

12 June 2024

# UniCredit European Credit Conference 2024

Lenka Zikmundova  
Peter Berlin

Head of Investor Relations  
Head of Finance

# EnBW - a key player in the energy transition

A leading integrated utility in Germany engaged in all aspects of the energy business: power generation, trading, transmission & distribution, energy sales and e-mobility

## Operational track record FY 2023

- **12 GW** generation capacity
- **27 TWh** own generation
- **179,000 km** electricity and gas grids
- **>1,100** fast-charging stations in Germany alone
- **5.5 m** B2C & B2B customers
- **28,630 employees**

## Financials FY 2023

- Revenues: **€44 bn**
- Adj. EBITDA: **€6.4 bn**
- Retained cash flow: **€4.8 bn**
- Gross investments: **€4.9 bn**
- Net debt: **€11.7 bn**
- Ratings: **A-** (S&P) / **Baa1** (Moody's)

## ESG performance

- ESG ratings: **A** (MSCI), **A-** (CDP)
- **87%** EU taxonomy-aligned capex
- **€5.5 bn green bonds** outstanding
- **~50%** of all bonds are **green**
- Climate protection targets certified by SBTi, 2028 coal exit, **2035 climate-neutrality**

## EnBW's segments focusing on energy infrastructure



### Sustainable Generation Infrastructure

- Power generation, district heating, trading, gas storage



### System Critical Infrastructure

- Transmission & distribution grids for electricity and gas



### Smart Infrastructure for Customers

- Retail, e-mobility, home storage

# Well-positioned with its integrated business model



## Integrated portfolio approach

- The only German utility covering the entire value chain
- Stabilizing the energy system, providing security of supply and driving the German energy transition



## High share of low-risk business

- Regulated grids and mainly contracted/guaranteed renewables earnings are anchor of stability
- Low-risk earnings share 2024-30: >70%



## Prudent hedging strategy

- Natural hedge of own generation and sales activities de-risks unfavorable price movements
- Earnings locked-in by hedging for up to 3 years and growing long-term (10y+) PPA footprint



## Strong ESG focus

- Ambitious SBTi emission reduction targets lead the way to climate neutrality in 2035
- Clear decarbonization roadmap



## Strong financial performance

- Strong FY23 earnings performance, robust FY24 guidance with adj. EBITDA target range of €4.6 – 5.2 bn
- Significant growth potential from strong political commitment to accelerate energy transition



## Stable government-related shareholder structure

- German state of Baden-Württemberg and OEW (an association of counties) >93% of share capital
- The shareholder structure has remained virtually unchanged and thus very stable since 2011

# Highlights 2023



## Strong earnings 2023

- reaching upper end of upgraded guidance supporting higher investments in energy transition



## Driving forward the energy transition

- significant strategic progress with expansion in renewables, grids, fuel switch and e-mobility



## Successful financing of growth

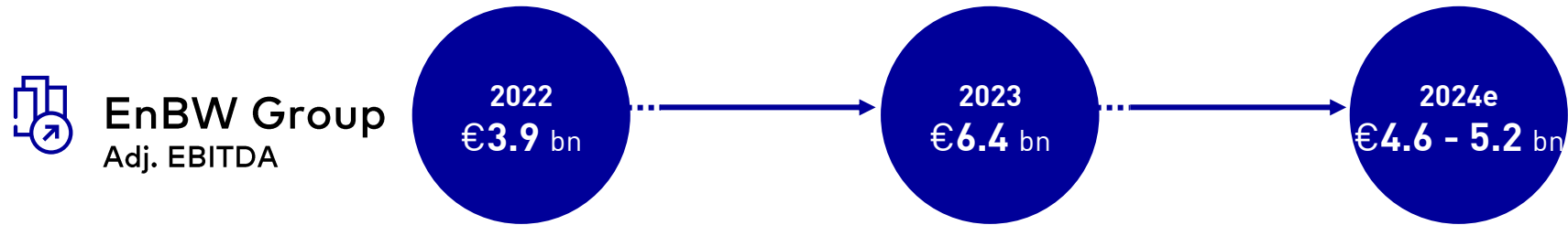
- by attracting new long-term partners and issuing green bonds



## High credit ratings by Moody's and S&P

- acknowledging integrated setup and financial strength. S&P outlook revised to stable 3/2023

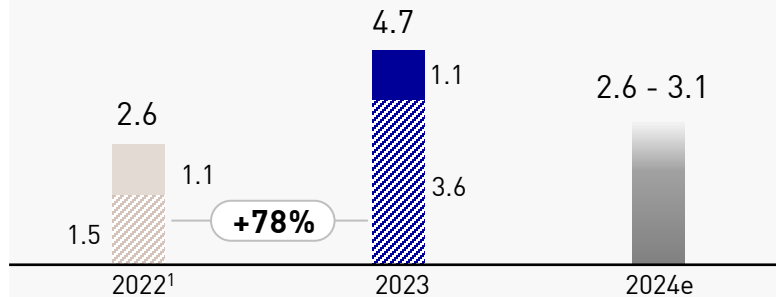
# Sustainably strong earnings performance



