Net investment volume 2021 - 2025

in € bn

80% growth

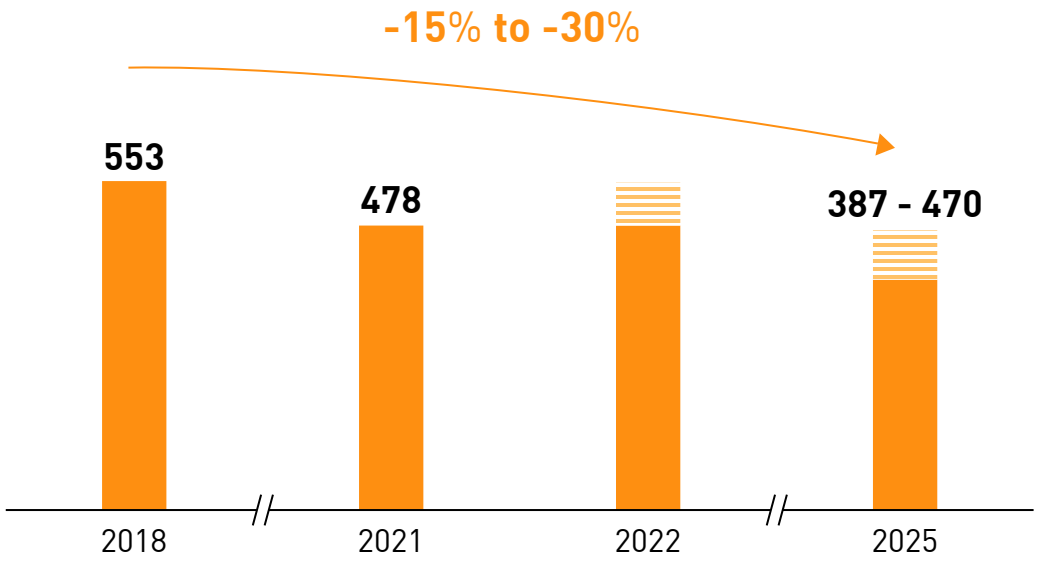


[1] EnBW's climate neutrality target relates to own emissions (Scope 1 and 2). Target relates to CO_2eq (CO_2, CH_4, N_2O and SF_6). Base year 2018.
[2] Includes some offsetting of remaining residual emissions by purchase of recognised offsetting certificates.
[3] Other/consolidation € -0.187 bn

Climate neutrality by 2035 and the other sustainability targets determine business activities

Carbon intensity in own electricity generation

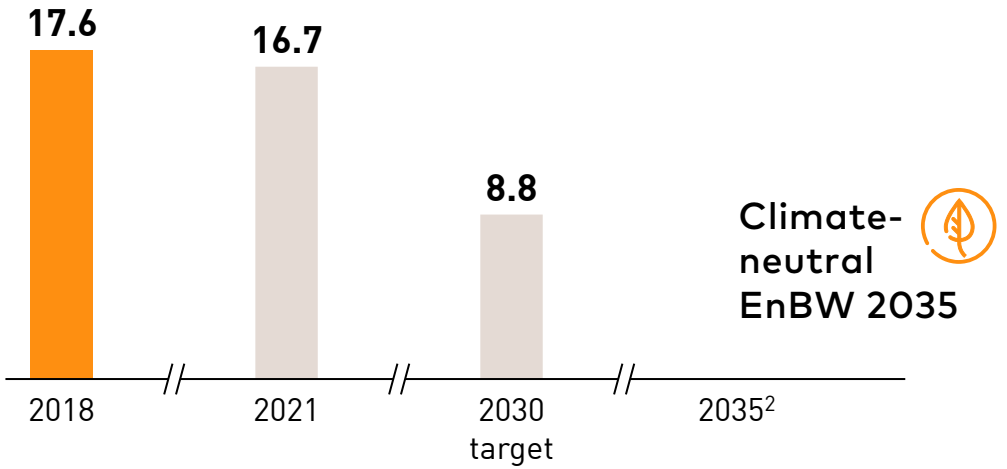
g/kWh (excluding nuclear power and redispatch)



For 2022, we expect increased generation in the thermal power plant portfolio – mainly driven by the high gas price – due to higher wholesale market prices and spreads. Combined with long-term average wind yields, we forecast that carbon intensity in 2022 will at best be on the same level as in 2021 and at worst will increase by 15%. This does not affect our reduction target for 2025.

EnBW Group carbon footprint[1]

mt CO_2eq (excluding supply chain)



[1] EnBW's climate neutrality target relates to its own emissions (Scope 1 and 2). The target relates to CO_2eq (CO_2, CH_4, N_2O and SF_6). Baseline 2018.
[2] Includes a portion of offsetting residual emissions by purchasing recognised offset allowances.

EnBW's carbon footprint
Emissions 2021: Scope 1, 2 and 3

8.9 m t CO_2eq	16.3 m t CO_2eq	0.4 m t CO_2eq	52.0 m t CO_2eq
Greenhouse gas emissions (CO_2, CH_4, N_2O and SF_6)			

Scope 3 upstream

Other indirect greenhouse gas emissions

- Upstream gas sales (gas procurement)
- Procurement of fuel
- Business trips

Scope 1

Direct greenhouse gas emissions from sources belonging to or directly controlled by the company

- Electricity generation
- Heat generation
- Operation of gas pipelines and gas plants
- Operation of electricity grid Buildings
- Vehicles

Scope 2

Indirect greenhouse gas emissions originating during the production of purchased electricity, steam, district heating and cooling that the company consumes; grid losses

- Grid losses
- Operation of plants, electricity grid
- Operation of plants, gas grid
- Operation of plants, water supply
- Buildings

Scope 3 downstream

Other indirect greenhouse gas emissions

- Gas consumption by customers

Upstream emissions by third parties ▶ **Direct and indirect emissions at EnBW** ▶ **Downstream emissions by third parties**

EnBW climate neutrality goal 2035 will be specified and complemented by Science Based Targets

Climate neutrality in 2035[1]

2018  **Base year: 17.6 mt CO_2**

2030  **-50%**

2035  **Climate neutrality**

- EnBW's climate neutrality goal 2035 aims at reducing Scope 1 and 2 emissions in 2030 by at least 50% and as far as possible in 2035. Unavoidable emissions will be compensated by offsetting certificates (gold standard) to reach climate neutrality in 2035.

Climate neutrality will be extended 2035 by Science Based Targets

By setting Science Based Targets we are going to

- identify reduction measures in line with the Paris Agreement for Scopes 1, 2 and 3
- implement measures to comply with reduction targets

Measures to reach EnBW's Science Based Targets

- Scope 1: Phase-out of coal-fired power plants and fuel switch to gas-fired power plants, use of green hydrogen in electricity and heat generation
- Scope 2: Procurement of renewable electricity for electricity losses
- Scope 3: Development of the German heat market (building efficiency, H_2 ramp-up etc.)

EnBW's climate neutrality target 2035 is complemented and substantiated in order to deliver on climate change action and to enable the transformation towards a climate neutral economy and living.

[1] EnBW's climate neutrality target relates to own emissions (Scope 1 and 2). Target relates to CO_2eq (CO_2, CH_4, N_2O and SF_6). Base year 2018.

EnBW uses various instruments on the path to climate neutrality

Coal exit/fuel switch

- Coal phase-out expected shortly after 2030[1]
- District heating/power generation fuel switch to natural gas, biogas/ biomass, hydrogen etc.

Use of climate-neutral gases

- Transition to climate-neutral gases necessary in medium term
- Climate-neutral hydrogen not expected to be universally available until mid-2030s

Use of green electricity

- Mainly relevant as substitute for 'grey' grid loss purchases in Scope 2[2]
- Surcharge for green grid loss purchases required

Offsetting

- Unavoidable residual emissions offset by purchase of recognised offsetting allowances (Scope 1[3])
- Reduction prioritised over offsetting

Other options

- Action package to avoid relatively small-scale emissions (such as canteen and building emissions)
- About 2% of total emissions at EnBW

[1] Given current sector targets for 2030, according to Climate Protection Act (Klimaschutzgesetz, KSG);
of EnBW's coal-fired power stations, only RDK8, GKM9 and LIP currently still expected to be in service beyond 2030, plus electricity from Walsum in 2030
[2] Indirect emissions from electricity purchased and used by the organisation.
[3] All direct emissions from the activities of an organisation or under their control.

Expansion of renewable energies as major driver for Sustainable Generation Infrastructure

Renewable Energies

In operation as of 30 June 2022

- Offshore wind 954 MW
- Onshore wind 1,020 MW
- Solar 819 MW

Targets 2025

- Share of generation capacity >50%
- Wind onshore and offshore 4 GW
- Solar 1.2 GW

Investments until 2025 €~4 bn

Thermal Generation

Coal exit 2035

- Coal 34% of generation capacity (2021)

Nuclear exit 2022 extended until 15 April 2023

- 10% of generation capacity (2021)

Reserve power plants

- 1.7 GW[1] until 2023

Fuel switch planned for 3 sites[2] – Hydrogen ready

- e.g. CCGT Altbach/Deizisau:
  750 MW electricity/170 MW heat

Energy trading

Hedging policy

- Hedging generation and sales position
- Contracts are closed on a back-to-back basis
- Hedging generation margin of EnBW's merchant power plants against potential negative impacts from high commodity prices and high volatility
  - For the next three calendar years
  - 100% for 2022 , 80 – 100% for 2023; 50 – 70% for 2024; 10 – 30% for 2025

Strategic dimensions

- Regional expansion into CWE/Nordics
- Further diversification of gas and coal procurement
- Growing LNG business

[1] Not included in EnBW's generation portfolio
[2] Final investment decisions will be taken at a later date; [3] MoU signed with Hanseatic Energy Hub

Renewable action targets to achieve climate neutrality

Renewable energies in operation and development until 2025

Solar

Market leader large-scale / utility scale in Germany

- 819 MW in operation
- 187 MW_p Weesow-Willmersdorf
- 153 MW_p Gottesgabe
- 151 MW_p Alttrebbin

- Secured pipeline & under construction: ~3.3 GW

Onshore wind

- 1,020 MW in operation

- Secured pipeline & under construction: ~2.4 GW

Offshore wind

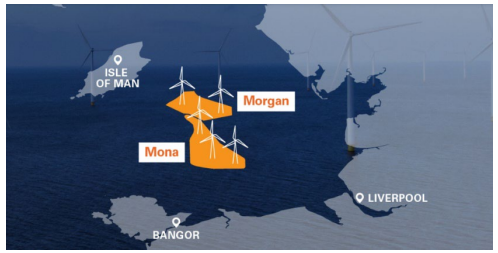
- 954 MW in operation
- 48 MW Baltic 1
- 288 MW Baltic 2
- 500 MW Hohe See
- 118 MW Albatros

- Secured pipeline & under construction: ~6.8 GW
  - 900 MW HeDreiht
    Expected FID 2023 / COD 2025

EnBW focuses on Europe for the expansion of offshore wind power

Irish sea

- Combined capacity of 3 GW
  Expected FID 2026 / COD 2029



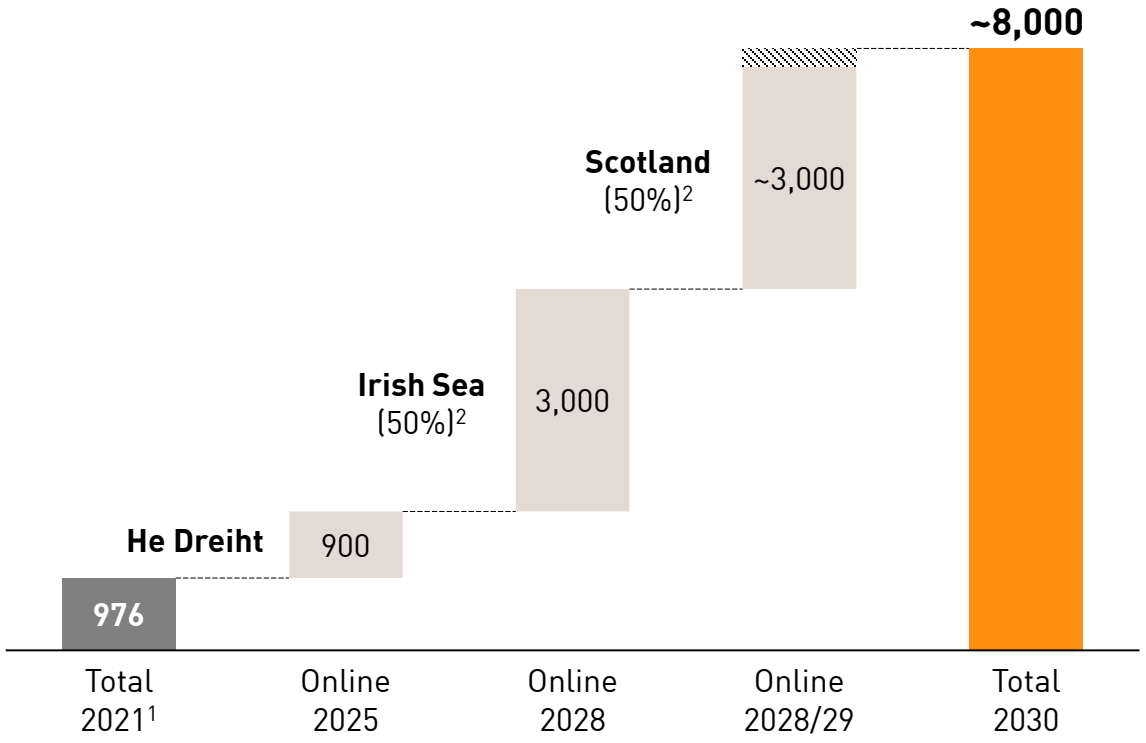
Scotland

- Capacity of 2.9 GW
  Expected FID 2026 / COD 2030

Expansion of offshore wind until 2030

Offshore wind capacity expansion

in MW



Explanatory notes

- Offshore remains a highly attractive market due to ongoing strong growth and the developing future segments of floating wind turbines and hydrogen
- Offshore capacity in EnBW's portfolio to increase moderately; capacity in Germany to remain a major share of the portfolio
- With a project portfolio of ~8 GW by 2030 (including existing portfolio), the critical mass for economies of scale/synergies would be comfortably achievable
- Goal of building a project development pipeline of at least 5 to 6 GW by 2030. This will be made possible by the sale of majority stakes in developed projects prior to commissioning and by cooperation with financially well-resourced partners
- Assessment of new request for bids in German waters still open but clear opportunities evident

[1] In each case including investment models; [2] EnBW share on commissioning

Expansion of onshore wind and solar until 2030

Explanatory notes

- Development of solar and wind onshore projects in the core markets of Germany, France and Sweden by 2030
- Germany, by a clear margin, remains the largest market in Europe for solar power and onshore wind
- Growth will accelerate due to political will and project throughput time in the second half of the decade, especially due to expected improvements in the operating framework (such as political support for better land availability)
- Even the ambitious expansion of renewables capacity will not be able to offset the reduction in power generated in EnBW's conventional power plants

Transformation of gas business to become a top player in climate-neutral gases in Germany

EnBW target vision for climate-neutral gases

- EnBW currently top 3 market player in natural gas business
- Gradual transformation towards business with climate-neutral gases as contribution to climate neutrality targets

2040

EnBW is active in all segments along the climate-neutral gas value chain

- Top player in production of biogas/biomethane in Germany; production of green hydrogen linked to EnBW Renewable Energies
- Operation of H_2-ready transmission and distribution grids
- Cost leader in operation of hydrogen storage
- Significant import and trading portfolio
- Sales of primarily climate-neutral gases

\+ Use of hydrogen in large-scale EnBW power plants for power grid stability and climate-neutral district heating

The gradual shutdown of Russian gas supplies since autumn 2021 and the Ukraine war have major impacts on the gas market

This will further accelerate the transformation of the gas sector

It is also expected to further accelerate the transition to hydrogen

EnBW is working intensively on a hydrogen growth strategy to secure a solid market position in the 'hydrogen world'

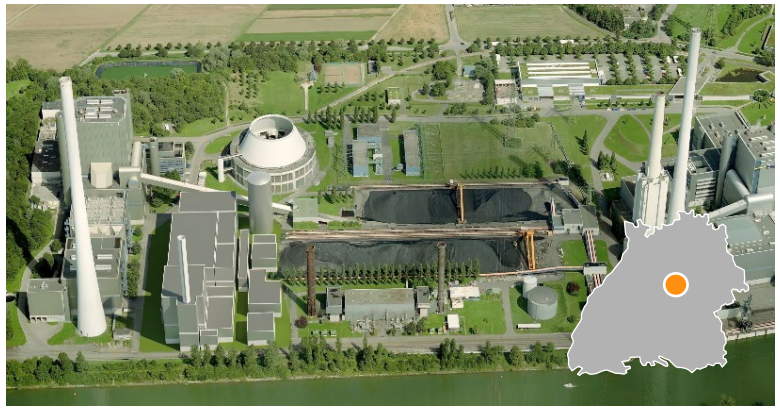
Need for dispatchable capacity – fuel switch activities

Stuttgart-Münster

- **Gas turbine plant with 124 MW_{el}**
  and waste heat steam generator
  Decommissioning of coal-fired boilers and gas turbines

Heilbronn

- **H_2-ready CCGT plant with 675 MW_{el}**
  and up to 190 MW heat output
  Decommissioning of HLB7 coal unit with 778 MW_{el}



Altbach/Deizisau

- **H_2-ready CCGT plant with 665 MW_{el}**
  and up to 180 MW heat output
  Decommissioning of HKW2 coal unit with 401 MW_{el}

The double fuel switch (from coal to gas and then to H_2) helps build a balanced portfolio of renewables and dispatchable capacity and is in line with EnBW's 2035 climate neutrality target

System Critical Infrastructure: Grid investments enable a successful energy transition

Electricity distribution grids

Integration of renewables and e-mobility

Netze BW climate neutral since 2021

Bid accepted to equip 170 sites in Baden-Württemberg with 450 MHz communication network

Partnership approach of Netze BW

- 214 municipalities
- Shareholding in Netze BW of around 14%

Electricity transmission grids

Expansion of networks to transmit electricity generated in the windy north to southern Germany

1. SuedLink 2 x 2 GW, >600 km (TransnetBW, TenneT)
2. ULTRANET 2 GW, 340 km, 40 km and transformer station by TransnetBW (TransnetBW, Amprion)

Examination of potential capital partnership in grids

- Minority stake sale of up to 49.9% in TransnetBW possible

Gas grids

H_2- readiness expected by 2040

Transmission grids (9,800 km)

- Start of construction of gas compressor station in Rheinstetten[1]
- Planning of natural gas pipeline in South-Germany (~250 km) to meet rising demand[2]
- EUGAL[3] - completion in Q2 2021 (~480 km)[4]

Distribution grids (16,100 km)

- Project "H_2 island" already delivers climate-friendly gas

As of 30 June 2022

[1] TransnetBW; [2] terranets bw; [3] European Gas Pipeline Link; 480 km from the Baltic Sea to the German-Czech border, 16% participation of Ontras; [4] Ontras

EnBW's hydrogen projects: Significant number of trial projects throughout Germany

H_2Mare – offshore wind PtX

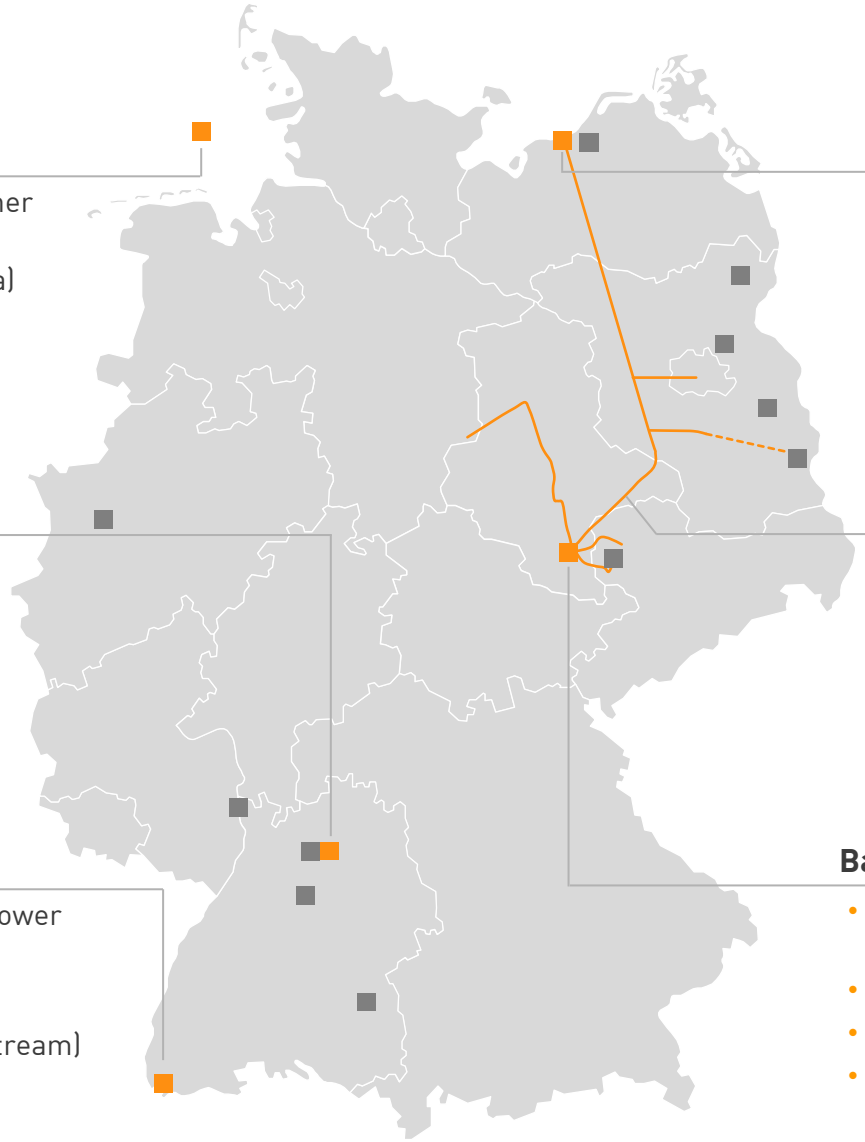
- Research into the production of green hydrogen and other PtX products from offshore wind power
- Joint project (including Siemens Gamesa, KIT, Dechema)
- Test platform planned to start operating in 2023

Öhringen Hydrogen Island

- Up to 30% hydrogen blended into gas grid for heat supply
- Supply of operating site plus 26 households
- Operating buildings supplied from 2021

H_2 Whylen Real-World Lab

- Production of green hydrogen from run-of-river hydropower
- Utilises electrolysis waste heat
- Generating capacity: up to 7 MW_{el}
- Planned to start operating in 2025 (1 MW_{el} already on stream)



Rostock Hydrogen Port

- Production of green hydrogen
- Consortium project (Port of Rostock, Rheinenergie, RWE)
- Generating capacity: 100 MW_{el}, scalable to 1000 MW_{el}
- Electrolyser planned to start operating in 2026

H_2 pipeline IPCEI projects

- Doing hydrogen, Green Octopus, LHyVE projects
- Conversion of natural gas pipelines to H_2 and construction of additional hydrogen pipelines for total of 900 km (Rostock-Leipzig-Salzgitter axis)
- First sections of pipelines planned to start operating from 2027

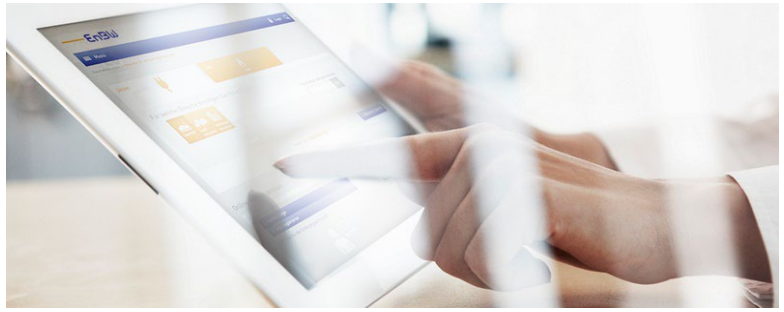
Bad Lauchstädt Energy Park

- Integrated project along hydrogen value chain in project consortium (Uniper, Terrawatt, DBI)
- Hydrogen produced used in industry
- Electrolyser generating capacity: 30 MW_{el}
- Wind farm, electrolyser and pipeline planned to start operating in 2024