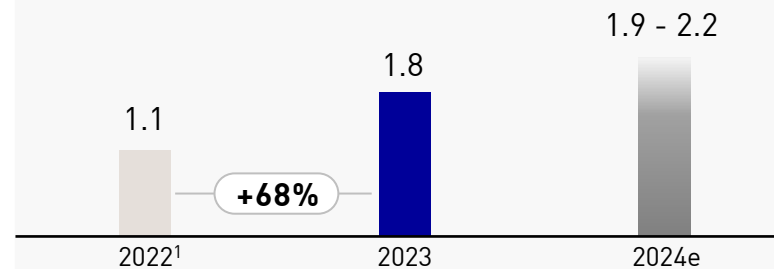
## Robust delivery despite:

- uncertainty in commodity markets
- power price volatility
- decline in European power prices

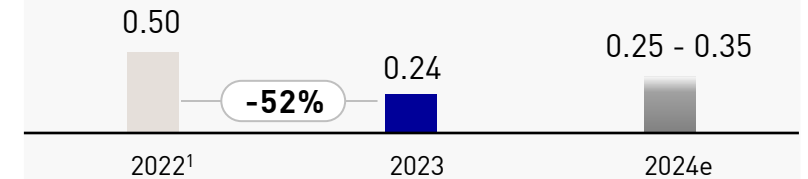
**Sustainable Generation Infrastructure Adj. EBITDA**  
in € bn



**System Critical Infrastructure Adj. EBITDA**  
in € bn



**Smart Infrastructure for Customers Adj. EBITDA**  
in € bn



Renewable Energies    Thermal Generation and Trading

<sup>1</sup> The figures for the previous year have been restated.

# Confirmed outlook 2024 reflects earnings in a normalized market environment

in € bn



Group

**4.6 – 5.2**  
2023: 6.4



**Sustainable Generation Infrastructure**

FY 2023

4.6



Outlook 2024

**2.6 - 3.1**

- Decline on the back of the falling energy prices and lower hedged generation margins
- Increased capacity in renewables



**System Critical Infrastructure**

FY 2023

1.8



Outlook 2024

**1.9 - 2.2**

- Higher earnings from grids through returns from increased investments



**Smart Infrastructure for Customers**

FY 2023

0.2



Outlook 2024

**0.25 - 0.35**

- No repeat of negative one-offs 2023
- Increased competition B2B and B2C customers

# Highlights 3M 2024: Good start to the year and progress in clean energy transition well underway



## 3M 2024 financials in line with expectations

- Group adj. EBITDA of €1.3 bn reflects lower power prices
- Confirmed outlook for 2024 backed by resilient operations

## ESG & sustainable finance

- CDP score raised to leadership level (A-)
- Issuance of €0.5 bn green subordinated bond in January 2024 to finance green growth

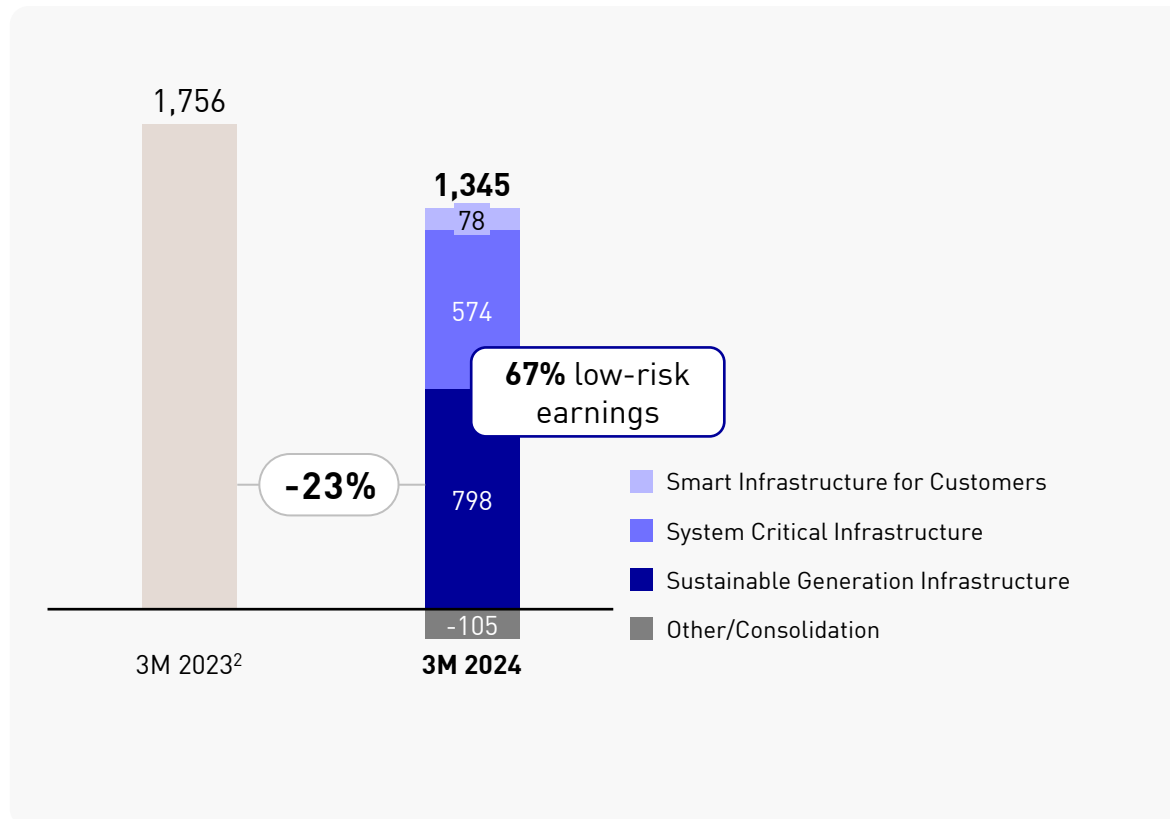
## Operational progress geared towards energy transition well on course