As of 30 June 2022

EnBW Group project activities: Highlighted Other projects

Smart infrastructure for customers: Sustainable engagement for our customers



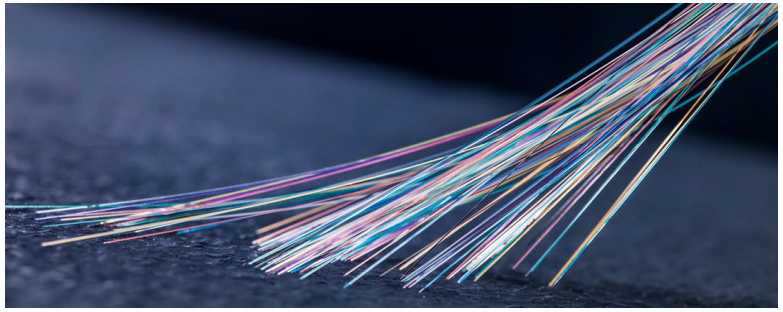
Electricity and gas

Green electricity has become standard product in EnBW's and Yello's portfolio[1]

- Supply of ~5.5 m customers with electricity, gas, district heating, drinking water
- Energy related services for B2B customers, such as billing services
- Energy supply contracting
- Energy savings contracting

E-mobility

- Leading and award wining Charge Point Operator (CPO) with largest fast charging network in Germany
- Auto Bild Leading CPO in DACH 22/2022 and 20/2021
- Auto Bild Best value for money of independent suppliers 22/2022
- No.1 e-mobility app in Germany connect 05/2021
  - Currently >700 EnBW locations
  - Target 2025: >2,500 EnBW locations
  - Over 300,000 charging points in 16 countries



Broadband/telecommunication

Fibre infrastructure combined with product and service portfolio

Plusnet (Telecommunications provider)

- >25,000 business customers
- 100G core network based on 6,500 km fibre network with access to further 50,000 km fibre

NetCom BW

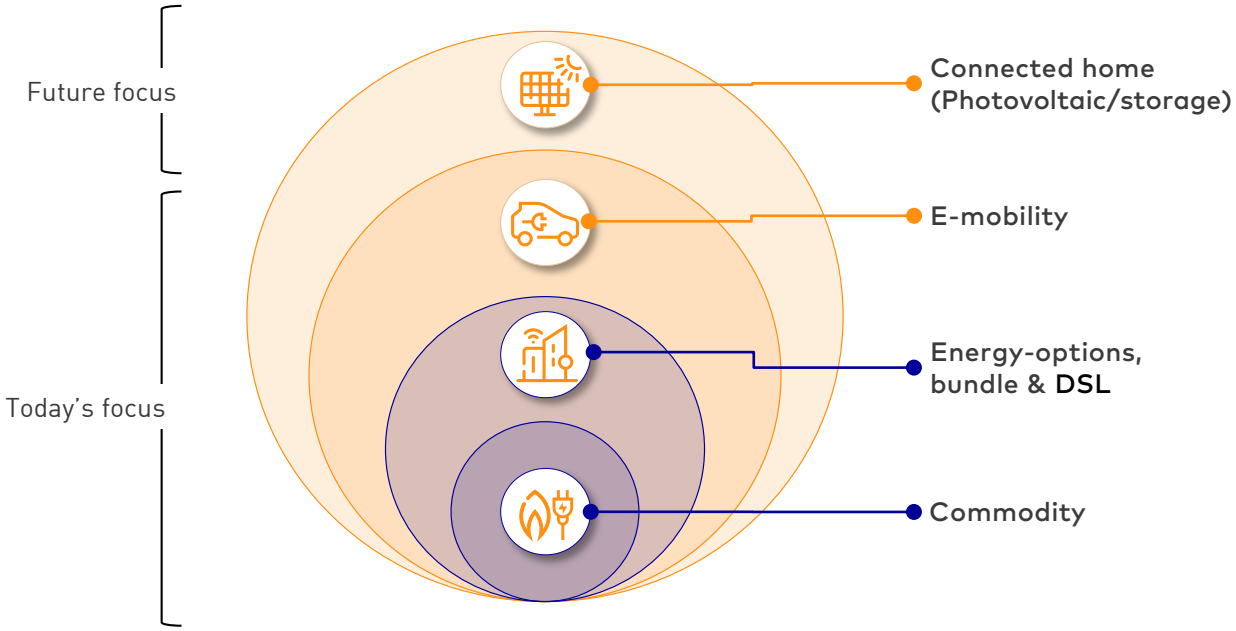
- ~74,000 customers (~63,500 B2C and ~10,500 B2B)
- ~18,400 km of fibre optic cable

As of 30 June 2022

[1] Excluding the provision of basic and reserve supplies

B2C strategy

Additional energy-related home infrastructure services with an eco system approach



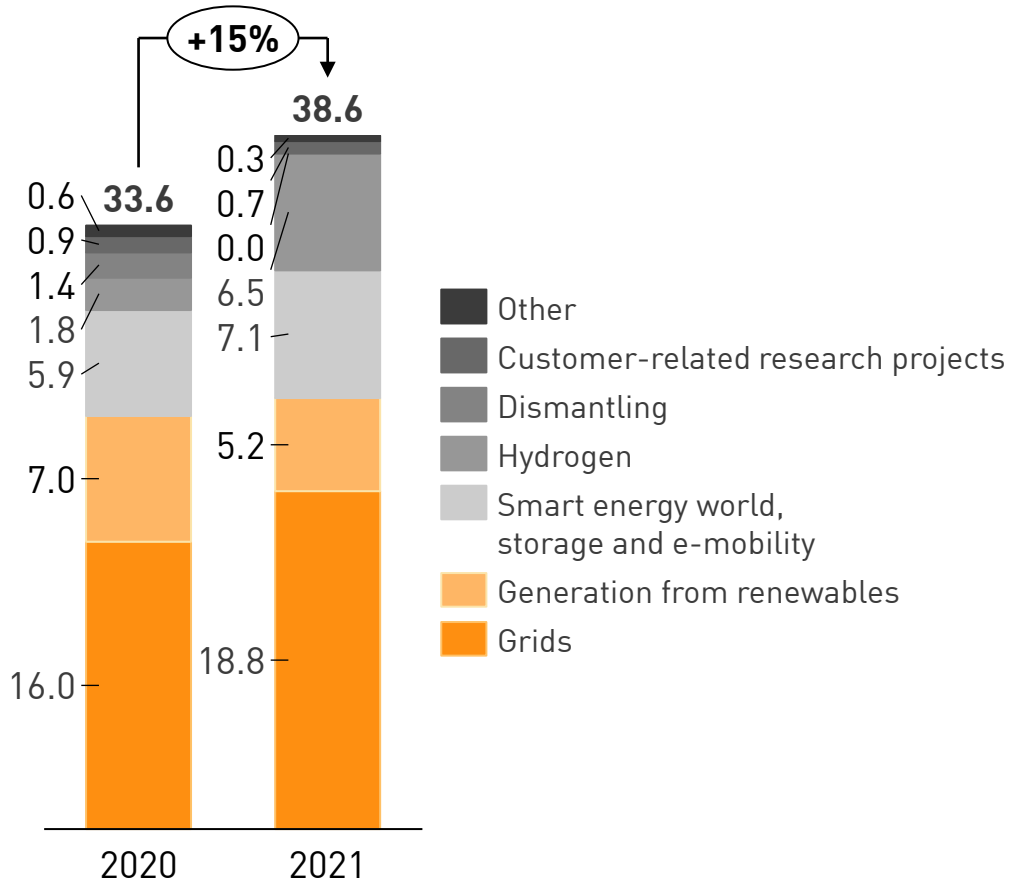
- B2C commodity sales remain a key element. Consistent expansion of household and multi-contract customers will be necessary
- Increasing importance of PV/storage and e-mobility drives even deeper integration into the customer household
- Further development and integration of telecommunication products, MSB (metering) or heat conceivable in the future

Consistent continuation of the customer household approach with a focus on energy and energy-related issues

Research and development

Expenditure on research, development and innovation

in € m



The goal of EnBW's research and development is to identify technological trends at an early stage, assess their economic potential and build up expertise in the business units.

- 66 R&D employees
- 253 employees involved in R&D projects
- Selected activities
  - Renewable energies
  - Geothermal energy
  - Hydrogen
  - E-mobility
  - Sustainable extraction of lithium

EnBW is focusing on 4 themes on its path to a sustainable, climate-neutral future

New energy & climate neutrality

e.g.: Expansion of renewable energies

Infrastructure transition

e.g.: Expansion of e-mobility

Culture of sustainability

e.g.: Sustainability as a benchmark for making business decisions

Protecting the natural environment

e.g.: Protecting people and the environment

Strategy and business activities driven by our strong ESG focus

E Environmental

- Reduction of CO_2 footprint
- Responsible use of resources
- Preservation of biodiversity
- Water and soil protection
- Energy efficiency
- Emission control

S Social

- Responsibility for employees
- Coal phase out: No job losses
  Fuel switch: Secure locations & jobs
- Transparent coal procurement aligned with ESG standards
  UN Guiding Principles on Business and Human Rights

G Governance

- ESG criteria integrated in investment approval process
- Decisions guided by climate neutrality target 2035
- Management Board remuneration including clawback

More ESG information on our website

Sustainability management | EnBW

Sustainability is is integral part of our investment decisions

Investment decisions

Strategic aspects | Financial aspects + **Sustainability aspects**

1 Enterprise valuation

(in an acquisition)

- Assessment, for example, of whether the company has a policy on compliance with ILO (International Labour Organisation) core labour standards, has an environmental/energy management system and publishes its accident/fatality rates

2 Project assessment

- Assessment of a proposed project from the sustainability perspective. This assesses the impact of the project category (such as wind power, solar, fuel switch or optical fibre) on our relevant top performance indicators, and also compliance with EU taxonomy requirements and contribution to selected topic areas under other sustainability standards and initiatives

3 Supplier evaluation

- Assessment of suppliers involved in a project with regard to their sustainability management. This assesses, for example, whether the supplier has an occupational safety and health management system and takes into account circular economy strategies for its product or product components

4 Controversy screening

- Screens a company (from enterprise valuation) and key suppliers (from supplier assessment) for sustainability controversies in the last five years

EU taxonomy aligned activities

Smart Infrastructure for Customers

- E-mobility

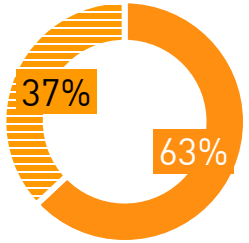
System Critical Infrastructure

- Electricity distribution grids
- Electricity transmission grids
- Water grids
- Water supply

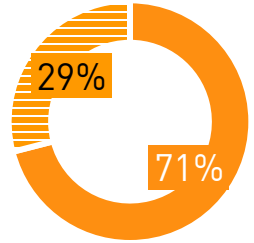
Sustainable Generation Infrastructure

- Wind onshore
- Wind offshore
- Solar
- Run-of-river
- Biomass
- Pumped storage

Adjusted EBITDA 2021



Expanded Capex 2021[1]
incl. IFRS 11 I IAS 28



EU taxonomy aligned

[1] In accordance with the Taxonomy Regulation, expanded by acquisitions and capital increases from companies accounted for using the equity method

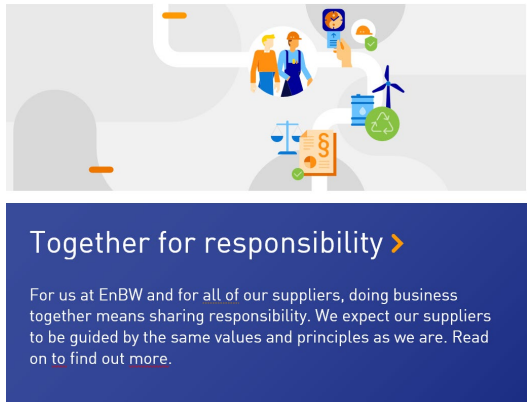
Supply chain sustainability: Responsibility for the environment and society

Managing sustainability risks in the supply chain and ensuring due diligence compliance

- Rollout of Supplier Code of Conduct as core element of supplier qualification at an advanced stage; recognised by all 3,000 A and B suppliers by end of 2022
- Risk analysis launched in six key procurement categories; to be completed for all procurement areas by Q2 2023
- Processes, tools and KPI specified and established by Q1 2023
- Sectoral dialogue initiated

Reducing supply chain carbon emissions (Scope 3 Upstream)

- Basic analysis for all procurement categories completed and hotspots identified
- CO_2-Tracker available Group-wide, will be shared open source with other companies and suppliers across industries in 2023 for continuous development
- Detailed analyses started for individual goods/services (e.g. electric vehicle charging stations) and reduction measures launched



Establishing sustainability in procurement strategies and supplier management

- Additional/increased sustainability criteria in procurement and investment decisions
- Active dialogue and cooperation launched with 70 top suppliers

Major sustainability ratings

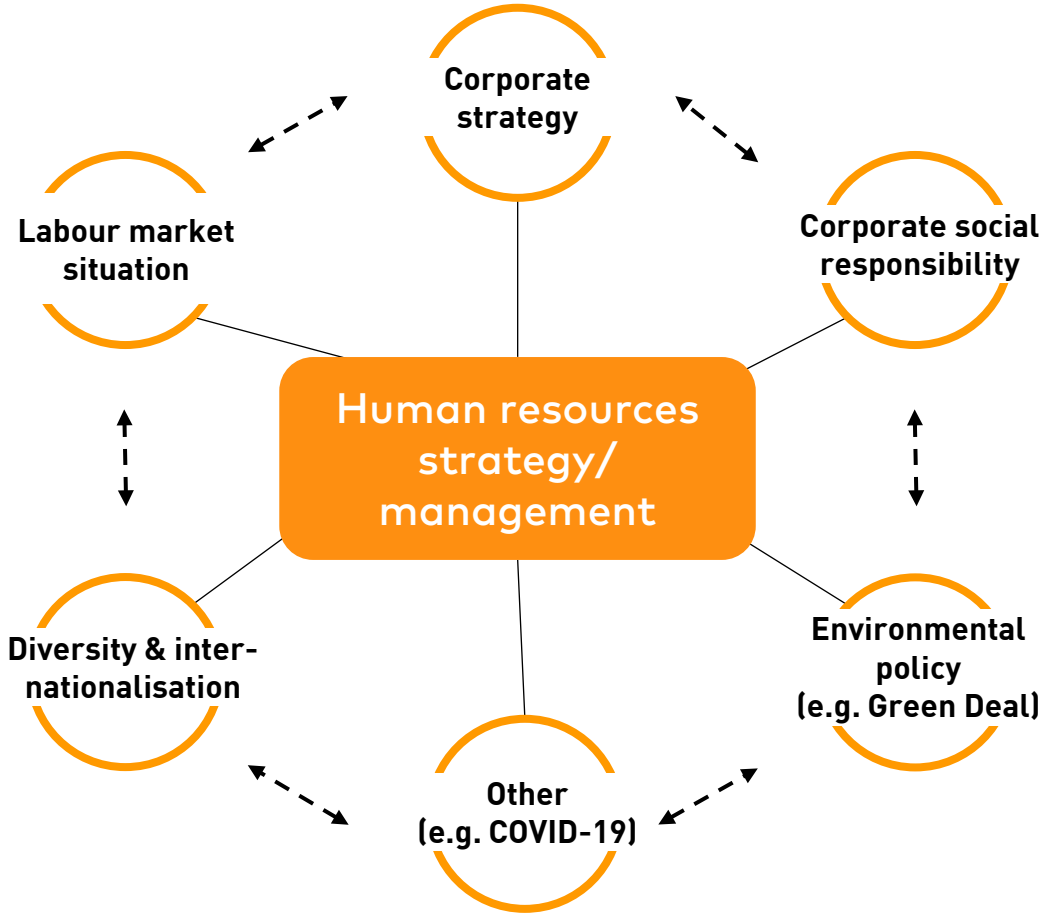
		Status quo
CDP[1]	Climate Rating	B Management
Sustainalytics[2]	ESG Risk Rating	27.7 Medium Risk
ISS ESG[3]	ESG Rating	B Prime Status
MSCI[4]	ESG Rating	A Average

[1] CDP Scale: A to D (Leadership A/A-; Management B/B-; Awareness C/C-; Disclosure D/D-; Failure F)
[2] Sustainalytics Scale: 0 to 40+ (Risk Score: negligible (0-10); low (10-20); medium (20-30); high (30-40); severe (40+))
[3] ISS ESG Scale: A+ to D- (absolute best-in-class basis; Prime Status awarded)
[4] MSCI Scale: AAA to CCC (Leader AAA – AA; Average A – BB, Laggard B – CCC)

HR strategy: Sustainable human resources management

We understand sustainable human resources management as a future-oriented, systematic and strategic approach to planning and implementing HR measures, aligned with strategic and organisational goals, while taking into account EnBW's corporate social responsibility (CSR).

The aim of sustainable HR management is to create an environment and a culture that enables the recruitment, retention and development of employees in a sustainable and future-oriented manner, in line with the corporate strategy and relevant factors.



HR strategy: Strategic directions of thrust and implementation

HR processes, services and digitisation	Increasing automation for careful use of available resources
Employer brand and recruitment	Securing suitable future-ready skills and capabilities
Leadership and skills	Enhancing resilience by transforming into a learning organisation and maintaining employability
People-centric transformation	Transformation to performance and empowerment with people in central focus
Diversity and inclusion	Systematic support to boost innovativeness, performance and creativity
Qualification	Ongoing development of qualified young talent

Overview

1. EnBW at a glance
2. War in Ukraine – impact on EnBW
3. Market environment
4. Sustainable corporate strategy
5. **Business segments**
6. Key financials and non-financials
7. Capital markets
8. Corporate governance
9. Service

- Smart Infrastructure for Customers
- System Critical Infrastructure
- Sustainable Generation Infrastructure
- Electricity and gas sales volumes

Smart Infrastructure for Customers: E-mobility

Highlights

over 700
fast-charging locations in Germany

over 2,500
fast-charging EnBW locations by the year 2025

over 300,000
charging points in the EnBW HyperNetwork

over €100 m
annual invest until 2025

Our range of services

Consulting and sales ▶ Location analysis ▶ Planning, project planning, civil engineering ▶ Access and billing ▶ Operation and service

Examples of partners and references

TANK & RAST, Shell, OMV, dm, ADAC, HYUNDAI, BAUHAUS, trigema, REWE, PENNY, GLOBUS

EnBW mobility+

- Is operating the biggest fast charging network in Germany with 100 % renewable energy
- Offers the largest network coverage in DACH region
- Is awarded multiple times:

As of 30 June 2022
DACH region: Germany, Austria and Switzerland

Smart Infrastructure for Customers: EnBW HyperNetwork

Charge while you eat or shop

Retail hubs

Convenient and time-saving quick charging while you eat or shop

- Supermarkets
- Malls
- Drugstores
- Bakeries
- Fast food outlets

- Typical provision: 2 - 12 chargers
- Typical capacity: 75 - 150 kW

Urban hubs

Fast to very fast charging in urban hubs

- Cities over 100,000 population
- Highly frequented locations for high capacity utilisation
- Urban areas with above-average population density

- Typical provision: 8 - 12 chargers
- Typical capacity: 75 - 300 kW

Make a quick charging stop

Long-distance hubs

Very fast range top-up on/near the Autobahn and major roads

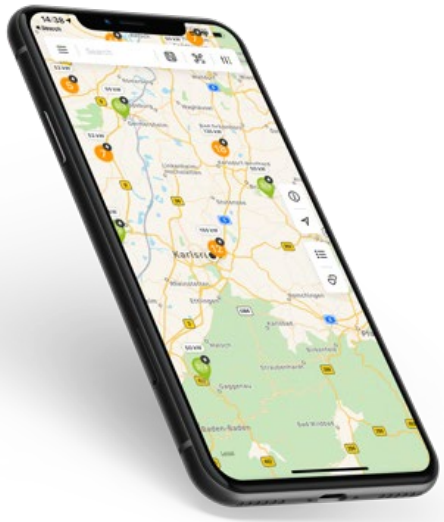
- Interchanges
- Slipways
- Major axes/trunk roads
- Rest stops/service stations
- Greenfield sites

- Typical provision: 12 - 20 chargers
- Typical capacity: 150 - 300 kW

Anyone without a home charger saves time by building the perfect HPC charging experience into their everyday routine

As of 30 June 2022
HPC: High power charging

Smart Infrastructure for Customers: EnBW mobility+ app

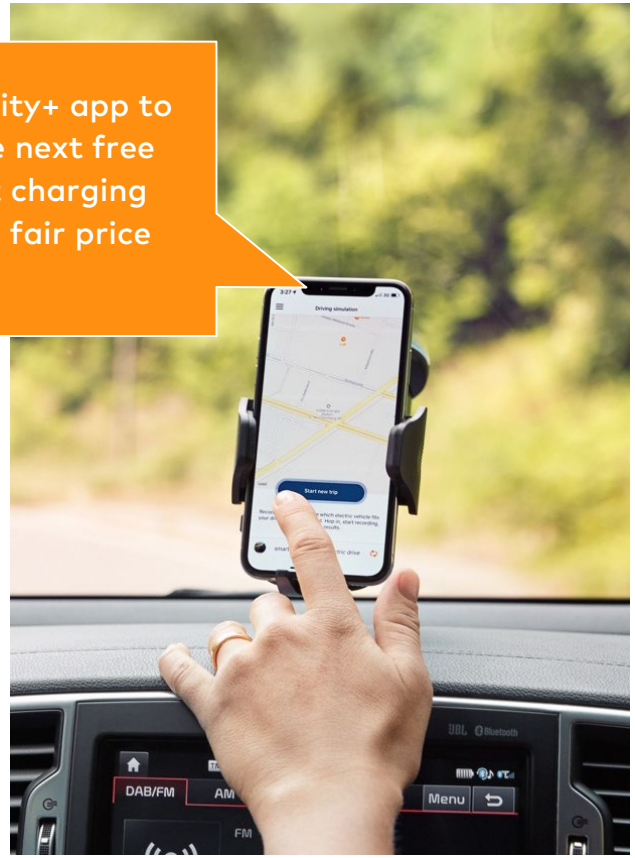


>1,600,000
downloads

>300,000
charging points in sixteen countries

of which >70,000
charging points in Germany

Use the EnBW mobility+ app to conveniently find the next free charging point, start charging and pay at the same fair price in nine countries

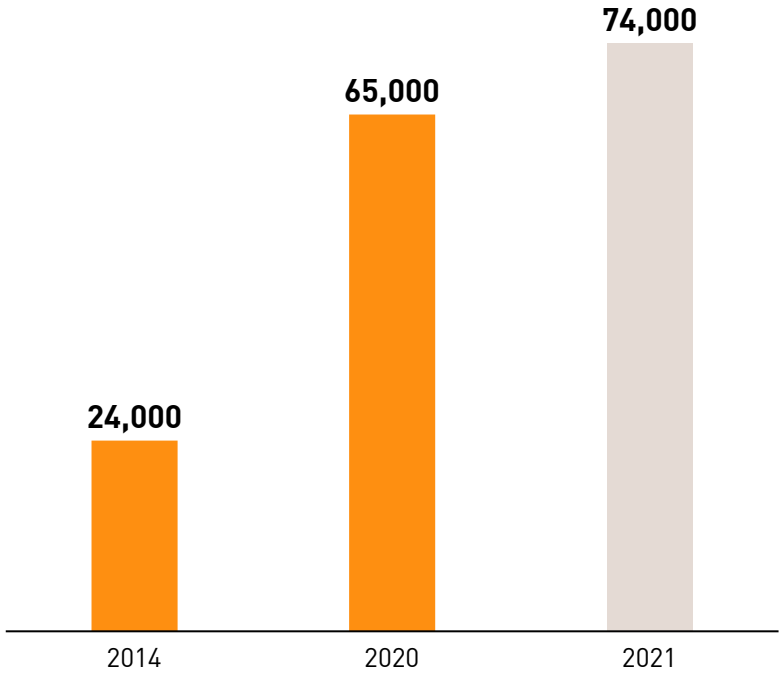


Multiple award-winning and most frequently downloaded electric mobility app in Germany

Smart Infrastructure for Customers: Fibre broadband and services at NetCom BW

Total customer growth

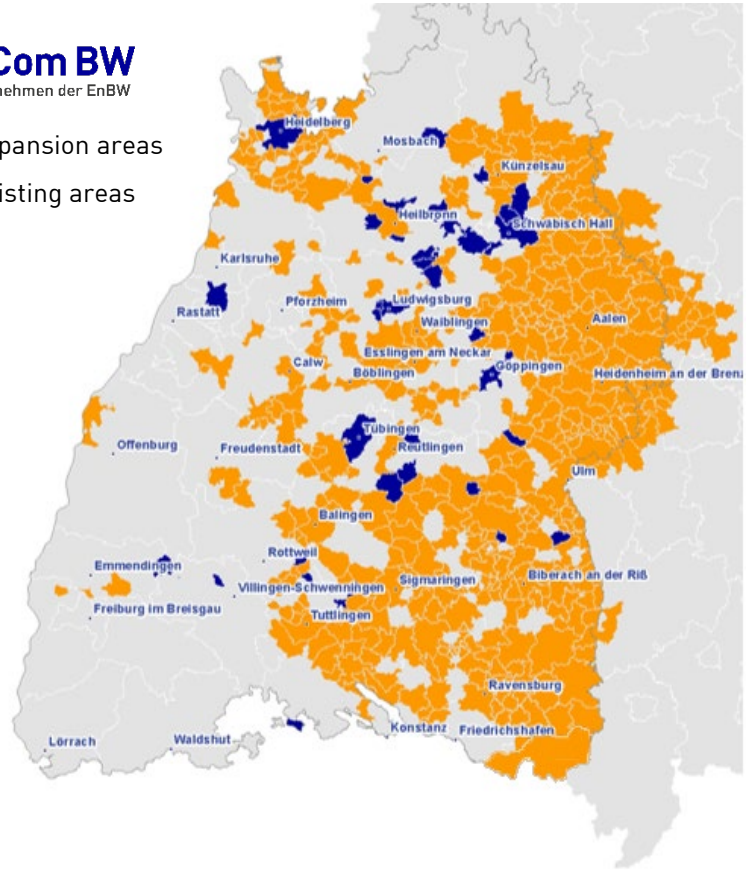
number of customers



- Approx. 75,000 customers, of which 10,500 commercial and industrial
- Around 18,400 km of fibre optic cable
- One of the largest fibre backbone networks in Baden-Württemberg
- Serves >40% of municipalities in Baden-Württemberg
- Strong data growth: 50% growth of transported data volume in 2021 to ~330,000,000 Gigabytes (compared to 2020)

NetCom BW
Ein Unternehmen der EnBW

- Expansion areas
- Existing areas



As of 31 December 2021

Smart Infrastructure for Customers: Plusnet - leading nationwide B2B telecoms operator

Key highlights

Customers

- Well-known and loyal customer base
- Overall ~25,000 business customers
- Customer base well-diversified by region, industry, size and products

Sales organisation

- Significant experience in B2B sales with long-term relationships
- Strong direct sales channel and indirect sales network with more than 300 partners
- Seamless interaction between indirect and direct sales with strong products

Network

- Fully meshed 100 Gbps DWDM backbone based on 6,500 km fibre network with access to overall 50,000 km fibre via cooperation
- Plusnet owns and operates third largest copper-based access network with >1,000 central offices, fully tailored to business (DSL) markets as well as the largest independent B2B WLL network in Germany with ~200 base stations and ~1,300 customer links

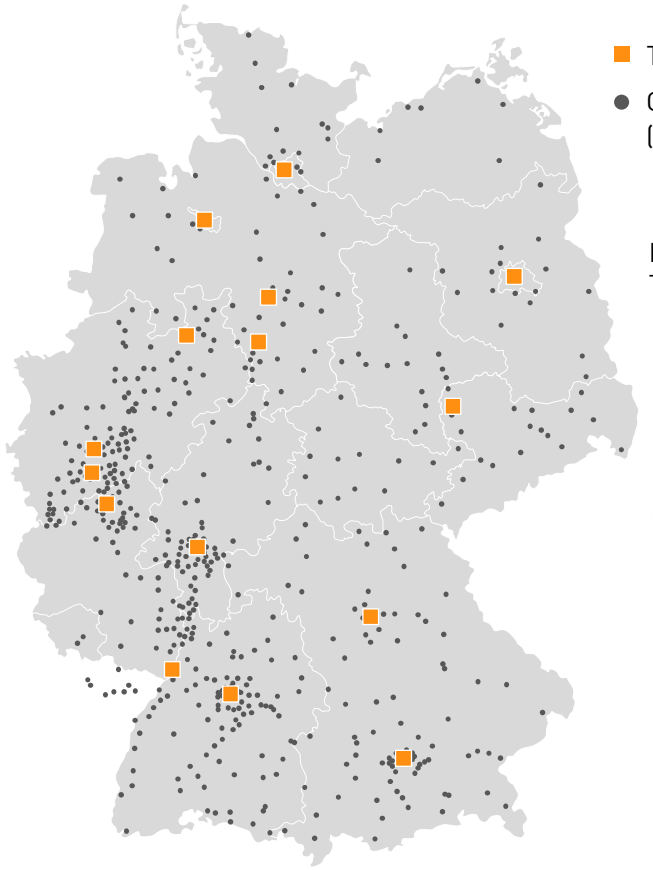
Fibre optic expansion

- Focused on commercial areas, we are rolling-out fibre selectively throughout Germany

Municipal utility companies in Germany

- Plusnet is well positioned to be the go-to provider of network services, white label and open access solutions for municipal utility companies, offering unique white label building-blocks

Nationwide IP-based voice and data network



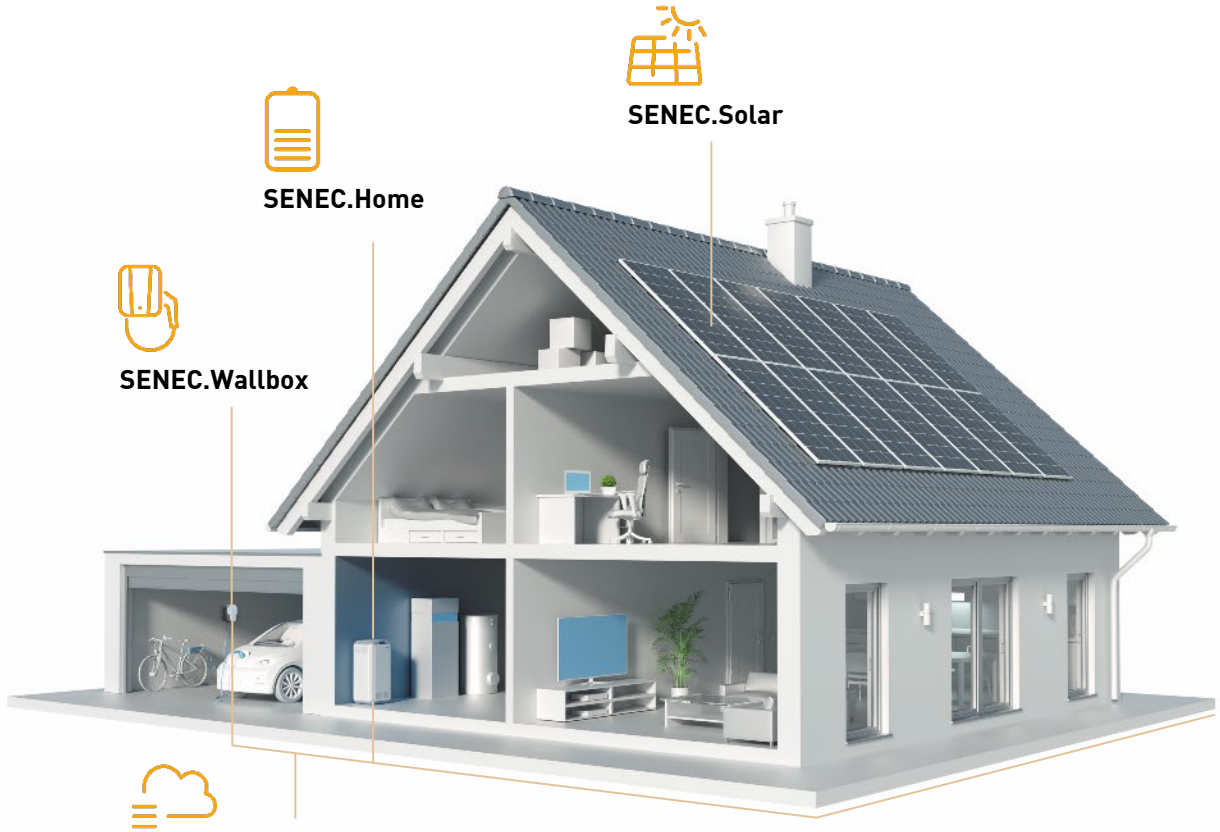
- Telehouse location
- CO location (access to network of Deutsche Telekom)

Largest CO network besides Deutsche Telekom and Vodafone

plusnet

B2B: Business to business CO: Central office ["Hauptverteiler" (HVT)] WLL: Wireless local loop

Smart Infrastructure for Customers: SENEC - decentralised energy solutions for homeowners



SENEC.Cloud *additional products*:
SENEC.Cloud To Go
SENEC.Cloud Heat
SENEC.Cloud Family & Friends

- Fully integrated solutions for self-supply with solar power (SENEC.360)
- Development and production of electricity storage systems
  - Distribution of own-brand PV systems and wallboxes
  - SENEC-Cloud virtual electricity storage
  - Electric mobility: Solar-optimized charging via wallbox
- Distribution through over 1,200 certified installers
- Positioned in high-growth sweet spots of decentralised energy solutions
- Over 100,000 electricity storage systems sold
- Presence in major growth markets (Germany, Italy and Australia)
- Strongly scaling business: tremendous growth since acquisition in 2018 to revenue well above €400 m in 2022

Smart Infrastructure for Customers: Energy-related services for utilities

Business model

- EnBW Utility Services has provided energy-related services to utilities for over 10 years. The business focus is on the supplier and distribution network business (including as default meter operator).
  Today, the business has over 2.6 m metering points under management.
- The main energy-related services include the provision of IT platforms (SaaS), business process outsourcing (BPO) and implementing projects such as migrations for e.g. municipal utilities.

Market development

- The business has changed noticeably in recent years, with changing customer behaviour, higher legislative and regulatory requirements and new technologies. This path of change continues with growing rapidity and increases complexity for market players who make increasing use of outsourcing.
- Overall, the market is expected to grow by about 2.5% a year to a total volume of around €3.5 bn by 2030 (today[1]: €2.7 bn). Strongest growth and margins: Software/SaaS and metering point business

approx. 100 clients

>5 m contracts under management

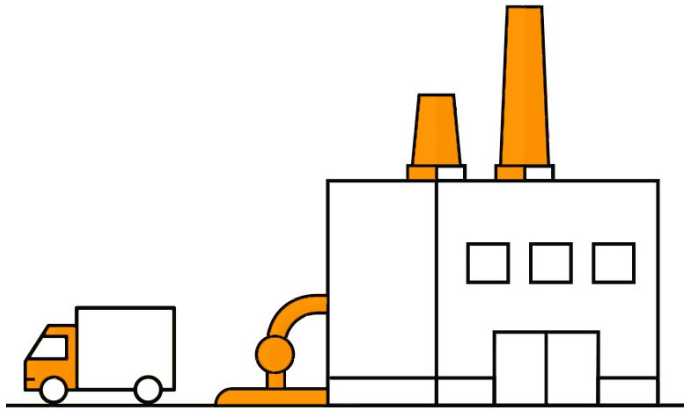
approx. €120 m revenue

[1] As of 30 June 2022

Smart Infrastructure for Customers: Develop biomethane business

Biomethane market development

- Short-term market development: Biomethane opens up additional applications in the transport and buildings sector for rapid decarbonisation
- In the medium term, biomethane will be used as a storable and climate-friendly gas fuel in industry, the tertiary sector and power generation
- Rapid expansion of biomethane business via acquisition of BayWa portfolio by bmp greengas (2019) and organic growth
- Expansion of non-subsidised business (Germany) and internationalisation by cross-border procurement and marketing activities



bmp greengas

- Wholly-owned subsidiary of Erdgas Südwest
- Germany's leading marketer of biomethane
- Develops efficient energy supply solutions
- Supports companies in switching to sustainable energy supplies with biomethane, bio-SNG and bio-LNG and in future green hydrogen
- Transport, mass balancing and supply of green gases
- Trader for biomethane GHG quota and in future bio-LNG in transport sector

Source: Erdgas Südwest GmbH

System Critical Infrastructure: Electricity and gas grids represent EnBW's core business

EnBW has a thorough understanding of grid business

- EnBW and its predecessor companies have been active in grid business for more than 100 years
- Security of supply is our highest priority – which is why we employ modern and tested technologies and maintain an extensive network of service centers
- Efficiency benchmark from most recent regulatory period certifies generally best results for EnBW grids
- High regulatory competence and market competence

Grid business has stabilising effect on portfolio

- Electricity and gas grids are subject to regulation
- Stabilising risk/return mix with stable cash flows

System Critical Infrastructure: Electricity and gas grids

in km

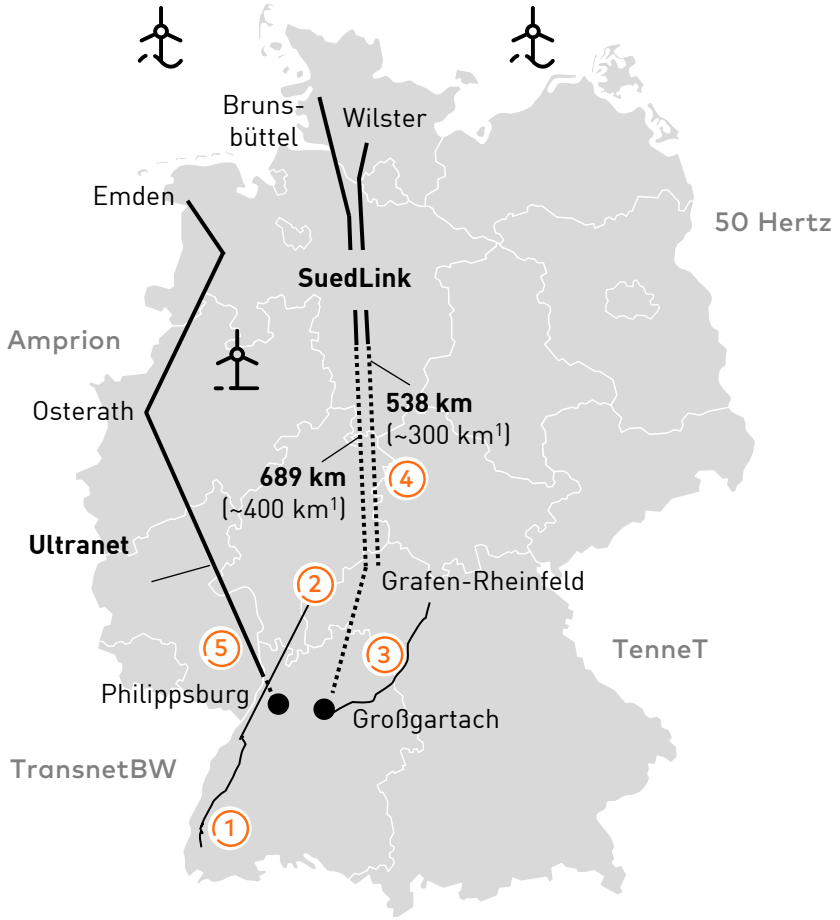
Transmission grids	2021	2020
Extra-high voltage 380 kV	2,200	2,200
Extra-high voltage 220 kV	900	1,000
Distribution grids		
High voltage 110 kV	8,500	8,600
Medium voltage 30/20/10 kV	43,300	43,000
Low voltage 0.4 kV	90,900	89,800
Overall length	**145,800**	**144,600**

Transportation grids	2021	2020
High pressure	9,800	9,700
Distribution grids		
High pressure	2,400	2,400
Medium pressure	9,100	8,900
Low pressure	4,700	4,700
Overall length	**26,000**	**25,700**

System Critical Infrastructure: Expansion of electricity transmission grids to ensure security of supply

	Grids section	Scheduled completion
AC grids reinforcement		
(1) for Rhine river area in Baden	~150 km	2023/2028
(2) for north Baden-Württemberg	~80 km	2028
(3) for north east Baden-Württemberg	~140 km	2022/2030
DC expansion		
(4) in corridor C "SuedLink"4 GW corridor TransnetBW contribution: Converter, power lines	~760 km[1]	2028
(5) in corridor A "Ultranet" 2 GW corridor EnBW/TransnetBW contribution: Converter, power lines in Baden-Württemberg	40 km[2]	2026

Investment up to 2025: About €6 bn



Source: BNetzA, EnBW, Net Development Plan (NEP) 2035 2. Draft 2021; www.netzausbau.de/en

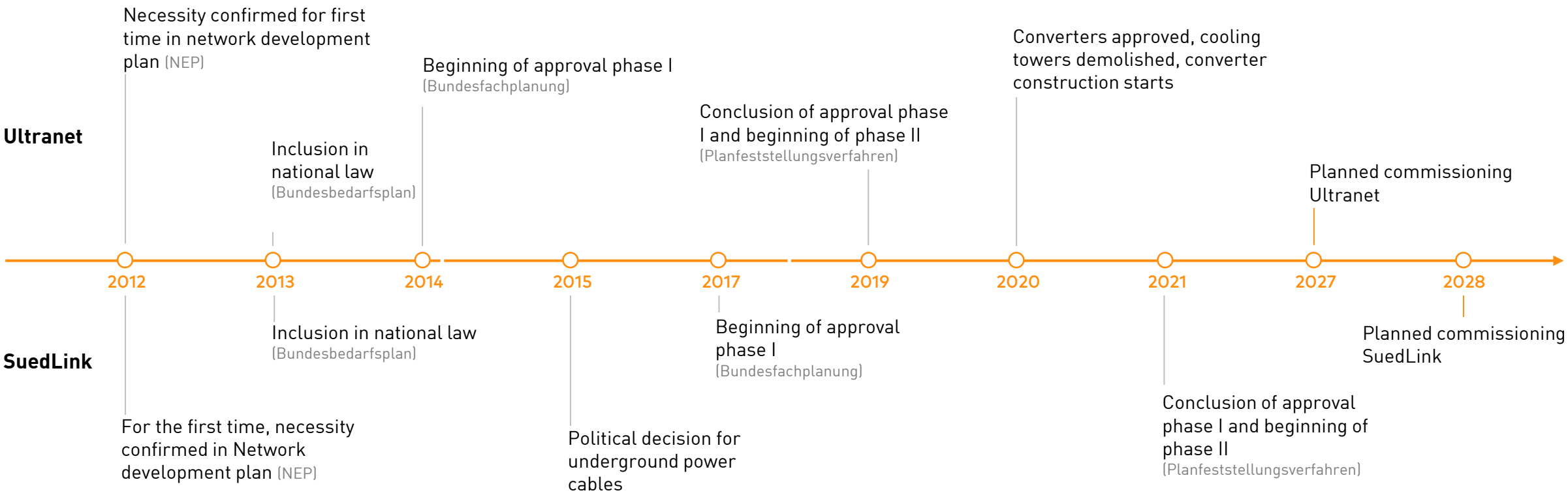
[1] In cooperation with TenneT [2] In cooperation with Amprion

AC: Alternating current DC: Direct current

System Critical Infrastructure: Our Challenges - extensive and long approval procedures

Schedule for HVDC projects at TransnetBW

Milestones



HVDC: High-voltage direct current transmission technology

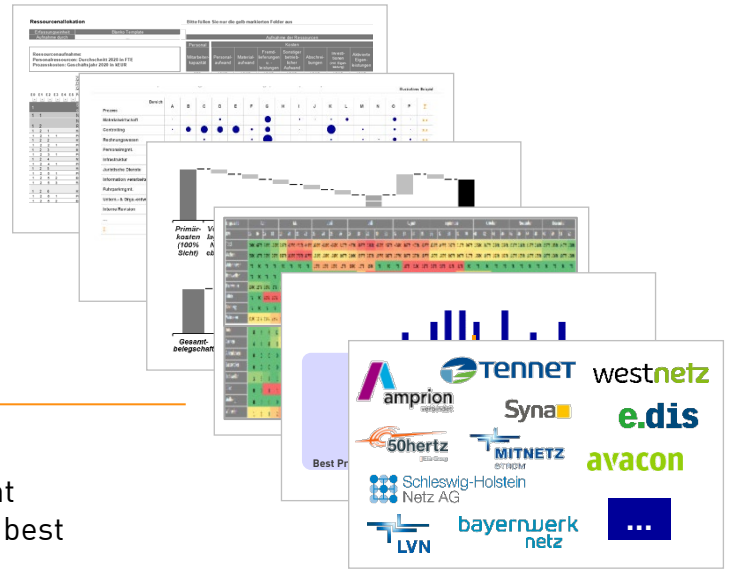
System Critical Infrastructure: Efficiency benchmarks – EnBW grids companies in top positions

Periodical implementation of benchmarks

Transparency for key figures regarding cost and performance in comparison to external comparable companies

Identification of potential for efficiency improvements and fields of action

Development of improvement measures and application of best practices



Efficiency figures at EnBW grids companies

Examples[1]

Transmission grids	TRANSNET BW	**100%**
Distribution grids	Netze BW, ED Netze, Netze ODR, NHF netze, Netzgesellschaft Düsseldorf mbH	**94 - 100%**

[1] Source: "BNetzA – Datenblatt Stromnetzbetreiber nach §23b EnWG"

System Critical Infrastructure: Integration of renewables and e-mobility in distribution grids

Challenges and activities

Challenges of the distribution grids in Baden-Württemberg

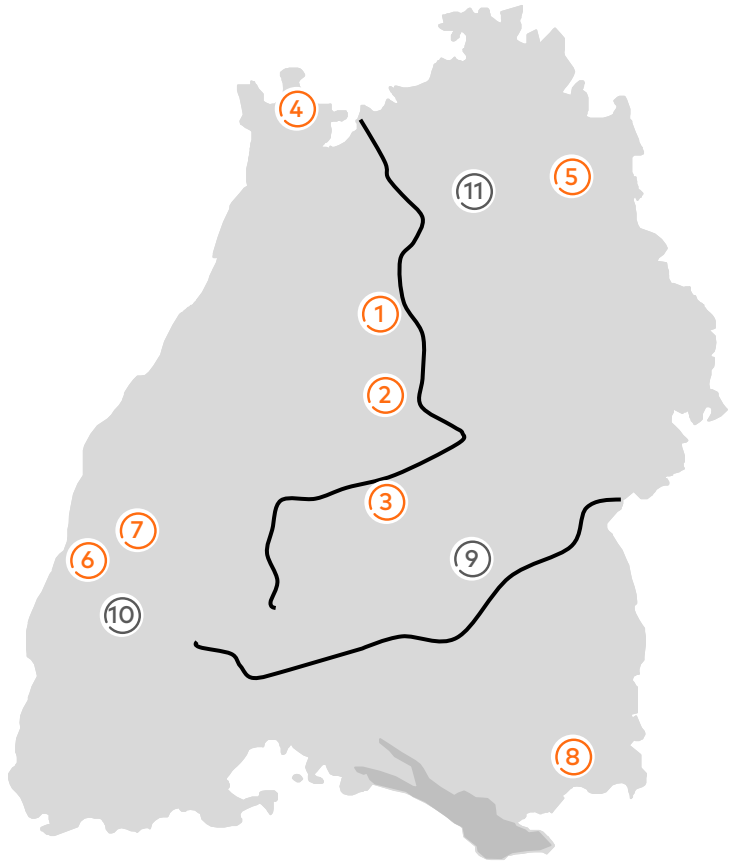
- Widespread use of photovoltaics
- High expansion targets for wind power
- Growing prevalence of electric cars and electric heating systems

Smart technologies (e.g. controllable distribution substations) potentially reduce the extent of grid expansions

In addition to the expansion of distribution grids, EnBW is investigating smart distribution grids together with partners in several "grid laboratories"

Until 2025, investment of ~€2.5 bn necessary to develop the electricity distribution grids infrastructure in Baden-Württemberg

EnBW grid laboratories and grid innovations



E-mobility

1. **E-mobility-Carré Tamm**
   Integration of e-mobility in apartment buildings in urban areas
2. **E-mobility-Allee Ostfildern**
   Integration of e-mobility in family homes in suburban areas
3. **E-mobility-Chaussee Kusterdingen**
   Integration of e-mobility in family homes in rural areas

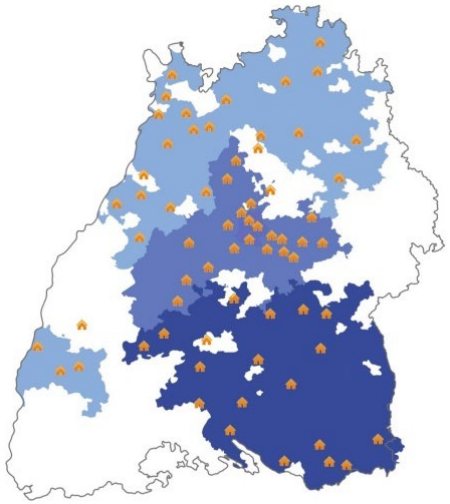
4-8 **Intelligent home-charging**
Remote controlled charging at home

Smart grids and others

9. **Sonderbuch**
   Interactive smart grids demonstrator
10. **Freiamt – flexQgrid**
    The grid as distributed power plant; implementation of grids traffic light
11. **Hydrogen-Island Öhringen**
    Renewable energies stored as hydrogen in the natural gas grids

System Critical Infrastructure: Local authorities and municipal utilities

Concessions



- Netze BW locations
- North grids region
- Centre grids region
- South grids region

With investment, research activities, state-of-the-art technology and our highly dedicated workforce, we make a major contribution in terms of security of supply and future-ready energy supply, especially in rural regions

- 550 electricity concessions
- 106 gas concessions
- 2.5 m electricity connections
- 150,000 gas connections

Our ambition:
Secure and win concessions

Shareholdings in local services

Alongside our own activities, our shareholdings in local services are a key pillar of our regional business. We place great importance on close teamwork

- Approx. 100 shareholdings, numerous network providers and municipal utilities
- Approx. €3 bn revenue
- 20% electricity and gas market volume share in Baden-Württemberg

Our ambition:
Long-term and durable partnerships with municipal shareholders and services

Local sale and distribution

Broad portfolio of products and services serving over 1,400 municipalities across Baden-Württemberg and beyond

- With a strong regional footprint, we work closely with municipal and district councils to deliver tailored solutions
- Our portfolio focuses on innovative mobility, connected infrastructure, sustainable energy, reliable security and digital services
- Total order value 2021 approx. €194 m

Our ambition:
Work together to deliver smart infrastructure for all generations

As of 30 June 2022

System Critical Infrastructure: Partnership as part of the strategy

"EnBW vernetzt" – a new quality of partnership with municipalities

214 municipalities
37.7% of authorized 568 municipalities

€307 m
about 14% of the company value

More than 1/3 or nearly 40% of the concession municipalities are shareholders of Netze BW

EnBW is considering long-term partnership options, offering up up to 49.9% of TSO TransnetBW

- Massive expansion of the transmission grid in Germany – TransnetBW Co-develops two of three large HVDC connections (SuedLink and ULTRANET)
- TransnetBW will invest at least about €10 bn until 2035[1]
- EnBW will remain the majority shareholder in TransnetBW

EnBW is looking for a committed long-term oriented investment partner to jointly finance this growth trajectory

[1] Source: "Netzentwicklungsplan bis 2035 (Fassung 2021)"

HVDC: High-voltage direct current transmission technology

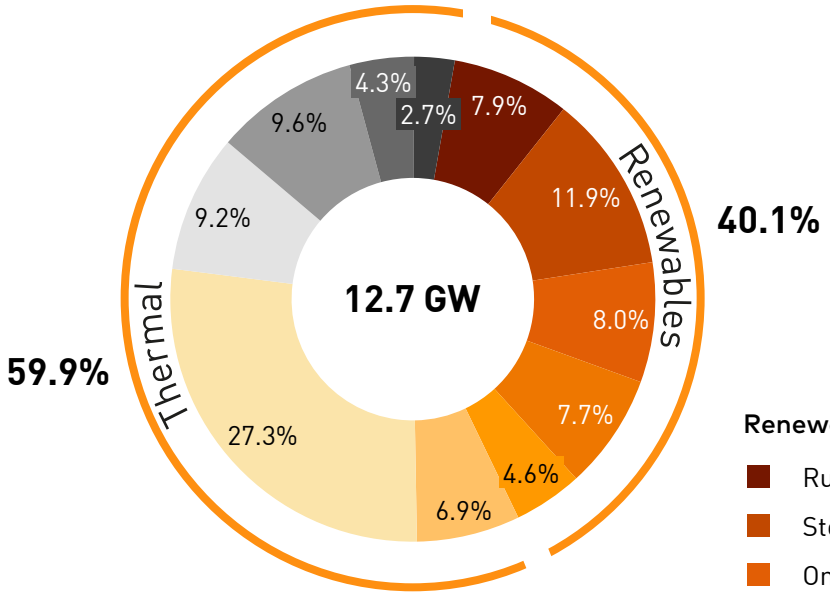
EnBW Group: Generation portfolio and own generation[1]

	Generation portfolio in MW 2021	share	Own generation in GWh 2021	share
Renewable Energies	**5,100**	**40.1%**	**11,692**	**27.6%**
Run-of-river	1,007	7.9%	5,150	12.2%
Storage/pumped storage (using natural flow of water)[2]	1,517	11.9%	858	2.0%
Onshore wind	1,016	8.0%	1,746	4.1%
Offshore wind	976	7.7%	3,196	7.5%
Other renewable energies	584	4.6%	742	1.8%
Thermal power plants[3]	**7,622**	**59.9%**	**30,707**	**72.4%**
Brown coal	875	6.9%	5,691	13.4%
Hard coal	3,467	27.3%	10,829	25.5%
Gas	1,166	9.2%	3,452	8.1%
Other	346	2.7%	152	0.4%
Pumped storage (not using natural flow of water)[2]	545	4.3%	1,106	2.6%
Nuclear	1,223	9.6%	9,477	22.4%
Total	**12,722**	**100%**	**42,399**	**100%**

[1] As of 31 December 2021. The generation portfolio includes long-term procurement agreements and generation from partly owned power plants.
[2] Output values irrespective of marketing channel, for storage: generation capacity
[3] Including pumped storage power plants that do not use the natural flow of water.
Divergence from 100% possible due to rounding effects

EnBW Group: Generation portfolio and own generation

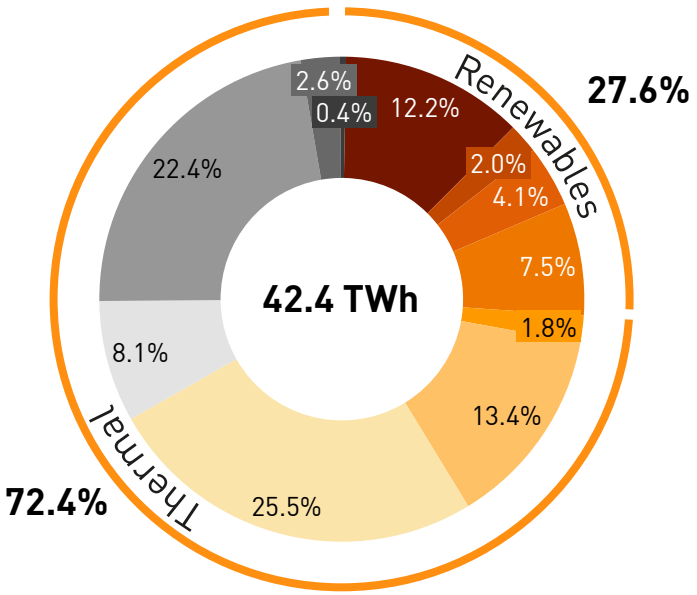
Generation portfolio 2021



Renewables
- Run-of-river
- Storage/pumped storage[1]
- Onshore wind
- Offshore wind
- Other renewables

Thermal
- Brown coal
- Hard coal
- Gas
- Nuclear
- Pumped storage[1]
- Other thermals

Own generation 2021



[1] Renewables storage/pumped storage (using natural flow of water) and thermal pumped storage (not using natural flow of water)

Sustainable Generation Infrastructure: Offshore wind in Germany - portfolio and project pipeline

- Installed capacity: **953.9 MW** ■ In operation
- Secured pipeline: **~900 MW** ■ Development stage

	Baltic 1	Baltic 2	Hohe See	Albatros
Country	Germany	Germany	Germany	Germany
Technology	Offshore	Offshore	Offshore	Offshore
Type of turbine	21 x Siemens SWT 2.3-93	80 x Siemens SWT 3.6-120	71 x SWT 7.35-154-HWRT	16 x SWT 7.35-154-HWRT
Total capacity in MW	48.3	288	500	117.6
Shareholders	~50.3% EnBW; ~49.7% 19 municipal utilities	~50.1% EnBW ~49.9% PGGM & ÄVWL	~50.1% EnBW ~49.9% Enbridge Inc./CPPIB	~50.1% EnBW ~49.9% Enbridge Inc./CPPIB
Operation date	Apr 2011	Sep 2015	Oct 2019	Jan 2020
Feed-in system	EEG 2009	EEG 2014	EEG 2014	EEG 2014

As of 30 June 2022
CPPIB: Canada Pension Plan Investment Board

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)
PGGM: Stichting Depositary PGGM Infrastructure Funds

ÄVWL: ÄrzteVersorgung Westfalen-Lippe

Sustainable Generation Infrastructure: Offshore wind in Germany under development

He Dreiht

Country	Germany
Technology	Offshore
Type of turbine	64 x Vestas V236 15 MW (incl. overplanting)
Total grid capacity in MW	900
Shareholders	100% EnBW (divestment of 49.9% envisaged at FID)
Commissioning	2025
Feed-in tariff	Without EEG funding

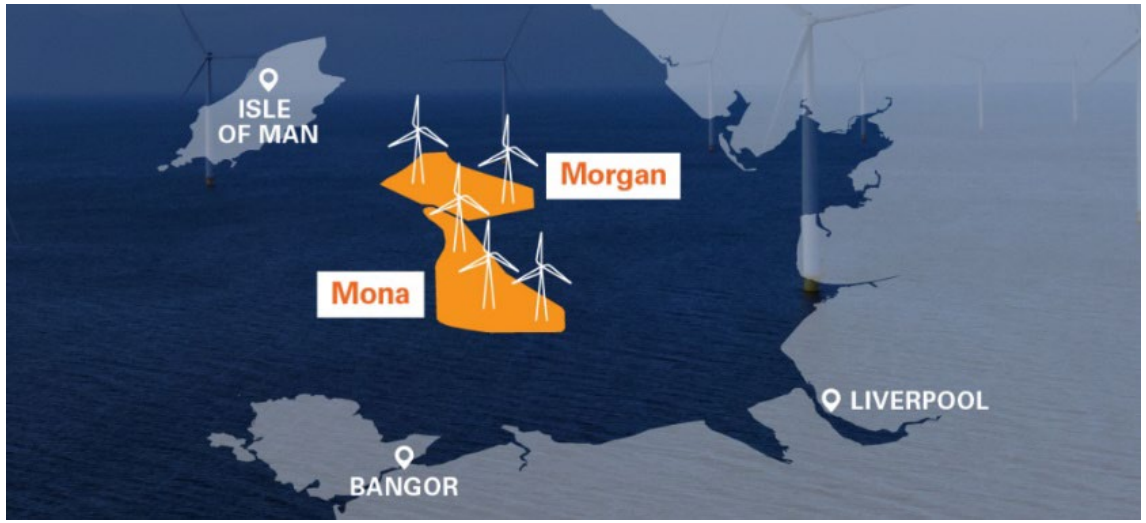
He Dreiht secured 900 MW grid capacity as one of the first zero subsidy projects in 2017

- Currently under development, i.e. engineering, consenting and financing
- All major supply contracts secured with experienced contractors
- Agreement on 66 kV direct connection of inner array grid to AC/DC converter eliminates the need for a costly offshore substation
- Export connection supplied by transmission system operator (TSO) by end of 2025
- Strong operational synergies with neighbouring EnBW wind farms Hohe See and Albatros
- Final Investment Decision (FID) planned for 2023
- Divestment of 49.9% stake envisaged at FID
- Start of operation expected for 2025

AC: Alternating current DC: Direct current EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Offshore Wind Development in United Kingdom (1/2)

Mona and Morgan



Location	30 km from the coast
Potential	Potential of 3 GW leases – powering c. 3.4 million UK homes
Area	Morgan: ~300 km² Mona: ~500 km²
Water-depth	35 m
Shareholders	50% EnBW, 50% bp
Commissioning	Depending on grid connection, aiming at 2028/29
Feed-in tariff	CfD, PPA and/or merchant offtake in 55 years operation time

EnBW/bp have been awarded Preferred Bidder status for seabed with a potential of 3,000 MW

- 50:50 partnership with bp combines EnBW's offshore wind expertise with bp's experience, especially in consenting and procurement
- Sites benefit from being close to shore and are lifting synergies from local proximity
- Grid access can be established in comparatively short time at fairly low cost due to relatively short export grid connection
- Both wind farms under development, various ongoing activities regarding grid connection, consent and engineering
- Actively pursuing cooperation with regional developers, ports, businesses and authorities to support early grid connection and consenting activities
- EnBW UK Ltd. established

Partners in UK offshore wind

CfD: Contract for Difference

Sustainable Generation Infrastructure: Offshore Wind Development in United Kingdom (2/2)

Morven

Location	~60 km off the coast from Aberdeen
Generation capacity in GW	~2.9
Area	~860 km²
Water-depth	65 - 75 m
Shareholders	50% EnBW, 50% bp
Commissioning	Depending on grid connection, aiming at 2030
Feed-in tariff	CfD, PPA and/or merchant offtake in 55 years operation time

EnBW/bp successful in the ScotWind round (2022) for an option to lease agreement with Crown Estate Scotland in the Scottish North Sea

- Morven is located approximately 60km from the coast of Aberdeen with an area of approximately 860km² and planned installed capacity of 2.9GW
- Third UK project with bp in 50:50 partnership. Mona, Morgan and Morven organised under single programme approach in order to capture synergies, learning effects and increase efficiencies.
- Various development activities ongoing regarding grid connection, approval, supply chain and engineering
- Actively pursuing cooperation with regional ports, suppliers and authorities to support localisation commitments.
- Please find more information on: EnBW BP

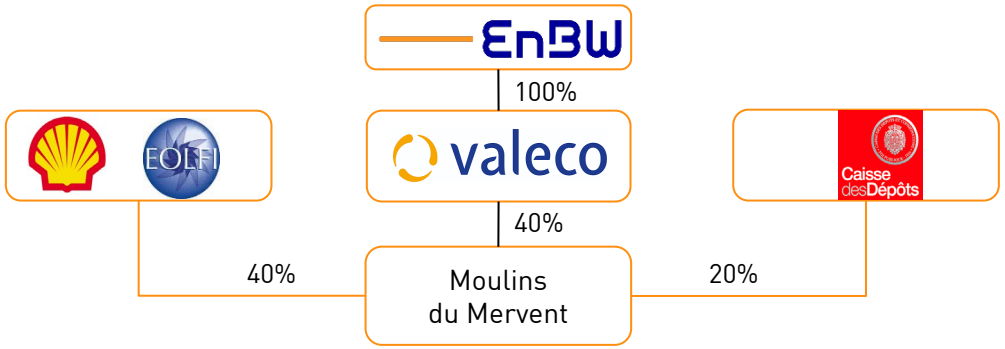
EnBW | bp
Partners in UK offshore wind

CfD: Contract for Difference

Sustainable Generation Infrastructure: Offshore wind in France and Norway - project development activities

France

- First European market enabling commercial-scale floating offshore wind projects with a dedicated regulated feed-in tariff as well as grid access by French independent operator RTE
- Opportunity to participate in three floating auctions (250 MW each):
  One in South Brittany in 2022 and subsequently two in the Mediterranean in 2023
- Pre-qualified joint venture for the South Brittany auction comprises
  40% Shell/Eolfi, 40% EnBW/Valeco and 20% CDC



Norway

- Recently increased offshore wind targets to 30 GW by 2040 with initial tenders announced for one floating offshore wind area in Western Norway and one fixed-bottom area of 1500 MW in Southern Norway (Southern North Sea 2- "SN2")
- First tender expected in 2023 and next rounds from 2025 onwards
- EnBW holds 50% of joint venture Norseman Wind AS, which will participate in the award process for SN2 together with a consortium of local Norwegian suppliers

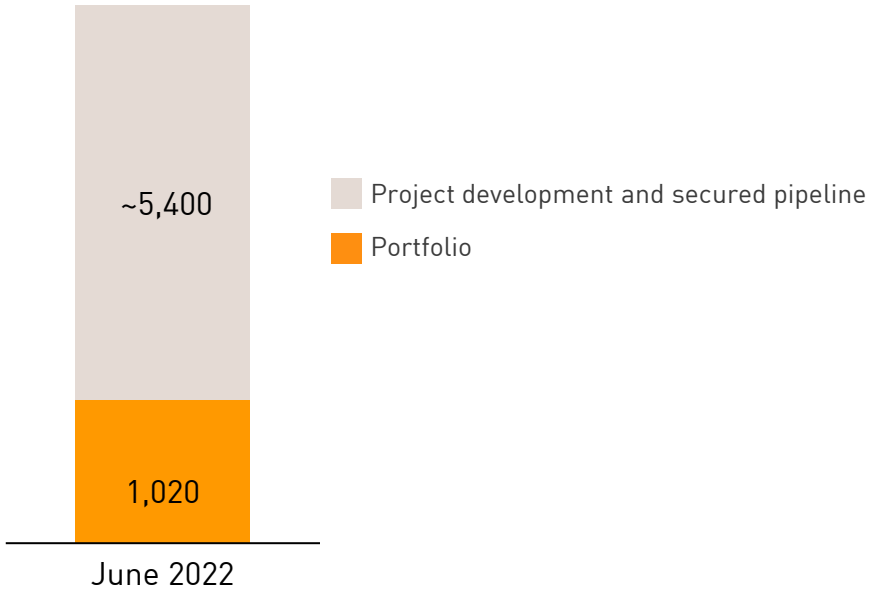
In parallel EnBW is constantly observing other European countries to identify promising offshore wind market opportunities

RTE: Réseau de Transport d'Electricité CDC: Caisse des Dépôts et Consignations OpCo: Operating Company

Sustainable Generation Infrastructure: Onshore wind portfolio and pipeline

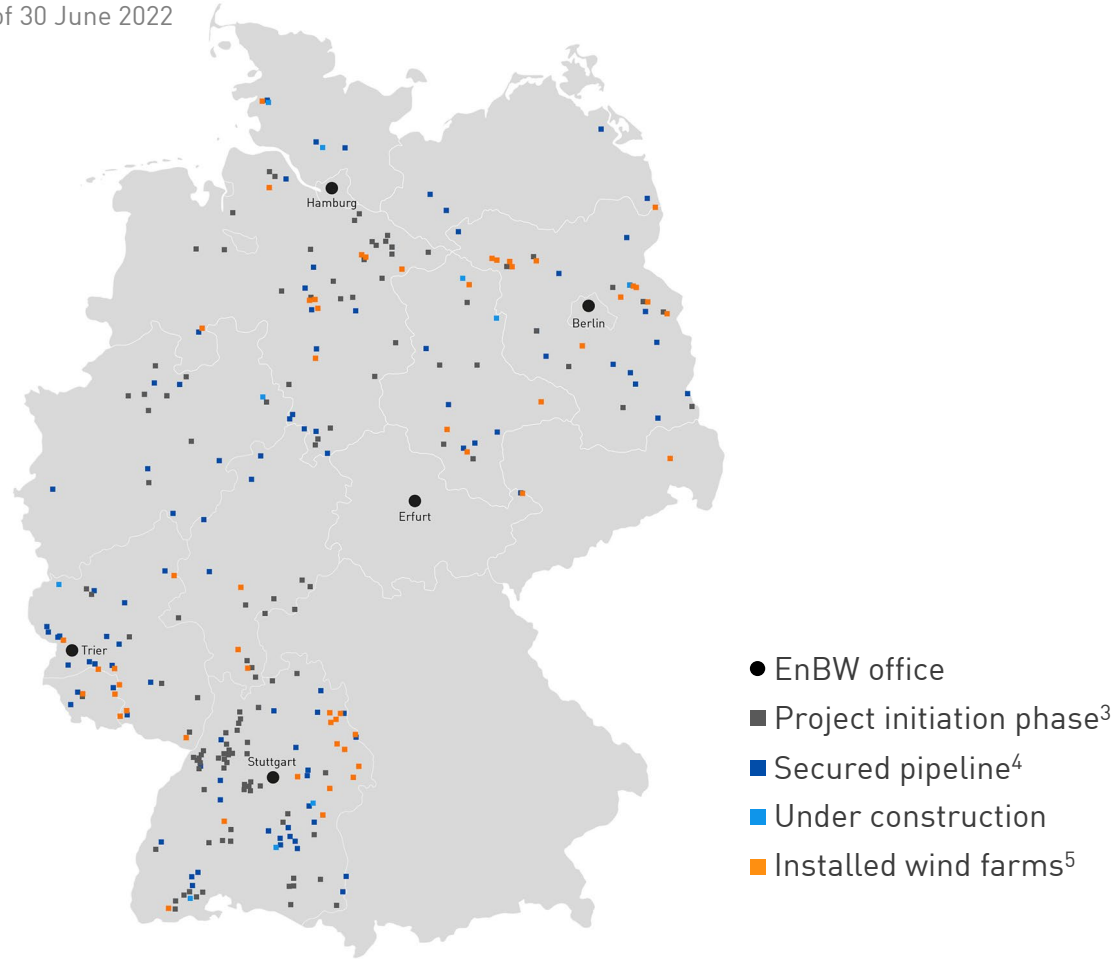
Portfolio and pipeline[1]

in MW



Regional distribution of the 2022 portfolio and pipeline[2]

as of 30 June 2022



[1] Germany and abroad
[2] Germany
[3] Negotiations for land contracts
[4] At least land contracts concluded
[5] Wind parks in operation with EnBW majority shareholding

Sustainable Generation Infrastructure: Onshore wind in Germany - portfolio and installed wind farms (1/7)

Portfolio

Installed total power in MW	724
Number of turbines	316
Number of locations	>60

In operation

	Aalen-Waldhausen	Alt Zeschdorf	Benndorf	Berghülen	Boxberg-Angeltürn	Boxberg-Bobstadt	Boxberg-Oberschüpf	Braunsbach	Breitenbach
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Vestas V126	Vestas V90	NEG Micon NM1000	Enercon E82-E2	Enercon E-115	Enercon E-115	Enercon E-101	Enercon E-115	GE 2.75-120
Total capacity in MW	16.5	6	5	6	12	12	3.1	15	8.25
Number of turbines	5	3	5	3	4	4	1	5	3
Commissioning date	Sep 2017	Dec 2009	Dec 2001	Dec 2012	Dec 2016 Feb 2017	Mar 2018	Jul 2017	Nov 2016 Dec 2016	2x Dec 2017 1x Jan 2018
Feed-in system	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2017[1]

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Onshore wind in Germany - installed wind farms (2/7)

In operation

	Bremervörde	Brettenfeld	Buchholz	Buchholz II	Buchholz III	Bühlertann	Burgholz	Christinendorf III	Dienstweiler
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Nordex S70	Nordex N131	Vestas V90	Enercon E82-E2	Vestas V126	Vestas V126	Vestas V126	Vestas V90	Nordex N117
Total capacity in MW	9	6.6	36	4	13.2	13.2	9.9	6	4.8
Number of turbines	6	2	18	2	4	4	3	3	2
Commissioning date	Nov 2016	Sep 2017	Dec 2009	Dec 2012	Sep 2017	May 2017	Sep 2017	Dec 2011	Mar 2017
Feed-in system	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Onshore wind in Germany - installed wind farms (3/7)

In operation

	Dittelsdorf III	Dünsbach	Düsedau	Eisennach II	Elze	Eppenrod	Fichtenau	Freckenfeld	Friedberg
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Vestas V90	Vestas V126	NEG Micon NM72	Vestas V90	Enercon E53	NEG Micon NW52	Vestas V126	Nordex N131	Vestas V90
Total capacity in MW	6	9.9	7.5	12	3.2	2.7	9.9	19.8	6
Number of turbines	3	3	5	6	4	3	3	6	3
Commissioning date	Jun 2010	Aug 2017	Dec 2002	Dec 2009	Dec 2010	Dec 2001	Sep 2017	Dec 2017	Dec 2011
Feed-in system	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Onshore wind in Germany - installed wind farms (4/7)

In operation


Haupersweiler

	Fürth	Görike	Grevenbroich	Harthäuser Wald	Hasel	Haupersweiler	Hemme	Homburg	Huettersdorf	Ilshofen-Ruppertshofen	Kemberg II
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Nordex N131	Vestas V90	Vestas V90 GS	Enercon E-115	Vestas V126	Nordex N117	Jacobs 48/600	Nordex N117	Nordex N131	Enercon E-101	Vestas V90
Total capacity in MW	16.5	10	2	54	9.9	15	2.4	9.6	6.6	6.1	12
Number of turbines	5	5	1	18	3	6	4	4	2	2	6
Commissioning date	Jun 2018	Dec 2010	Jul 2014	Nov 2015 Dec 2015 Sep 2017	Nov 2017	Dec 2010	Jul 2001	Mar 2017	Oct 2021	Jul 2014 Jun 2015	Jul 2014
Feed-in system	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2017	EEG 2014 and older	EEG 2014 and older

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Onshore wind in Germany - installed wind farms (5/7)

In operation

	Königheim	Königsbronn	Langenburg	Leddin II	Müncheberg	Neuruppin	Niederlinxweiler	Nonnweiler	Ober-Ramstadt
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Enercon E-115	E138	Vestas V126	Vestas V90	Vestas V90	Vestas V90	Nordex N117	Nordex N117	SWT130
Total capacity in MW	6	3.5	33.45	2	8	16	4.8	4.8	8.4
Number of turbines	2	1	10	1	4	8	2	2	2
Commissioning date	Sep 2017	Feb 2021	Dec 2017	Dec 2009	Nov 2006	Feb 2014	Dec 2015	Mar 2017	Dec 2020
Feed-in system	EEG 2014 and older	EEG 2017	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2017

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Onshore wind in Germany - installed wind farms (6/7)

In operation

	Obhausen	Oldendorf	Ostercappeln	Prötzel	Prötzel I	Puschwitz	Rosenberg Süd	Rositz	Rot am See	Schnittlingen
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Enercon E66	Enercon E53	Nordex S70	Vestas V80	Enercon E115	Vestas V80	Nordex N131	Nordex S70	Vestas V126	DeWind D6
Total capacity in MW	36	12	18	18	9	20	6.6	13.5	13.2	1
Number of turbines	20	15	12	9	3	10	2	9	4	1
Commissioning date	2000-2002	Dec 2010	Nov 2016	2006 2008	May 2020	Dec 2017	Sep 2017	Nov 2016	Sep 2016 Jun 2019	Dec 2002
Feed-in system	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2017	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Onshore wind in Germany - installed wind farms (7/7)

In operation

	Schopfloch	Schulenburg II	Schwienau II	Schwienau III	Söllenthin	Tantow	Webenheim	Willich	Winterbach	Zernitz
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Enercon E82	Vestas V90	Vestas V80	V150	Vestas V90	Vestas V136	Repower MM92	Vestas V80	Nordex N131	Enercon E66
Total capacity in MW	2	6	10	12.6	6	10.8	6.15	4	9.9	14.4
Number of turbines	1	3	5	3	3	3	3	2	3	8
Commissioning date	Dec 2012	Dec 2010	Dec 2009	Jan 2021	Jul 2014	Jan 2022	Dec 2016	Nov 2004	Dec 2017	Nov 2016
Feed-in system	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2017	EEG 2014 and older	EEG 2017	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older	EEG 2014 and older

As of 30 June 2022

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Onshore wind in Germany – wind farms under construction

Under construction

	Düsedau II	Häusern	Hohenstadt	Lentföhrden	Neuendorf RLP	Prötzel II	Steinheim	Veringenstadt B	Wiemerstedt	Wulkow-Trebnitz
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	V150	V126	N149/N131	N133	V150	E-138	V150	E-138	N149	V150
Total capacity in MW	22.4	6.6	12.0	24	8.4	37.8	21	4.2	11.4	21
Number of turbines	4	2	3	5	2	9	5	1	2	5
Operation date	Mar 2023	Apr 2023	Mar 2023	Sep 2023	Apr 2023	Dec 2023	Mar 2023	Mar 2023	Mar 2024	Nov 2023
Feed-in system	EEG 2021	EEG 2021	EEG 2021	EEG 2021	EEG 2021	EEG 2021	EEG 2021	EEG 2021	EEG 2021	EEG 2021

Sustainable Generation Infrastructure: Onshore wind in France - portfolio and installed wind farms (1/2)

Portfolio

Installed total power in MW	172
Number of turbines	80
Number of locations	13

In operation

	Audincthun	Belleuse	Bernagues	Cap Espigne	Cap Redounde	Champs Perdus
Location	France, Pas-de-Calais (62)	France, Somme (80)	France, Herault (34)	France, Herault (34)	France, Tarn (81)	France, Somme (80)
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Enercon E92	Vestas V100	Enercon E70	Enercon E70	Alstom Eco 62	Alstom Eco 110
Total capacity in MW	14.1	11	16.1	16.1	3.9	12
Number of turbines	6	5	7	7	3	4
Commissioning date	Jul 2019	Jan 2020	Dec 2016	Jan 2017	Aug 2006	Oct 2014
Remuneration	FiP	FiP	FiT	FiT	FiT	FiT

As of 30 June 2022
FiP: Feed-in-Premium (Contract for Difference) post Decree of 13 December 2016

FiT: Feed-in-Tarif prior to Decree of 13 December 2016
AO CRE 1: First wind tender (December 2017 - April 2021)

Sustainable Generation Infrastructure: Onshore wind in France - installed wind farms (2/2)

In operation

	Gramentes	La Bessiere	Puech de Cambert	Puech de l'Homme	Saint Félix	Sommereux	St. Jean-Lachalm II
Location	France, Aude (11)	France, Tarn (81)	France, Tarn (81)	France, Tarn (81)	France, Charente-Maritime (17)	France, Oise (60)	France, Haute-Loire (43)
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Enercon E82	Enercon E70	Alstom Eco 62	Enercon E70	Vestas V100	Vestas V100	Enercon E70
Total capacity in MW	13.8	13.8	11.7	16.1	19.8	17.6	6
Number of turbines	6	6	9	7	9	8	3
Commissioning date	Jul 2020	Jan 2012	Jun 2007	Nov 2011	Mar 2020	Oct 2021	Dec 2008
Remuneration	FiP	FiT	FiT	FiT	FiP / AO CRE1	AO CRE 1	FiT

As of 30 June 2022
FiP: Feed-in-Premium (Contract for Difference) post Decree of 13 December 2016

FiT: Feed-in-Tarif prior to Decree of 13 December 2016
AO CRE 1: First wind tender (December 2017 – April 2021)

Sustainable Generation Infrastructure: Onshore wind in Sweden – portfolio and installed wind farms

Portfolio

Installed total power in MW	120.1
Number of turbines	55
Number of locations	8

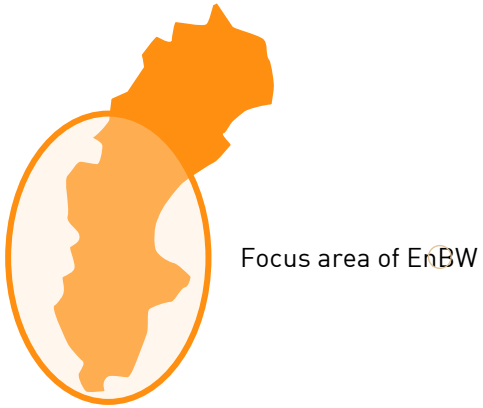
In operation

	Bliekevare	Brahehus	Granberget	Hedbodberget	Kulltorp	Råmmare-hemmet	Röbergsfjället	Säliträdberget
Country	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden
Technology	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore	Onshore
Type of turbine	Vestas V90	Siemens SWT101	Vestas V90	Vestas V90	Nordex N90	Enercon E138	Vestas V90	Vestas V90
Total capacity in MW	32	11.5	10	12	10	12.6	16	16
Number of turbines	16	5	5	6	4	3	8	8
Commissioning date	May 2009	Feb 2011	Mar 2011	Feb 2009	Sep 2009	Jul 2021	Dec 2007	Feb 2009
Feed-in system	Market based (Elcertificates)	Market based (Elcertificates)	Market based (Elcertificates)	Market based (Elcertificates)	Market based (Elcertificates)	Market based (Elcertificates)	Market based (Elcertificates)	Market based (Elcertificates)

Sustainable Generation Infrastructure: Onshore wind in Sweden – development

Development

Secured projects in development phase with focus in the south of Sweden



Total power in MW	approx. 371
Number of turbines	approx. 60
Number of locations	8

Sustainable Generation Infrastructure: Onshore wind in Czech Republic - portfolio

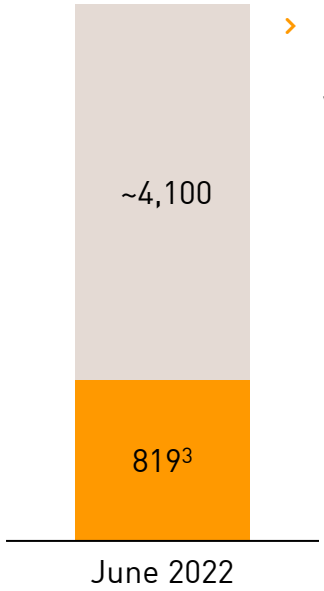
Portfolio

	Horní Částkov
Country	Czech Republic
Technology	Onshore
Type of turbine	VESTAS V90
Total capacity in MW	4
Number of turbines	2
Number of locations	1
Commissioning date	Jul 2009
Feed-in system	Green Bonus

Sustainable Generation Infrastructure: Photovoltaics - portfolio and pipeline

Portfolio and pipeline[1]

in MWp



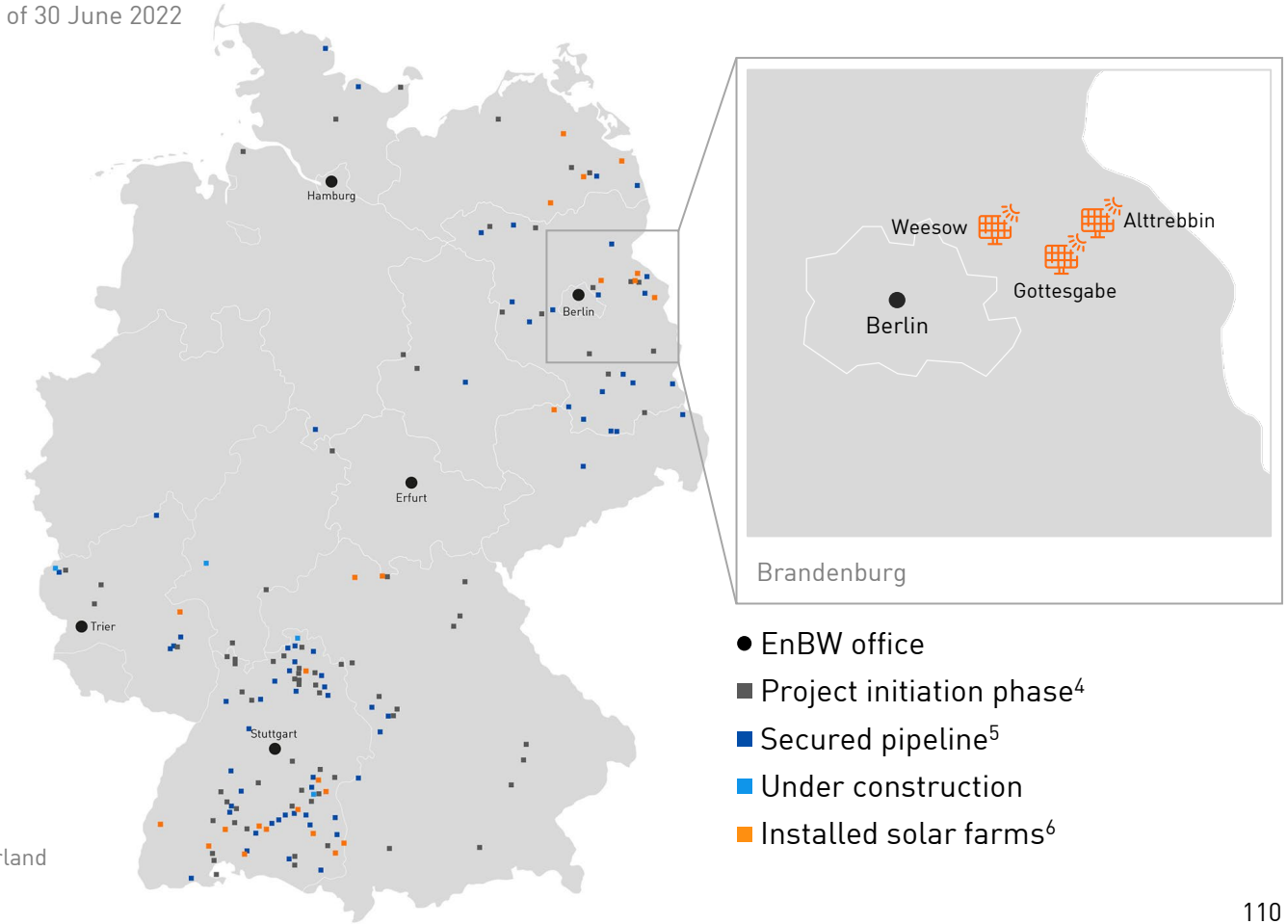
- Besides projects within the EEG system, EnBW focuses on projects on a larger scale without feed-in tariff

Project development and secured pipeline

Portfolio[3]

Regional distribution of the 2022 portfolio and pipeline[2]

as of 30 June 2022



[1] Germany and abroad
[2] Germany
[3] Portfolio consists of 681 MWp Germany, 108 MWp France, 26 MWp Czech Republic, 4 MWp Switzerland
[4] Negotiations for land contracts
[5] At least land contracts concluded
[6] PV parks in operation with EnBW majority shareholding

Sustainable Generation Infrastructure: Photovoltaics in Germany – portfolio and installed solar parks (1/3)

Portfolio

Installed total power in MWp[1]	681
Number of solar parks[1]	>100

In operation

	Aitrach	Alttrebbin	Berghülen	Birkenfeld	Eggesin	Gottesgabe	Ingoldingen	Inzigkofen	Krautheim	Leibertingen I
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Solar	Solar	Solar	Solar	Solar	Solar	Solar	Solar	Solar	Solar
Total capacity in MWp	1.5	151	2.7	5.8	10	153.1	4.3	7.5	0.5	2.1
Commissioning date	Dec 2012	Mar 2022	Jan 2017	Nov 2019	Dec 2017	Mar 2022	Aug 2018	Oct 2019	May 2011	Dec 2009
Feed-in system	EEG 2014 and older	Without EEG funding	EEG 2014 and older	EEG 2017	EEG 2017	Without EEG funding	EEG 2017	EEG 2017	EEG 2014 and older	EEG 2014 and older

As of 30 June 2022

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

[1] The number of solar parks shown neither adds up to > 100 nor to 681 MWp. Small solar installations e.g. at city halls and schools as well as solar parks of subsidiaries are not included.

Sustainable Generation Infrastructure: Photovoltaics in Germany – installed solar parks (2/3)

In operation

	Leibertingen II	Leutkirch-Haid 1	Leutkirch-Haid 2	Leutkirch 2b	Lindendorf	Löffingen	March-Neuershausen	Maßbach	Mühlhausen-Ehingen
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Solar	Solar	Solar	Solar	Solar	Solar	Solar	Solar	Solar
Total capacity in MWp	5	4.9	2.9	0.8	6.9	2.7	0.9	28.1	8.9
Commissioning date	Aug 2019	Dec 2012	Jan 2014	Nov 2018	Oct 2019	Aug 2018	Dec 2010	Oct 2021	Feb 2022
Feed-in system	EEG 2017	EEG 2014 and older	EEG 2014 and older	EEG 2017 (fixed remuneration)	EEG 2017	EEG 2017	EEG 2014 and older	EEG 2017 (partly)	EEG 2017

Sustainable Generation Infrastructure: Photovoltaics in Germany – installed solar parks (3/3)

In operation

	Müssentin	Riedlingen-Zwiefaltendorf	Sophienhof I	Torgau	Tunningen	Ulm-Eggingen	Ulrichshof	Weesow-Willmersdorf	Welgesheim
Country	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany	Germany
Technology	Solar	Solar	Solar	Solar	Solar	Solar	Solar	Solar	Solar
Total capacity in MWp	9.1	5.3	8.8	4.7	4.5	6.5	6.6	187	3.2
Commissioning date	Aug 2018	Jun 2017	Oct 2020	Aug 2018	May 2017	Jun 2010	Dec 2020	Dec 2020	Oct 2020
Feed-in system	EEG 2017	EEG 2014 and older	EEG 2017	EEG 2017	EEG 2014 and older	EEG 2014 and older	EEG 2017	Without EEG funding	EEG 2017

As of 30 June 2022

EEG: Erneuerbare Energien-Gesetz (Renewable Energy Act)

Sustainable Generation Infrastructure: Photovoltaics in Germany – solar parks under construction

Under construction

	Allmendingen	Bad Camberg	Brandscheid	Emmingen-Liptingen	Külsheim
Country	Germany	Germany	Germany	Germany	Germany
Technology	Solar	Solar	Solar	Solar	Solar
Total capacity in MWp	12.99	4	7.7	17	28
Operation date	Mar 2023	Oct 2022	Dec 2022	Feb 2023	Dec 2023
Feed-in system	EEG 2021	EEG 2021	EEG 2021	EEG 2021	Without EEG funding

Sustainable Generation Infrastructure: Photovoltaics in France - installed solar parks (1/3)

Portfolio

Installed total power in MWp	108.2
Number of solar parks	17

In operation

	Beaucaire	**Châteauvert I**	**Châteauvert II**	**Cordesse**
Location	France, Gard (30)	France, Var (83)	France, Var (83)	France, Var (83)
Technology	Rooftop	Ground mounted with trackers	Ground mounted	Ground mounted
Total capacity in MWp	3.7	12	11	5
Commissioning	Sep 2019	Oct 2021	Oct 2021	Oct 2021
Remuneration	AO CRE4	AO CRE1	AO CRE 4	AO CRE 4

As of 30 June 2022

AO CRE 1: First solar tender (September 2011)
AO CRE 4: Fourth ground solar tender (February 2017 – July 2021)

Sustainable Generation Infrastructure: Photovoltaics in France - installed solar parks (2/3)

In operation

	Exideuil	Isle-sur-la-Sorge	Le Val	Megasol	Montégut	Saint Laurent Solar
Location	France, Charente (16)	France, Vaucluse (84)	France, Var (83)	France, Bouches-du-Rhône (13)	France, Gers (32)	France, Gard (30)
Technology	Ground mounted	3 x Rooftop 1 x Sunshade	Ground mounted	Ground mounted	Ground mounted	Rooftop
Total capacity in MWp	9.7	2	7.2	6.2	5	4.8
Commissioning	Dec 2020	Nov 2019	Aug 2015	Aug 2016	Nov 2020	Apr 2012
Remuneration	AO CRE4	AO CRE 4	AO CRE 1	AO CRE 1	AO CRE 4	FiT

As of 30 June 2022
AO CRE 1: First solar tender (September 2011)

FiT: Feed-In tarifs prior to September 2011
AO CRE 4: Fourth ground solar tender (February 2017 – July 2021)

Sustainable Generation Infrastructure: Photovoltaics in France - installed solar parks (3/3)

In operation

	Saint Mamet	Severac	St Quentin la Tour	Sycala	TEA Fleury Ouest	Terres Rouges I	Terres Rouges II
Location	France, Gard (30)	France, Aveyron (12)	France, Ariège (09)	France, Lot (46)	France, Essone (91)	France, Hérault (34)	France, Hérault (34)
Technology	Rooftop	Ground mounted	Ground mounted	Ground mounted	Sunshade	Ground mounted	Ground mounted
Total capacity in MWp	2.8	5	3.1	8	10	7.1	5.6
Commissioning	Jun 2016	Sep 2020	May 2020	May 2011	Sep 2020	Jan 2015	Jan 2017
Remuneration	AO CRE 2	AO CRE 4	AO CRE 4	FiT	AO CRE 4	FiT	AO CRE 2

As of 30 June 2022
AO CRE 2: Second solar tender (March 2013)

FiT: Feed-In tarifs prior to September 2011
AO CRE 4: Fourth ground solar tender (February 2017 – July 2021)

Sustainable Generation Infrastructure: Photovoltaics in Czech Republic - portfolio and installed solar parks

Portfolio

Installed total power in MW	26
Number of solar parks	14

In operation

	FVE Dačice	FVE Hořovice	FVE Hrouda	FVE Jinonice	FVE Kondrac	FVE Lhotka	FVE Mikulov
Country	Czech Republic	Czech Republic	Czech Republic	Czech Republic	Czech Republic	Czech Republic	Czech Republic
Total capacity in MWp	4.848	1.087	0.028	0.173	1.109	0.060	0.941
Operation date	2009/2010	2010	2010	2010	2009	2010	2009

	FVE Ořechovská	FVE Pozorka	FVE Pozořice	FVE Pražačka (I-III)	FVE Rajhradská	FVE Sever	FVE Světlík
Country	Czech Republic	Czech Republic	Czech Republic	Czech Republic	Czech Republic	Czech Republic	Czech Republic
Total capacity in MWp	3.168	3.998	4.596	0.138	3.168	0.204	2.154
Operation date	2009	2010	2010	2010	2009	2010	2009/2010

Sustainable Generation Infrastructure: Hydropower plants

Run-of-river
in MW

Rhine power plants	527
Neckar, Donau, Murg, Nagold, Enz, Glatt, Jagst, Kocher, Argen	151
Iller power plants	51
EnAlpin	278


Iffezheim

Pumped storage
in MW

Schluchsee power plants	870
Vorarlberger Illwerke	1,059
Glems	90
Rudolf-Fettweis-Werk Forbach	43


Forbach

As of 31 December 2021

Sustainable Generation Infrastructure: Thermal power plants[1]

Conventional power plants
in MW

	Hardcoal	Browncoal	Gas	Oil	Waste	
Karlsruhe	1,351					**1,351**
Düsseldorf			829	86	27	**942**
Lippendorf		875				**875**
Heilbronn	778					**778**
Altbach/Deizisau	336		253			**589**
Mannheim	426					**426**
Rostock	259					**259**
Walsum	250					**250**
Stuttgart	55		29	70	27	**181**
Walheim				136		**136**
Total	**3,467**	**875**	**1,166**	**292**	**54**	**5,854**

Nuclear
in MW

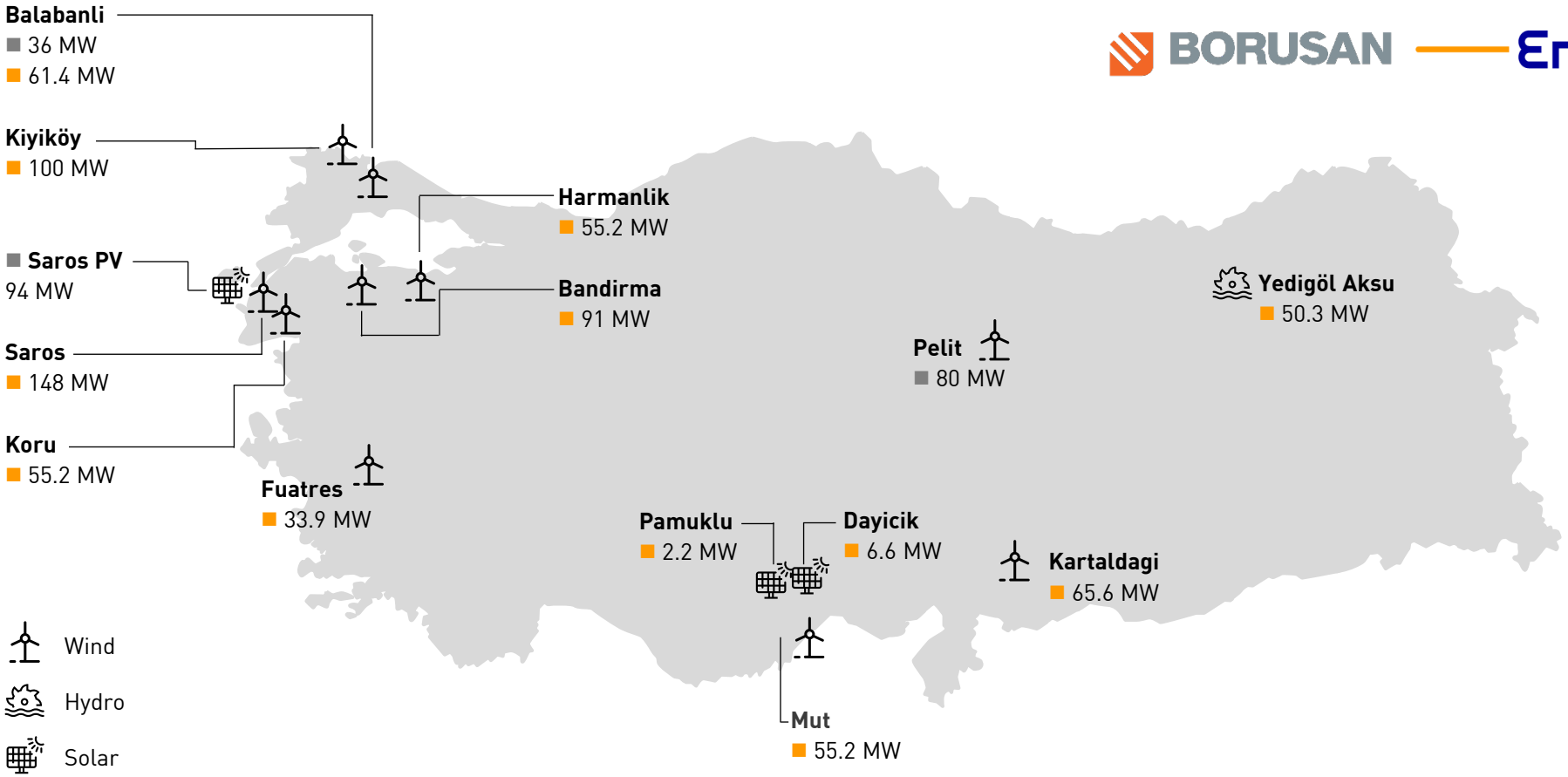
Neckarwestheim	1,096

Grid reserve power plants[2]
in MW

Marbach	426
Heilbronn	250
Walheim	244
Karlsruhe	353
Altbach	433
Total	**1,706**

[1] Major power plants in Germany, as of 31 December 2021
[2] Continued temporary operation of 9 power plant units due to system relevance: HLB 5/6 , MAR DT III, MAR GT II, MAR GT III, WAL1/2, RDK4s and ALT HKW1

Sustainable Generation Infrastructure: Activities in Türkiye - Borusan EnBW Enerji portfolio and projects[1]



BORUSAN — EnBW

Borusan EnBW Enerji, based in Istanbul, was founded in summer 2009 as a joint venture between EnBW and the Turkish company Borusan.

The aim of the joint venture is to build up generation capacities in the field of renewable energies in Türkiye.

Operating	**725** MW
Development	**210** MW

[1] Generation capacity not consolidated, as of 31 December 2021

Sustainable Generation Infrastructure: Fuel switch with H_2 readiness

Planning rational

- Fuel switch keeps locations economically viable and contributes to security of supply
- Driven by heat energy transition, priority on locations with integrated district heat provision
- Implementing fuel switch significantly cuts carbon emissions
- Natural gas as interim technology, conversion to biogenic gases such as green hydrogen already provided for

- Fuel switch top priority
- Currently low priority for fuel switch or coal-fired plant not on the market
- Fuel switch already implemented

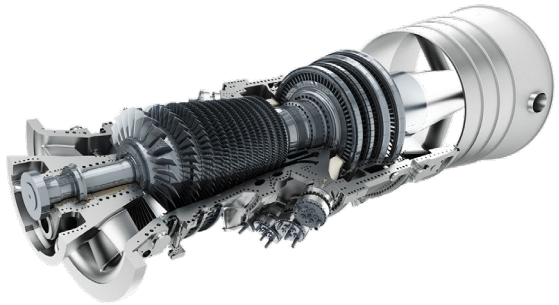
Heilbronn (CCGT plant, 675 MW_{el})
- FID in March 2022
- Commissioning in 2026

Altbach (CCGT plant, 665 MW_{el})
- FID in March 2022
- Commissioning in 2026

Stuttgart-Münster (GT plant, 124 MW_{el})
- FID in March 2022
- Commissioning in 2025

H_2 strategy

- Deployment of gas turbines that allow 10% - 25% H_2 blend from the outset
- Conversion to 100% H_2 combustion already taken into account in project design and business plan

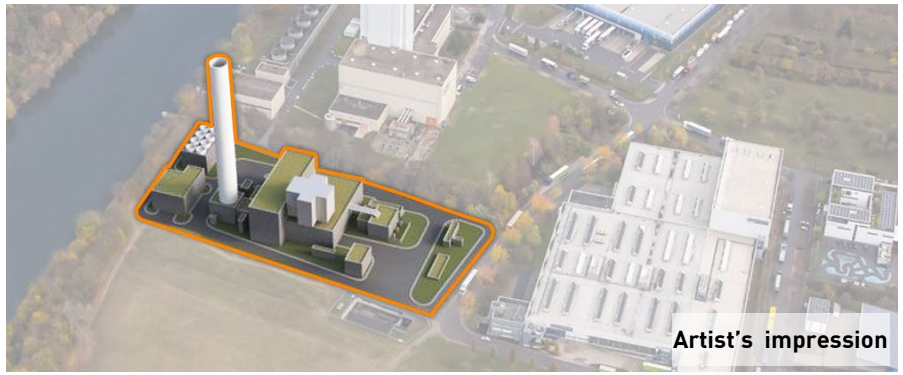


FID: Final Investment Decision

Sustainable Generation Infrastructure: New-built gas turbine power plant for grid stability purposes in South Germany

Additional capacity needed for grid stability in South Germany

- In 2017, the federal regulatory agency approved 1.2 GW additional power generation capacity in southern Germany to maintain grid stability in the context of the energy transition.
- August 2019: Award of contract for design and installation of 300 MW gas turbine power plant at existing EnBW site Marbach a.N..



Artist's impression

Marbach a.N.

Timeline and next steps

- Construction works on site started mid 2020
- Delivery of the rotating equipment mid 2021
- Commercial operation originally planned for October 2022, due to pandemic consequences delay of several months expected

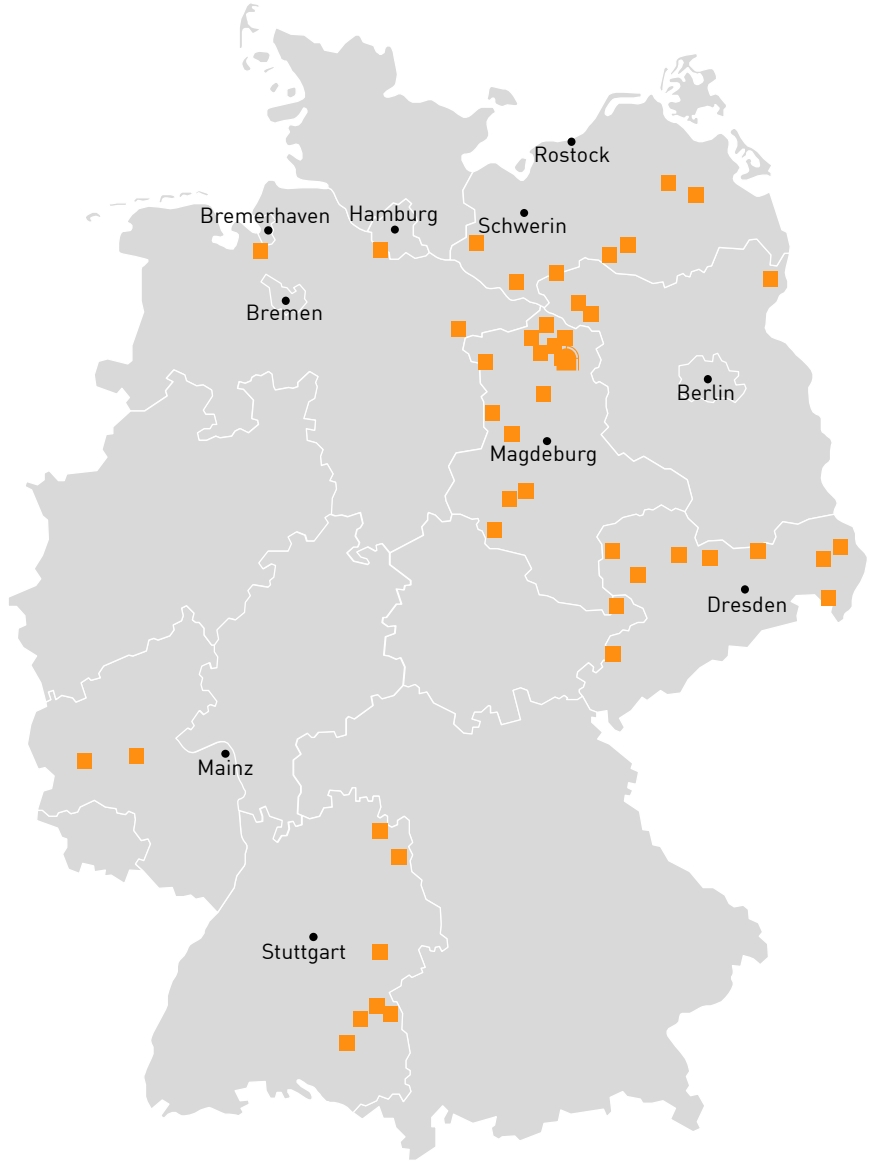
Sustainable Generation Infrastructure: Expand biogas production

Sustainable production of biogas, biomethane and Bio-LNG

- Strong growth in biogas plant portfolio from 10 MW rated thermal input in 2017 to 198 MW in 2021; further growth planned
- Options for site development and reuse safeguard plant asset value when subsidies expire, increasingly with upgrading of biogas to biomethane and future perspective to use the CO_2 of the biogas installation in industry
- EnBW to become market leader in biogas production in Germany

BALANCE Erneuerbare Energien — EnBW — Erdgas Südwest

- Biogas and biomethane plant operators
- Investment in and further development of plant design proposals (BALANCE Erneuerbare Energien)
- Conventional biogas to electricity generation, such as combined heat and power
- Sale of proprietary biomethane quantities
- New markets: JV to produce bio-LNG near Berlin and Fulda by liquefying biomethane from the gas grid. Target market: Fuel for transport sector



Source: BALANCE Erneuerbare Energien GmbH, EnBW AG

Sustainable Generation Infrastructure: Trading – adapting to energy market changes

Diversified activities and managing market risks

- Buying and selling electricity and gas on wholesale markets from intraday to 10 years+
  - Fuel procurement (including emissions) and logistics
  - Dispatching of EnBW assets
- Origination activities for electricity and gas to substitute conventional generation assets by contracts
  - LNG trading activities
  - Renewables PPA business (e.g. intermediary for production and demand)
- Active in various markets
  - Targeted internationalisation: Central Western Europe (e.g. PPA with Blue Elephant Energy in Spain), Nordics and beyond

Smart and digital

- Enhancement of automated trading and improved forecasting

LNG: Liquefied natural gas

PPA: Power purchase agreement

Sustainable Generation Infrastructure: Supporting energy transition and achieving carbon neutrality

Partner for project developers and investors in managing market risks

- Tailored power purchase agreements for merchant renewables assets

Offering carbon free electricity to corporates to reach their sustainability targets

- Corporate PPA and Power Sales Agreements based on renewable projects enable companies (large, medium or small) to realise their sustainability strategies and decarbonisation efforts

Direct marketing

- Marketing of renewable energy plants in the market premium model and route to market services for assets after the support period (post EEG PPA)

Management of merchant risks of own renewables capacity

- EnBW is considering PPAs for PV (Weesow Willmersdorf, Alttrebbin/Gottesgabe) and offshore wind projects (He Dreiht)
- Industry leading companies as offtakers: Covestro, Fraport
  - Covestro: 63 MW for Weesow-Wilmersdorf for 15 years from 2022
  - Fraport: 85 MW from He Dreiht for 15 years from 2026

Sales and Purchase Agreements (SPAs) between Venture Global and EnBW

- June 2022
  - Two long-term Sales and Purchase Agreements (SPAs) starting in 2026 for 20 years
  - 0.75 MTPA from Plaquemines LNG
  - 0.75 MTPA from CP2 LNG
- October 2022
  - Increase of quantity of by an additional 0.5 MTPA from Plaquemines and CP2 LNG

EnBW Group: Electricity and gas sales volumes

in bn kWh

	2021	2020[1]	Change in %
Electricity sales volumes (without System Critical Infrastructure)			
Retail and commercial customers (B2C)	14.4	14.3	0.7
Business and industrial customers (B2B)	23.5	20.0	17.5
Trade	69.6	73.0	-4.7
Total	107.5	107.3	0.2

	2021	2020[1]	Change in %
Gas sales volumes (without System Critical Infrastructure)			
Retail and commercial customers (B2C)	18.3	17.1	7.0
Business and industrial customers (B2B)	246.6	199.7	23.5
Trade	230.1	224.7	2.4
Total	495.0	441.5	12.1

[1] The figures for the previous year have been restated

Overview

1. EnBW at a glance
2. War in Ukraine – impact on EnBW
3. Market environment
4. Sustainable corporate strategy
5. Business segments
6. Key financials and non-financials
7. Capital markets
8. Corporate governance
9. Service

- Multi-year overview
- Fiscal year 2021
- First six months 2022
- Financial and non-financial KPIs and targets

Multi-year overview (1/2)

EnBW Group		2021	2020	2019	2018	2017
External revenue	€ m	32,148	19,694	19,436	20,815	21,974
Adjusted EBITDA	€ m	2,959	2,781	2,433	2,158	2,113
Adjusted Group net profit/loss[1]	€ m	1,203	683	787	438	793
Balance sheet						
Equity	€ m	8,499	7,769	7,445	6,273	5,863
Net debt	€ m	8,786	14,407	12,852	9,587	8,418
Net financial debt	€ m	2,901	7,232	6,022	3,738	2,918
Cash flow						
Retained cash flow	€ m	1,784	1,639	1,241	999	3,050
Debt repayment potential[2,3]	%	20.3	11.4	-	-	-
Internal financing capability[3]	%	-	102.9	90.0	92.2	111.9
Profitability						
ROCE	%	7.0	6.3	5.2	6.5	7.3
Value added	€ m	456	253	0	32	152
Earnings per share[1]	€	1.34	2.20	2.71	1.23	7.58
Dividend per share/dividend payout ratio[4]	€	1.10/36	1.00/40	0.70/40	0.65/40	0.50/17

[1] In relation to the profit/loss attributable to the shareholders of EnBW AG
[2] For the calculation of the adjusted net debt and adjusted debt repayment potential, please refer to the section "The EnBW Group" EnBW Integrated Annual Report 2021, page 46
[3] The debt repayment potential replaces the internal financing capacity as a key performance indicator in 2021
[4] Adjusted for the valuation effects of IFRS 9 in 2021 and 2019

Multi-year overview (2/2)

EnBW Group		2021	2020	2019	2018	2017
Energy sales						
Electricity	bn kWh	108	107	153	137	122
Gas	bn kWh	495	442	362	329	250
Smart Infrastructure for Customers						
External revenue	€ m	13,998	9,965	9,350	7,348	7,354
Adjusted EBITDA	€ m	323	335	326	268	330
System Critical Infrastructure						
External revenue	€ m	4,407	3,657	3,460	3,215	7,472
Adjusted EBITDA	€ m	1,289	1,347	1,355	1,177	1,046
Sustainable Generation Infrastructure						
External revenue	€ m	13,735	6,064	6,623	10,246	7,139
Adjusted EBITDA	€ m	1,535	1,278	925	729	709

Fiscal year 2021: Financial key performance figures

Financial and strategic performance indicators

		2021	2020	Change in %
TOP Adjusted EBITDA	€ m	2,959.3	2,781.2	6.4
TOP Share of adjusted EBITDA accounted for by Smart Infrastructure for Customers	€ m	344.0	335.0	-3.6
	%	11.6	12.0	-
TOP Share of adjusted EBITDA accounted for by System Critical Infrastructure	€ m	1,263.0	1,346.6	-4.3
	%	42.7	48.4	-
TOP Share of adjusted EBITDA accounted for by Sustainable Generation Infrastructure	€ m	1,539.7	1,277.8	20.1
	%	52.0	45.9	-
Share of adjusted EBITDA accounted for by Other/Consolidation	€ m	-187.4	-178.2	-5.2
	%	-6.3	-6.3	-
Adjusted Group net profit[1]	€ m	1,203.2	682.8	76.2
Group net profit[1]	€ m	363.2	596.1	-39.1
Earnings per share from Group net profit[1]	€	1.34	2.20	-39.1
TOP Debt repayment potential	%	20.3	11.4	-
TOP Return On Capital Employed (ROCE)	%	7.0	6.3	-

[1] In relation to the profit/loss attributable to the shareholders of EnBW AG.

Fiscal year 2021: Non-financial key performance figures

Customers and society goal dimension

	2021	2020	Change in %
TOP Reputation Index	55	56	-1.8
TOP EnBW/Yello Customer Satisfaction Index	127 / 159	132 / 159	-3.8 / -
TOP SAIDI (electricity) in min./year	16	15	6.7

Environment goal dimension

TOP Installed output of renewable energies in GW and the share of the generation capacity accounted for by renewable energies in %	5.1 / 40.1	4.9 / 39.0	4.1 / -
TOP CO_2 intensity in g/kWh[1,2]	478	342	39.8

Employees goal dimension

TOP People Engagement Index (PEI)[3]	82	83	-1.2
TOP LTIF for companies controlled by the group[4,5]/LTIF overall[4]	2.3 / 3.3	2.1 / 3.6	9.5 / -8.3

Employees of the EnBW Group[6]

	31.12.2021	31.12.2020	Change in %
Employees	26,064	24,655	5.7
Employee equivalents[7]	24,519	23,078	6.2

LTIF: Lost Time Injury Frequency SAIDI: System Average Interruption Duration Index

[1] The figures for the previous year have been restated.
[2] The calculation method for the key performance indicator CO_2 intensity will be restricted in future to include only factors that can be controlled by the company.
[3] Variations in the group of consolidated companies. Companies that were fully consolidated for the first time in the fourth quarter of 2021 were not included in the employee surveys for the PEI.
[4] Variations in the group of consolidated companies. Companies that were fully consolidated for the first time during the 2021 financial year were not included in the calculations for the LTIF performance indicators.
[5] Except for companies in the area of waste management.
[6] Number of employees excluding apprentices/trainees and inactive employees.
[7] Converted into full-time equivalents.

Fiscal year 2021: ROCE and value added

Group level

- ROCE at 7.0% compared to 6.3% in the prior year
- Increase in average capital employed

in € m		Smart Infrastructure for Customers		System Critical Infrastructure		Sustainable Generation Infrastructure		Other/ Consolidation		Total	
Value added to the EnBW Group by segment[1]		**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Adjusted EBIT incl. the adjusted investment result[2]	€ m	174.2	186.5	719.9	824.9	867.6	665.7	-233.6	-226.7	1,528.1	1,450.4
Average capital employed	€ m	1,653.7	1,543.8	10,625.5	10,435.1	8,917.6	10,537.5	514.7	509.2	21,711.5	23,025.6
Return On Capital Employed (ROCE)	%	10.5	12.1	6.8	7.9	9.7	6.3	-	-	7.0	6.3
Weighted Average Cost of Capital (WACC)	%	7.6	7.4	4.0	4.1	5.4	5.4	-	-	4.9	5.2
Value added	€ m	48.0	72.6	297.5	396.5	383.5	94.8	-	-	455.9	253.3

[1] The figures for the previous year have been restated
[2] 2021: Amended adjusted investment result of €88.4 m, adjusted for taxes (investment result/0.706 - investment result; with 0.706 = 1 - tax rate 29.4%).
2020: Amended adjusted investment result of €41.6 m, adjusted for taxes (investment result/0.706 - investment result; with 0.706 = 1 - tax rate 29.4%).

Fiscal year 2021: Segment reporting[1]

in € m	Smart Infrastructure for Customers		System Critical Infrastructure		Sustainable Generation Infrastructure		Other/ Consolidation		Total	
Revenue	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
External revenue	13,998.2	9,964.9	4,407.2	3,657.5	13,734.8	6,063.8	7.7	8.1	32,147.9	19,694.3
Internal revenue	1,127.1	757.2	1,471.2	1,353.1	5,498.6	3,131.6	-8,096.9	-5,242.0	-	-
Total revenue	15,125.3	10,722.1	5,878.4	5,010.6	19,233.4	9,195.4	-8,089.2	-5,233.9	32,147.9	19,694.3
Earnings indicators										
Adjusted EBITDA	323.1	335.0	1,288.5	1,346.6	1,535.1	1,277.8	-187.4	-178.2	2,959.3	2,781.2
EBITDA	254.7	206.1	1,177.3	1,311.0	1,370.6	1,162.0	0.9	-15.8	2,803.5	2,663.3
Scheduled amortization and depreciation	-161.6	-151.0	-601.7	-553.4	-741.0	-641.2	-52.1	-44.2	-1,556.4	-1,389.7
Impairment losses	-2.6	-1.7	-3.4	-89.0	-1,082.3	-80.2	-	-	-1,088.3	-170.9
Net profit/loss from entities accounted for using the equity method	7.5	2.8	15.9	14.4	35.6	78.2	-	-	59.0	95.4
Significant non-cash-relevant items	-94.2	-61.4	-27.3	-2.1	25.9	10.7	-20.8	-21.4	-116.4	-74.2

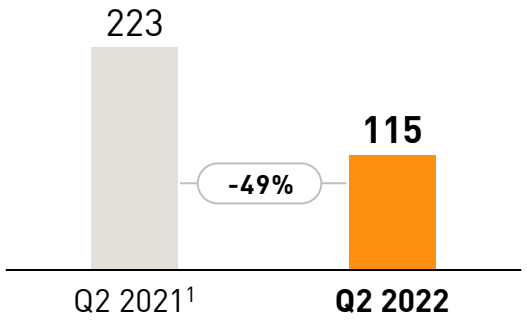
[1] The figures for the previous year have been restated

First six months 2022: EnBW's integrated business model proves resilience in volatile markets

Smart Infrastructure for Customers

Adjusted EBITDA

in € m



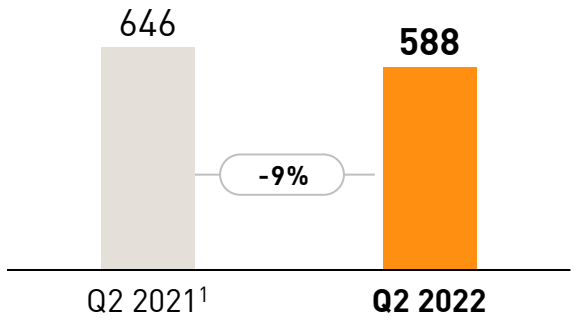
Electricity and gas sales

- Increased procurement costs mainly due to sharp increase in commodity prices caused by reduced gas supply from Russia

System Critical Infrastructure

Adjusted EBITDA

in € m



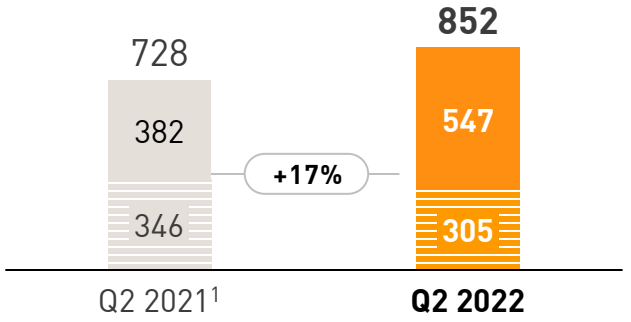
Transmission and distribution grids

- Higher expenses caused by higher operating hours and prices than expected for grid reserve power plants and redispatch to maintain security of supply

Sustainable Generation Infrastructure

Adjusted EBITDA

in € m



Renewable Energies

- Marketing above the fixed EEG tariff
- Expansion of solar parks
- Better wind yields

Thermal Generation and Trading

- Replacement procurement costs due to reduced gas supply

[1] Previous year's figures restated

First six months 2022: Financial key performance figures

Financial and strategic performance indicators

		1.1. – 30.6.2022	1.1. – 30.6.2021	Change in %
Adjusted EBITDA	€ m	1,424.2	1,479.4	-3.7
Share of adjusted EBITDA accounted for by Smart Infrastructure for Customers[1]	€ m	114.9	223.0	-48.5
	%	8.1	15.1	-
Share of adjusted EBITDA accounted for by System Critical Infrastructure[1]	€ m	587.7	645.7	-9.0
	%	41.3	43.6	-
Share of adjusted EBITDA accounted for by Sustainable Generation Infrastructure[1]	€ m	851.8	727.6	17.1
	%	59.8	49.2	-
Share of adjusted EBITDA accounted for by Other/Consolidation[1]	€ m	-130.2	-116.9	-11.4
	%	-9.2	-7.9	-
Adjusted Group net profit[2]	€ m	299.8	594.3	-49.6
Group net profit/loss[2]	€ m	563.9	-162.8	-
Earnings per share from Group net profit/loss[2]	€	2.08	-0.60	-
Retained cash flow	€ m	792.0	835.7	-5.2
Net cash investment	€ m	1,092.9	860.6	27.0

[1] The figures for the previous year have been restated
[2] In relation to the profit/loss attributable to the shareholders of EnBW AG

First six months 2022: Non-financial performance indicators[1]

Customers and society dimension	1.1. – 30.6.2022	1.1. – 30.6.2021	Change in %
EnBW/Yello Customer Satisfaction Index	139 / 166	127 / 161	9.4 / 3.1
SAIDI (electricity) in min./year	9	8	12.5

Employees dimension			
LTIF for companies controlled by the group[2,3]/LTIF overall[2]	2.6 / 3.7	1.7 / 2.5	52.9 / 48.0

Employees of the EnBW Group[4,5]			
Employees	26,312	24,894	5.7
Employee equivalents[6]	24,710	23,369	5.7

LTIF: Lost Time Injury Frequency SAIDI: System Average Interruption Duration Index

[1] The values for the key performance indicators Reputation Index, People Engagement Index (PEI) "Installed capacity of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %" and CO_2 intensity are exclusively collected at the end of the year
[2] Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for companies in the area of waste management as well as external agency workers and contractors)
[3] Except for companies in the area of waste management.
[4] Number of employees excluding apprentices/trainees and inactive employees.
[5] The number of employees for the ITOs (ONTRAS Gastransport, terranets bw and TransnetBW) is only updated at the end of the year; for intervals of less than a year, the number of employees from 31 December 2021 is carried forward.
[6] Converted into full-time equivalents

Majority of EnBW's debt is on AG level or guaranteed by AG

Borrower	Amount in € m[1]	Type of indebtness	Guarantors	Liens in € m
EnBW Energie Baden-Württemberg AG	480	Bank loans	None	None
	2,500	Subordinated bonds		
	139	Finance lease		
EnBW International Finance B.V.	4,669	Senior bonds	EnBW AG	None
Netze BW GmbH	177	Finance lease	None	None
	341	Various		
TransnetBW GmbH	132	Finance lease	None	None
Valeco SAS	162	Bank loans	None	162
	32	Finance lease		
Pražská energetika Holding a.s.	182	Bank loans	None	None
	72	Finance lease		
VNG AG	157	Bank loans	None	11
	492	Promissory notes		
	114	Finance lease		
Stadtwerke Düsseldorf AG	194	RCF	None	None
	33	Subsidized loans		
	200	Promissory notes		
Other	~400	Various	None	70

[1] As of 30 June 2022; there may be deviations from the amounts reported in the balance sheet due to fair value accounting shown in the balance sheet

Financial and non-financial KPIs and targets: Finance and strategy dimensions

Dimension Finance	KPI	2021	Forecast 2022	Target 2025
Securing profitability	Adjusted EBITDA in € bn	3.0	3.025 – 3.175	3.2
Managing the financial profile	Debt repayment potential in %	20.3	13.5 - 14.5	>12[1]
Increasing Group value	ROCE in % Value spread in %	7.0 -	- 1.5 - 2.5	-[2] 0.5 – 1.5[2]
Strategy[3]				
Share of result accounted for by Smart Infrastructure for Customers	Share of overall adjusted EBITDA in € bn / in %	0.3 / 10.9	0.350 - 0.425 / 10 -15	0.6 / 20.0
Share of result accounted for by System Critical Infrastructure	Share of overall adjusted EBITDA in € bn / in %	1.3 / 43.5	1.225 - 1.325 / 35 - 45	1.3 / 40.0
Share of result accounted for by Sustainable Generation Infrastructure	Share of overall adjusted EBITDA in € bn / in %	1.5 / 51.9	1.650 – 1.750 / 50 - 60	1.3 / 40.0

[1] Following the transition to the growth strategy, the internal financing capability was replaced by the new key performance indicator debt repayment potential from 2021 onwards. To achieve the unchanged goal of maintaining solid investment-grade ratings, EnBW regularly checks the 2025 target value for the debt repayment potential for managing its financial profile.

[2] We will use value spread to measure the increase in the value of the company from 2022 onwards. This performance indicator is more meaningful and is independent of external market influences making it easier to control. It will also improve the comparability of the data. ROCE will thus be replaced by the new key performance indicator value spread.
Value spread stood at 2.1% in the 2021 reporting year.

[3] The sum of the three segments does not correspond to the adjusted EBITDA for the EnBW Group. €-187.4 m (+5.2%) is attributable to Other/Consolidation in the 2021 financial year.

Financial and non-financial KPIs and targets: Other dimensions

Dimension	KPI	2021	Forecast 2022	Target 2025
Customers and society				
Reputation	Reputation Index	55	56 - 59	58 - 62
Customer proximity	EnBW / Yello Customer Satisfaction Index	127 / 159	127 – 139 / 150 - 161	125 - 136 / 148 - 159
Supply reliability	SAIDI Electricity in min. / year	16	15 - 20	<20
Employees				
Employee engagement	People Engagement Index (PEI) [1]	82	⩾77	77 – 83[2]
Occupational safety	LTIF for companies controlled by the Group [3,4] LTIF overall [3]	2.3 3.3	2.0 - 2.2 3.2 - 3.5	2.1 3.5
Environment				
Expand renewable energies (RE)	Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	5.1 / 40.1	5.4 – 5.6 / 41.5 – 42.5	6.5 - 7.5 / >50
Climate protection	CO_2 intensity in g/kWh[5]	478	0 – 15%	-15% to -30%[6] (reference year 2018)

LTIF: Lost Time Injury Frequency SAIDI: System Average Interruption Duration Index

[1] Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered [except ITOs]). Companies that were fully consolidated for the first time in the fourth quarter of 2021 were not included in the employee surveys for the PEI.
[2] Due to the extraordinary effects relating to the COVID-19 in the year this key performance indicator was introduced, we may need to adjust this target value during the strategy period.
[3] Variations in the group of consolidated companies (all companies with more than 100 employees, excluding external agency workers and contractors, are considered). Companies that were fully consolidated for the first time during the 2021 financial year were not included in the calculations for the LTIF performance indicators.
[4] Excluding companies in the area of waste management
[5] The calculation method for the key performance indicator CO_2 intensity will be restricted in future to include only factors that can be controlled by the company. In contrast to previous years, the share related to redispatch that cannot be controlled by EnBW is no longer included. Using the previous calculation method, the CO_2 intensity for the 2021 financial year would have been 492 g/kWh. This performance indicator still excludes nuclear generation. The CO_2 intensity including nuclear generation for the reporting year was 386 g/kWh (previous year: 268 g/kWh).
[6] The reference year is 2018 because the 2020 reporting year cannot be considered representative for the coming years (due to, among other things, market effects and the COVID-19).

Overview

1. EnBW at a glance
2. War in Ukraine – impact on EnBW
3. Market environment
4. Sustainable corporate strategy
5. Business segments
6. Key financials and non-financials
7. Capital markets
8. Corporate governance
9. Service

- Financial management and strategy
- Asset Liability Management Model
- Financial asset management
- Financing instruments
- Liquidity management
- EnBW's bonds
- Sustainable finance activities
- Credit ratings
- EnBW share

Financial management and strategy

Financing strategy

- Management of financing needs of operating activities separately from the Group's pension and nuclear obligations
- Managing financing needs of operating activities
  - Constant assessment of capital market trends with regard to
    - current interest rate environment
    - any potentially favorable refinancing costs
- Coverage of pension and nuclear obligations using our asset liability management model

Financial objectives

- Payment obligations can be fulfilled without restriction
- Balanced financing structure
- Solid balance sheet ratios
- Solid investment-grade ratings

Financial foundations

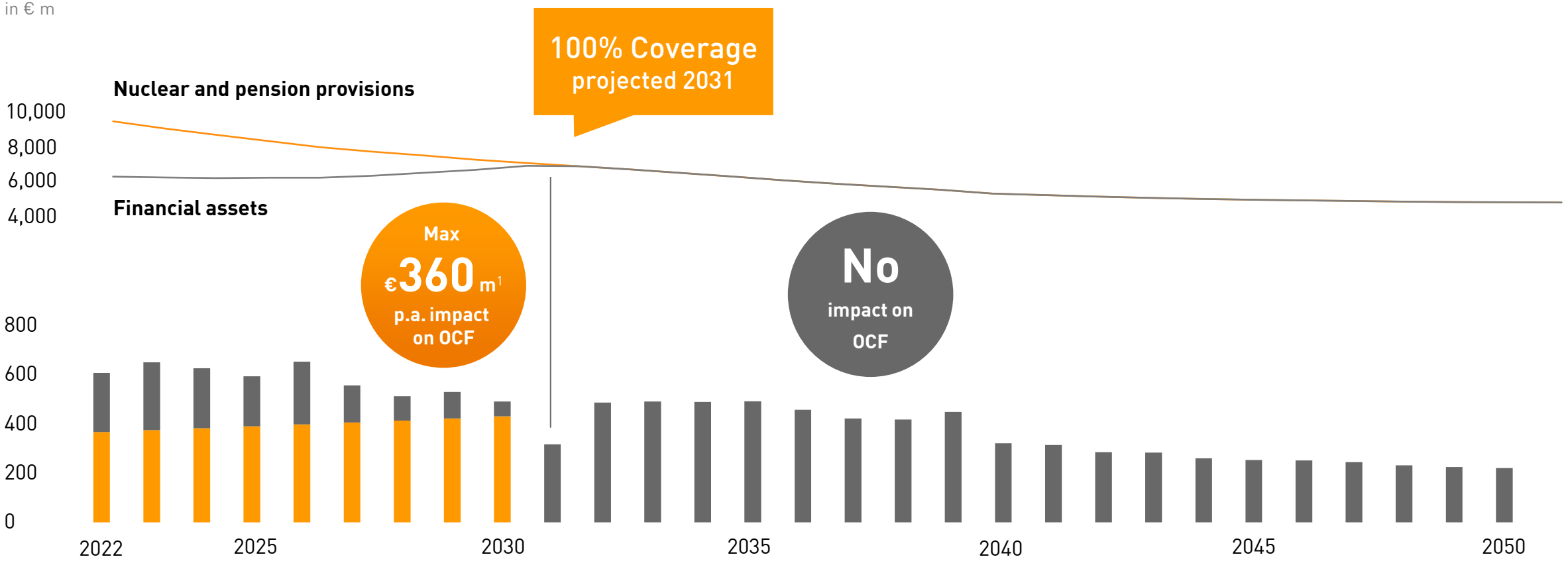
- Management of financial transactions within the Group finance department in order to minimise risk, optimise costs and increase transparency
- Deployment of derivatives in the operating business generally for hedging purposes only: For example, for forward contracts for electricity and primary energy source trading
- Interest rate risk management for managing and monitoring interest-sensitive assets and liabilities
  Interest rate risk strategy to limit the risk of interest rate changes for the Group
- Currency management system to monitor foreign exchange risks

Asset Liability Management Model

Management of financing needs for pension and nuclear obligations

EnBW's cash flow-based model

in € m



As of 30 June 2022

[1] Adjusted for inflation

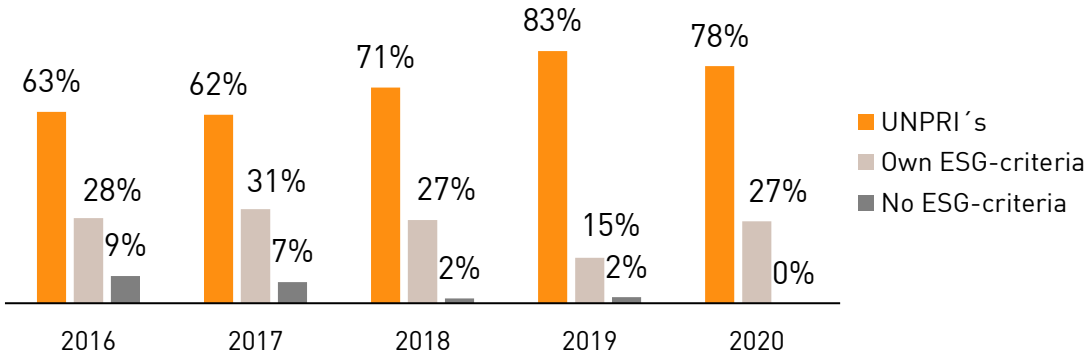
OCF: Operating cash flow

Financial asset management: Providing for group pension and nuclear provisions while meeting ESG criteria

Investment targets

- Risk-optimised investments with performance in line with market trends
- Comply with the framework given by EnBW's Asset Liability Management Model

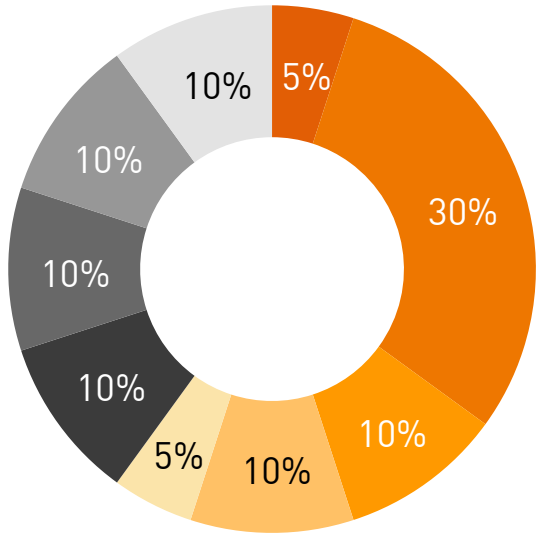
Rising number of EnBW's asset managers incorporate ESG criteria in their investment decisions



ESG criteria are linked to EnBW's overall UN-SDG Strategy:

- Improvements in climate protection
- Risk minimisation through the governance factor (e.g. reputation, fraud, corruption)
- Ensure diversity to avoid undesired risk concentration

Strategic asset allocation



Financial asset management: ESG progress and integration

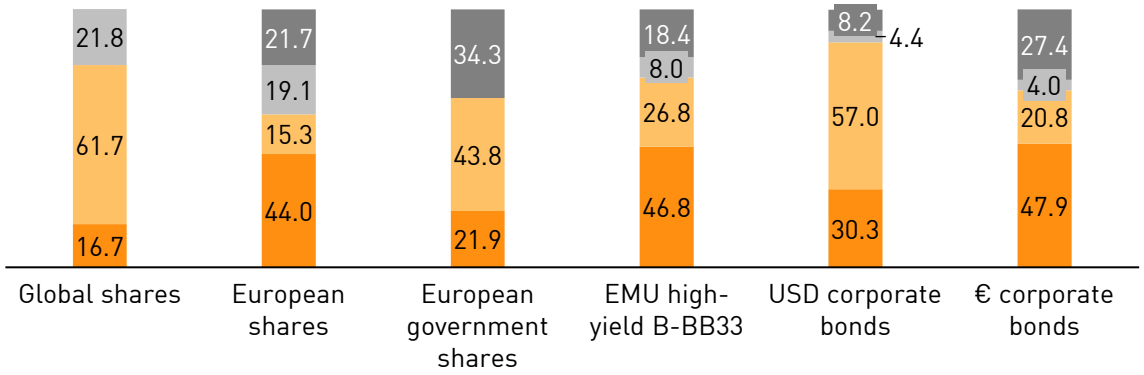
ESG score overall versus benchmark, by asset class

H1 2022 survey of the mandated asset managers and strategies with regard to ESG data in the area of liquid assets

- ~39% of the strategies have a better ESG score than the reference figure (based on the evaluation carried out and extrapolation to the entire portfolio)
- ~34% are at benchmark level, a total of almost 73% of the EnBW portfolio is at or above the benchmark from an aggregated ESG perspective (based on ESG data)

In 2022 start of implementing EnBW's ESG philosophy more strongly in the mandated portfolios.

- Improvement in data availability and relative ESG positioning is expected in 2022
  - managers are placing a stronger focus on the ESG topic
  - EnBW's ESG strategy will be further intensified

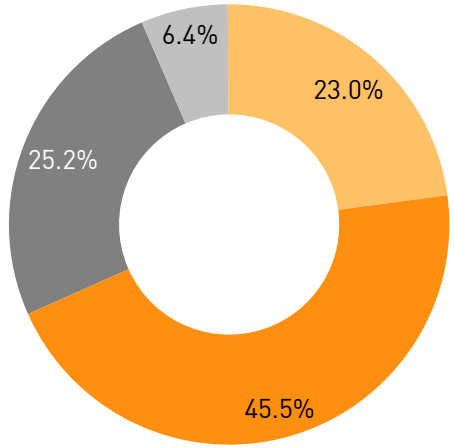


Relative governance score versus benchmark, EnBW portfolio

Governance (the "G" in ESG) plays an important role in EnBW's ESG philosophy

- particular focus of mandated asset managers
- ~45% of the managers are ahead of the benchmark, 23% are within the benchmark range and only 6% miss the benchmark G score (if the individual strategies are evaluated in terms of the relative governance score)

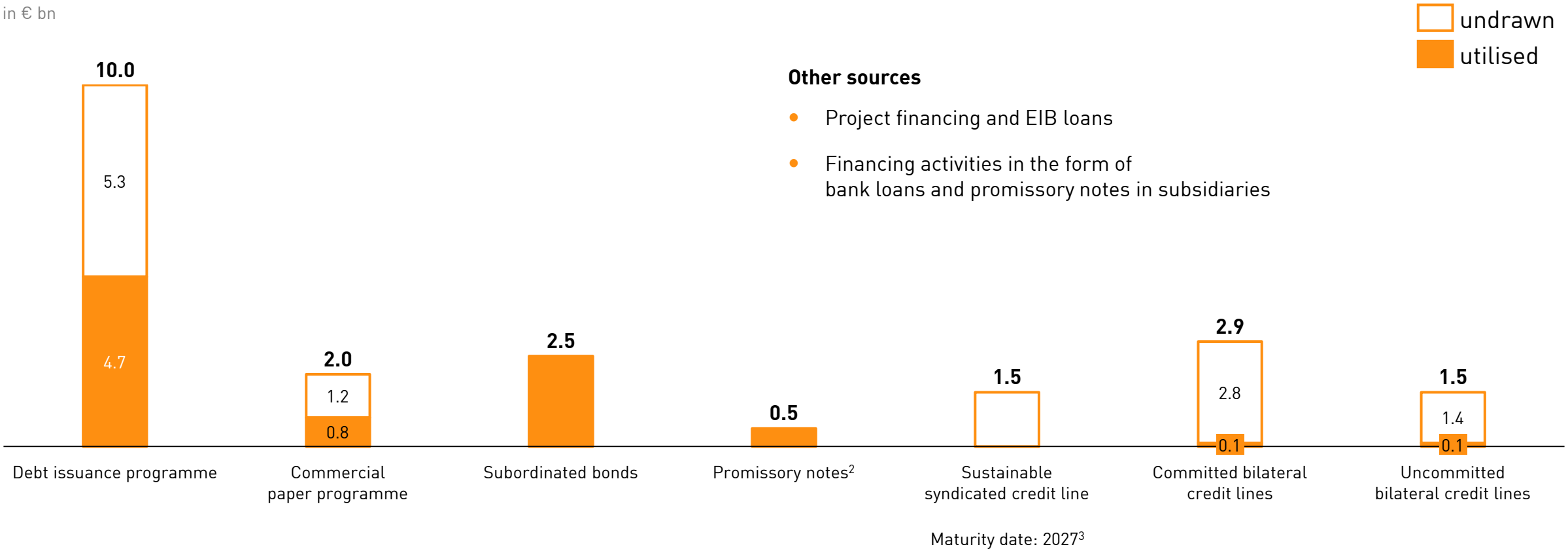
Award for EnBW's Asset Management Team by F.A.Z. Verlag: "Pioneer of sustainable capital investments and best ESG implementation in the years 2020 & 2021"



As of 30 June 2022

EnBW has flexible access to various financing sources[1]

in € bn



Other sources

- Project financing and EIB loans
- Financing activities in the form of bank loans and promissory notes in subsidiaries

Maturity date: 2027[3]

[1] Rounded figures as of 30 June 2022
[2] As of 6 July 2022
[3] Term until the end of June 2027 after exercise of the second extension option for a further year. The utilisation of €1.5 bn at the beginning of March was repaid in full on 11 April 2022

Liquidity management at EnBW – risk-based approach to allow efficient and forward-looking financing decisions

Integrated planning process

- System based inhouse bank approach "EnBW Cashpool"
- Defined group of liquidity drivers represents all relevant EnBW activities
- Subsidiaries without stand-alone financing included
- Integrated view on historical and planning data

Efficient inhouse bank approach to cover all liquidity needs

Rolling time horizon and risk based

- 12 months rolling time horizon with daily output for the first 3 months and monthly output for the following 9 months
- Secured CFs for most of the liquidity drivers
- Risk based approach for certain liquidity drivers
- Risk assessment with focus on working capital movements
- Scenario analysis complementing risk-based approach

Combination of expected and unexpected cash flows

Funding

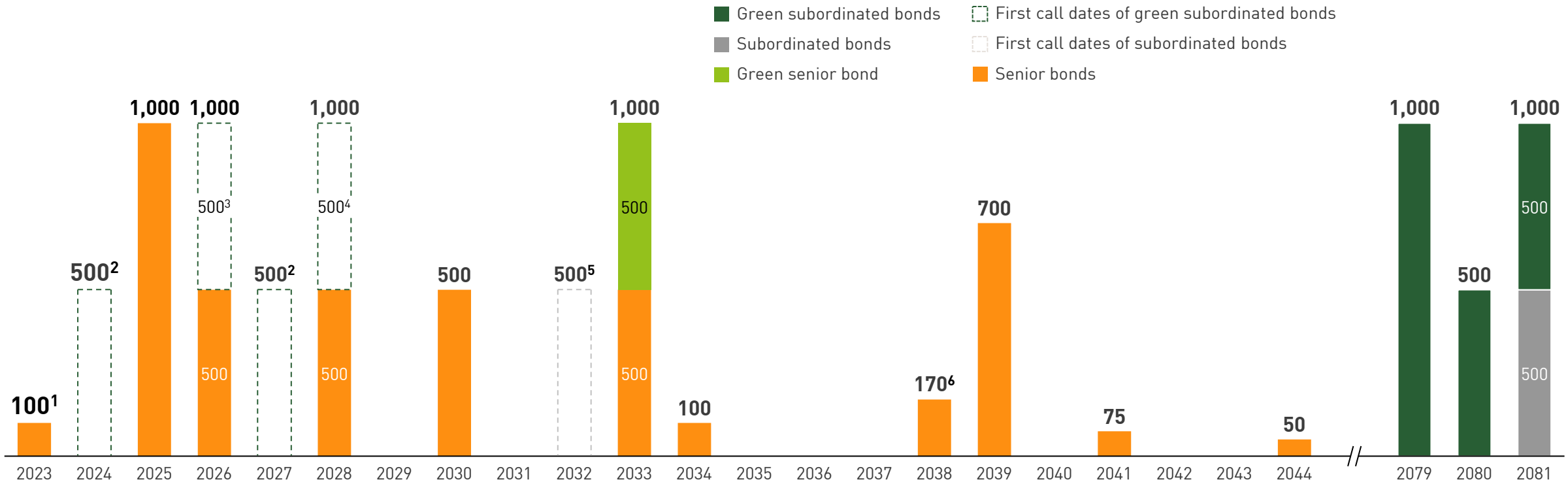
- Different type of funding sources for certain time periods (Cash, bank lines, etc.)
- Calculation of short term (7 days) and medium term (3 and 12 months) liquidity based on the current account balance
- Consumption ratio for cumulative time periods (Needs vs. sources)
- Escalation mechanism implemented

Entire short term and long term funding basis

Inhouse bank and risk based approach to allow efficient and forward-looking financing decisions

Maturities of EnBW's bonds

in € m, as of 30 June 2022



[1] CHF 100 m, converted as of the reporting date of 30.6.2022
[2] First call date: green subordinated maturing in 2079
[3] First call date: green subordinated maturing in 2080
[4] First call date: green subordinated maturing in 2081
[5] First call date: subordinated maturing in 2081
[6] JPY 20 bn (Swap in €), coupon before swap 5.460

Fixed income: EnBW's senior bonds

Issuer: EnBW International Finance B.V.

Type	CCY	Denomination	Volume (m)	Term (years)	Issue date	Maturity	Coupon (%)	Interest date	Security No.	ISIN No.	Stock Exchange
Senior	CHF	5,000	100	10	12.07.2013	12.07.2023	2.250	12.7.	A1HM5N	CH0217677654	S
Senior	EUR	1,000	500	20	09.12.2004	16.01.2025	4.875	16.1.	A0DG9U	XS0207320242	L
Senior	EUR	1,000	500	5	07.04.2020	17.04.2025	0.625	17.4.	A28V1E	XS2156607702	L
Senior	EUR	1,000	500	12	04.06.2014	04.06.2026	2.500	4.6.	A1ZJ9E	XS1074208270	L
Senior	EUR	1,000	500	7	22.02.2021	01.03.2028	0.125	1.3.	A3KMDZ	XS2306986782	L
Senior	EUR	1,000	500	10	12.10.2020	19.10.2030	0.250	19.10.	A283UQ	XS2242728041	L
Senior	EUR	1,000	500	12	22.02.2021	01.03.2033	0.500	1.3.	A3KMD0	XS2306988564	L
Green Senior	EUR	1,000	500	15	31.10.2018	31.10.2033	1.875	31.10.	A2RTNC	XS1901055472	L
Senior	EUR	100,000	100	20	13.06.2014	13.06.2034	2.875	13.6.	Private Placement		
Senior	YEN	100,000,000	20	30	16.12.2008	16.12.2038	3.880	16.6. 16.12.	Private Placement		
Senior	EUR	1,000	600	30	07.07.2009	07.07.2039	6.125	7.7.	A1AJTV	XS0438844093	L
Senior	EUR	10,000	100	25	16.06.2014	16.06.2039	3.080	16.6.	Private Placement		
Senior	EUR	100,000	75	22	15.01.2019	21.01.2041	2.080	21.1.	Private Placement		
Senior	EUR	100,000	50	30	01.08.2014	01.08.2044	2.900	1.8.	Private Placement		

as of 30 June 2022
L: Luxembourg, S: Switzerland, CCY: Currency

Fixed income: EnBW's subordinated bonds

Issuer: EnBW Energie Baden-Württemberg AG

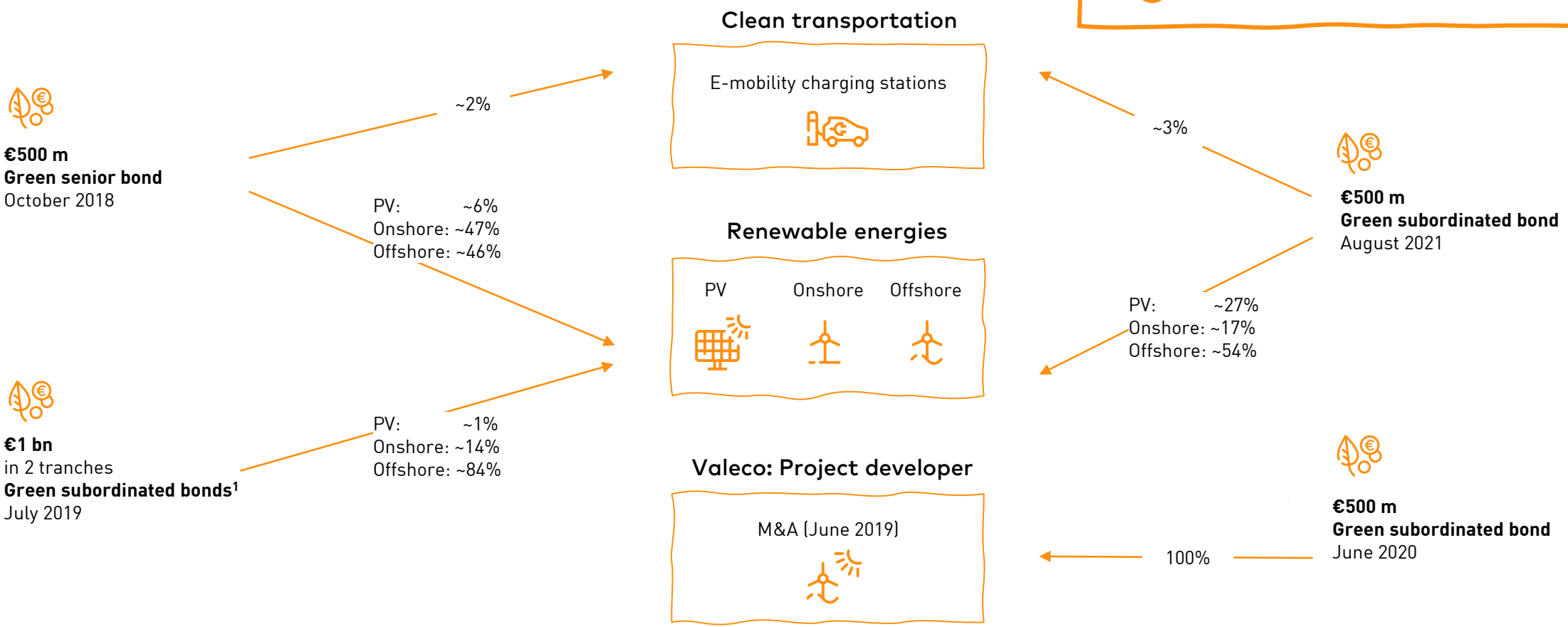
Type	CCY	Denomination	Volume (m)	Term (years)	Issue date	Maturity	Coupon[1] (%)	Interest date	Security No. (WKN)	ISIN No.	Stock Exchange
Green Subordinated	EUR	100,000	500	60	05.08.2019	05.08.2079	1.625	5.8.	A2YPEQ	XS2035564629	L
Green Subordinated	EUR	100,000	500	60.25	05.08.2019	05.11.2079	1.125	5.11.	A2YPEP	XS2035564975	L
Green Subordinated	EUR	100,000	500	60	22.06.2020	29.06.2080	1.875	29.6.	A289QA	XS2196328608	L
Green Subordinated	EUR	100,000	500	60	24.08.2021	31.08.2081	1.375	31.8.	A3MP4X	XS2381272207	L
Subordinated	EUR	100,000	500	60	24.08.2021	31.08.2081	2.125	31.8.	A3MP4Y	XS2381277008	L

as of 30 June 2022

L: Luxembourg, F: Frankfurt, CCY: Currency
[1] Subordinated bond coupon initially
[2] Regulation: These Notes are not offered or sold within the United States or to, or for the account or benefit of, U.S. persons

Allocation of EnBW's green bond proceeds

Find more information in our
Green Bond Impact Report 2021 | EnBW



As of 30 June 2022
[1] 100% allocated, difference due to rounding

Sustainable finance activities

Green bonds

- **€2.5 bn green bonds**
- **First green bond:**
  - Issuance size €500 m, October 2018
- **Four green subordinated bonds:**
  - First German green subordinated bond issuer
  - 2* €500 m, total issue size €1 bn, July 2019
  - Issue size €500 m, June 2020
  - Issue size €500 m, August 2021

Sustainable syndicated credit line

- **First sustainability-linked syndicated credit facility in June 2020:**
  - Credit facility amount of €1.5 bn
  - Borrowing costs are reduced or increased according to target attainment on selected sustainability indicators:
    - CO_2 intensity
    - Share of renewables capacity
    - Grid supply reliability (SAIDI)

EU Taxonomy alignment

- **First mover: Publication of Taxonomy-aligned business activities in March 2021 as one of the first companies in Europe**
- **Activities examined for the EU Taxonomy Regulation**
  - 2020: Electricity distribution/transmission grids, onshore/offshore wind, solar, run-of-river
  - 2021: Also further activities as e-mobility, water grids/supply, biomass, pumped storage
- **Environmentally-sustainable activities of EnBW Group in 2021:**
  - Revenue: 15%
  - Capex incl. IFRS 11 I IAS 28: 71%
  - Opex: 29%
  - Adjusted EBITDA: 63%

Sustainability-linked syndicated credit facility increasing importance of sustainability on financial strategy

EnBW's selected sustainability key performance indicators

- System-relevant social and environmental KPIs reinforce our 2025 strategy of becoming a sustainable and innovative infrastructure partner
- Borrowing costs are reduced or increased according to target attainment on selected sustainability indicators.

Target dimension	Topic	Selected sustainability KPI
1. Environment	Climate protection	CO_2 intensity in g/kWh
2. Environment	Expansion of renewable energies	Share of renewable energies in the generation capacity in %
3. Society	Reliability of supply	SAIDI Electricity in min./year

Margin adjustment mechanism

✓ Margin discount applies if at least 2 out of the 3 KPIs meet their achievement values

✕ Margin premium applies if at least 2 out of the 3 KPIs meet their non-achievement values

— No impact otherwise

Illustrative scenarios

	3 KPIs met	**2 KPIs met & 1 missed**	**1 KPI met & 2 neither missed nor met**	**2 KPIs neither missed nor met & 1 missed**	**1 KPI met & 2 missed**	**3 KPIs missed**
KPI 1	✓	✓	✓	-	✓	x
KPI 2	✓	✓	-	-	x	x
KPI 3	✓	x	-	x	x	x
	Discount	Discount	No adjust.	No adjust.	Premium	Premium

Fixed income: Credit ratings

MOODY'S INVESTORS SERVICE

Baa1 / stable
Latest update
13 September 2022
CONFIRMED

- **Leadership position** as vertically integrated utility within Baden-Württemberg
- **High share of regulated earnings** (transmission and distribution grid) and growing share of renewable assets under contracts
- Exposure to Russian gas supply through VNG subsidiary which is seeking support measures could be negative, credit implications depend on terms and conditions of any support to be provided
- **Solid set of results for the first half of 2022** in spite of taking losses and provisions of €545 m resulting from restrictions in gas supply arrangements of VNG
- Historically **balanced financial policy** and track record to defend credit quality
- Supportive stance of shareholders

S&P Global Ratings

A- / negative
Latest update
15 September 2022
CONFIRMED

- **Diversified and integrated position**, which has demonstrated its resilience across different economic and geopolitical cycles
- High share of regulated EBITDA and expanding share of renewable generation provides **stability and predictability to earnings and cash flow**
- Investment strategy with focus on regulated infrastructure and renewable capacity deployment provides a long-term earnings base
- Gas reprocurement losses and potential equity support for subsidiary VNG could pressure EnBW's credit metrics and causes negative rating outlook. Full effect depends on an agreement with the German government and improved performance of other business areas
- **Rating outlook could be revised back to stable** after gaining clarity on VNG's full-year losses and sufficient visibility on the German gas market
- Financial policy, including shareholder support, geared toward protecting the 'A-' rating

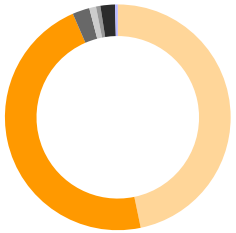
EnBW share[1]

		2021	2020	2019	2018	2017
Annual high	€	85.40	58.00	61.00	34.00	29.63
Annual low	€	55.00	32.00	29.00	25.40	20.00
Closing price	€	76.00	56.00	50.50	29.20	28.78
Number of shares outstanding as of 31 December[2]	Thousand shares	270,855	270,855	270,855	270,855	270,855
Market capitalisation as of 31 December[2]	€ bn	21.0	15.2	14.0	8.1	7.8
Stock exchange trade (total)	Number of shares	108,231	152,206	106,534	86,190	157,021
Stock exchange trade (daily average)	Number of shares	447	611	424	435	604
Earnings per share from Group net profit/loss	€	1.34	2.20	2.71	1.23	7.58
Dividend distribution[3]	€ m	298	271	190	176	135
Dividend per share	€	1.10	1.00	0.70	0.65	0.50

Stock exchange information

ISIN no.	DE0005220008
Share identification no.	522000
Stock exchange abbreviation	Bloomberg: EBK GY Reuters: EBKG.DE
Transparency level	General standard
Index	DAX sector All Utilities
Number of shares	276,604,704 shares without a par value (voting shares)
Markets	Listed on the stock exchanges in Frankfurt a. M. and Stuttgart in the regulated market

Shareholder structure[4]



OEW Energie-Beteiligungs GmbH[5]	46.75%
NECKARPRI-Beteiligungsgesellschaft mbH[6]	46.75%
Badische Energieaktionärs-Vereinigung	2.45%
Gemeindeelektrizitätsverband Schwarzwald-Donau	0.97%
Neckar-Elektrizitätsverband	0.63%
EnBW Energie Baden-Württemberg AG	2.08%
Other shareholders	0.39%

[1] Share value based on closing price trading the EnBW share in XETRA
[2] Total number of shares: 276,604,704 million shares
[3] Distrubution in terms of shares entitled as of year-end
[4] May not add up to 100% due to rounding; figures as of 30 June 2022
[5] Wholly-owned subsidiary of Zweckverband Oberschwäbische Elektrizitätswerke - association of 9 districts with headquarters in Ravensburg
[6] Wholly-owned subsidiary of NECKARPRI GmbH, which is wholly owned by the state of Baden-Württemberg
Capital stock: € 708,108,042.24, divided into 276,604,704 no par value bearer shares with an imputed value of € 2.56 each

Key investment highlights

One of the largest German utilities

- Contributing to the stabilisation of the energy crisis and guaranteeing for security of supply

Integrated portfolio approach

- Along the entire value chain

High share of low-risk business

- 71% adjusted EBITDA from regulated grids business and renewable energies in 2021

Prudent financial policy and solid credit ratings

- Operating financing needs separately managed from pension and nuclear obligations

Stable government-related shareholder structure

- State of Baden-Württemberg and OEW, an association of counties, together holding more than 93% of share capital

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- Responsible and transparent management
- Allocation of responsibilities within the Board of Management
- Remuneration systems
- Corporate compliance

Responsible and transparent management

Board of Management

- Responsible Group management
- Represents the company legally

Andreas Schell
Chief Executive Officer
To take office on 15 Nov 2022[1]

Dirk Güsewell
Chief Operating Officer Critical Infrastructure
With EnBW since 1999

Thomas Kusterer
Chief Financial Officer
With EnBW 2004 to 2009, and since 2011

Colette Rückert-Hennen
Chief Sales and Human Resources Officer
With EnBW since 2019

Dr. Georg Stamatelopoulos
Chief Operating Officer Sustainable Generation Infrastructure
With EnBW since 2010

EnBW corporate culture

Transparent and responsible

Strengthen trust and confidence among

- Customers
- Capital providers
- Employees
- Public

Long-term success

Supervisory Board

- **20 members**: 10 shareholder representatives, 10 employee representatives, of which three union representatives
- Appoints members of Board of Management and defines their remuneration
- Supervises the Board of Management
- Advises them on management of the company

Lutz Feldmann
Chairman of the Supervisory Board
With EnBW since 2015

[1] During the transition phase (1 October -15 November 2022), the experienced EnBW Board of Management team manages the company's business.

Allocation of responsibilities within the Board of Management

Andreas Schell
Chief Executive Officer
To take office on 15 Nov 2022[1]

- Corporate development
- Sustainability
- Strategy and energy economy
- Communications / policy
- IT and Digital Office
- Corporate security

Dirk Güsewell
Chief Operating Officer Critical Infrastructure

- DSO[2] electricity / gas
- TSO[3] electricity / gas
- Grid technology
- Telecommunications
- Gas value chain
- Innovation management and system critical infrastructure (development projects)

Thomas Kusterer
Chief Financial Officer

- Accounting and tax
- Controlling
- Finance
- Digital finance and transformation
- Investor Relations
- M&A
- Risk management / ICS
- Equity investment management
- Performance in growth
- Purchasing
- Risk management for trading

Colette Rückert-Hennen
Chief Sales and Human Resources Officer

- Personnel
- HR strategy
- Sales, marketing and operations
- Transformation (Next Level EnBW)
- Law
- Auditing
- Regulatory management
- Compliance management and data protection
- Boards and shareholder relationships
- Occupational medicine and health management
- Real estate management

Dr. Georg Stamatelopoulos
Chief Operating Officer Sustainable Generation Infrastructure

- Conventional generation / nuclear
- Renewable generation
- Coordination technology
- Waste management / environmental services
- Decentralised energy services
- Occupational safety, environmental protection and crisis management
- Research and development
- Trading

EnBW Board of Management

As of 1 May 2022
[1] 1.1.- 30.9.2022: Dr. Frank Mastiaux, during the transition phase (1.10. -15.11.2022), the experienced EnBW Board of Management team manages the company's business.
[2] Distribution system operator; [3] Transmission system operator

Remuneration system for members of the Board of Management and the Supervisory Board

Board of Management

- The annual general meeting of a listed company must adopt a resolution on the approval of the remuneration system of the Board of Management at every material change and in any case at least every four years
- Last adopted by the Company's Annual General Meeting on 5 May 2022 confirmed by 99.99%
- Resolution on the approval of the remuneration system for members of the Board of Management as well as the remuneration system itself must be published on the Company's website

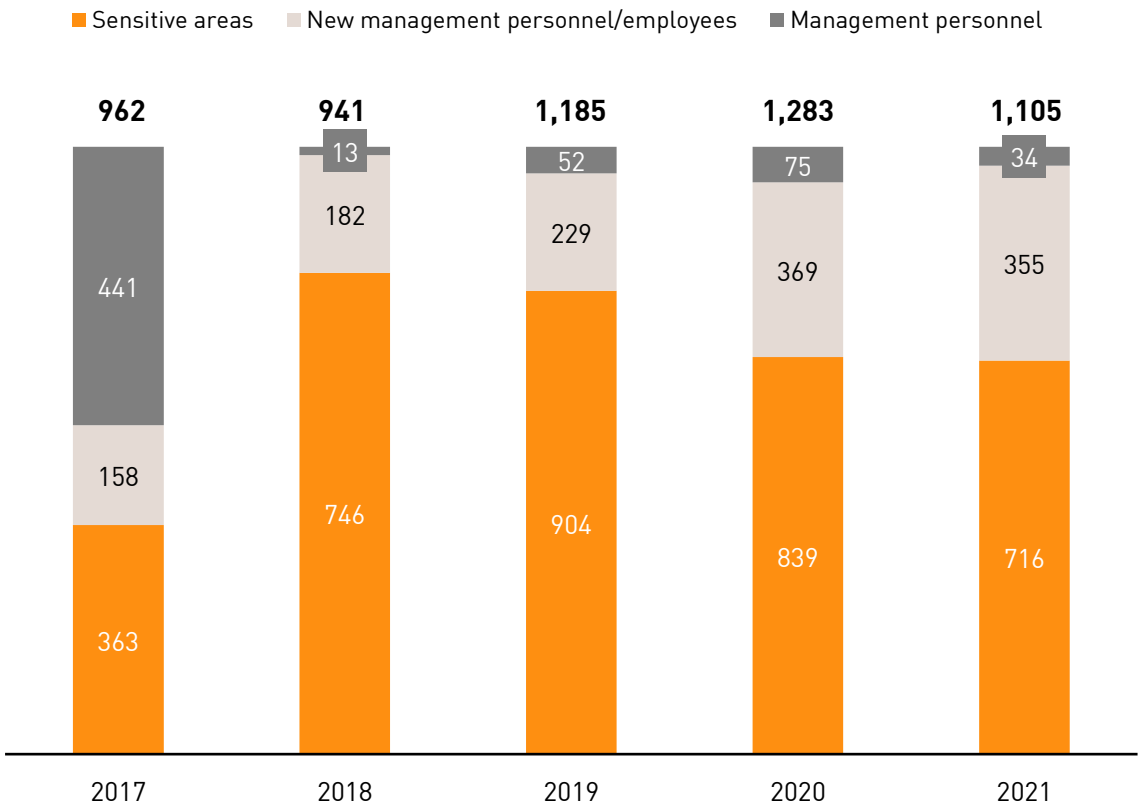
Supervisory Board

- The annual general meeting of a listed company must adopt a resolution on the approval of the remuneration system of the Supervisory Board at least every four years, with the resolution permitted to take the form of a resolution confirming remuneration
- Last adopted by the Company's Annual General Meeting on 17 July 2020
- This resolution was confirmed by the Company's Annual General Meeting on 5 May 2021 with 99.99%
- Resolution on the approval of the remuneration system for members of the Supervisory Board as well as the remuneration system itself must be published on the Company's website

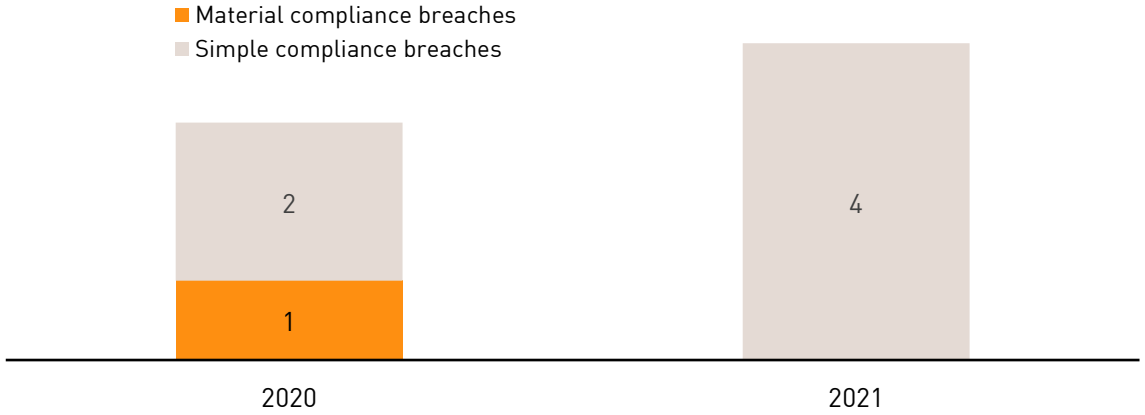
Corporate Governance | EnBW

Corporate compliance

Number of participants in compliance training events[1]



Number of compliance breaches[1]



Compliance management system

- Serves to minimise risks and avoid liability issues and loss of reputation
- Focuses on company- and sector-specific risks and priorities
- Encompasses all controlled companies with employees in the EnBW Group
- Various tools used e.g. training/workshops – focused on compliance attitude – Code of Conduct, Annual Compliance Risk Assessment and Ombudsman

[1] At EnBW AG and directly controlled companies with employees

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- IR contacts
- Important links
- Important note

IR contacts

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"EnBW's corporate and financing strategy are the focus of our investor communication. To us, investor relations means providing capital market participants with comprehensive and timely information, and also reflecting how they view EnBW back to the Company. That is why we attach great importance to continuous dialogue with investors."
(Marcel Münch)

Important links

EnBW Group	https://www.enbw.com/company/the-group/about-us/
Investor Relations	https://www.enbw.com/investors
Overview Board of Management	https://www.enbw.com/board-of-management
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