- Start of construction of the largest solar park in the southwest of Germany (80 MW)
- More than half of He Dreiht offshore wind capacity secured via PPAs
- Start of construction for the first H<sub>2</sub> transport pipeline in southern Germany (250 km)
- All three fuel switch projects under construction since February 2024

# Adjusted EBITDA and adjusted Group net profit down on the back of normalizing power price environment

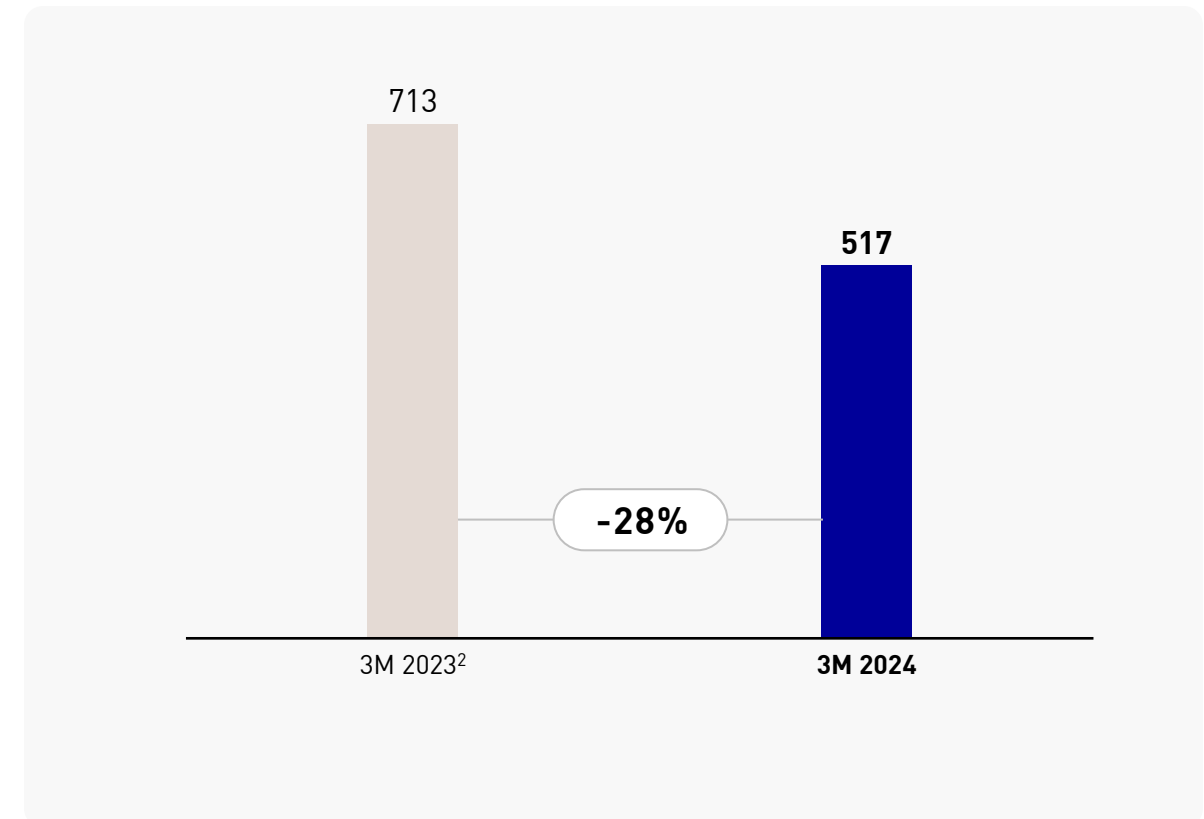
## Adjusted EBITDA

in € m



## Adjusted Group net profit<sup>1</sup>

in € m



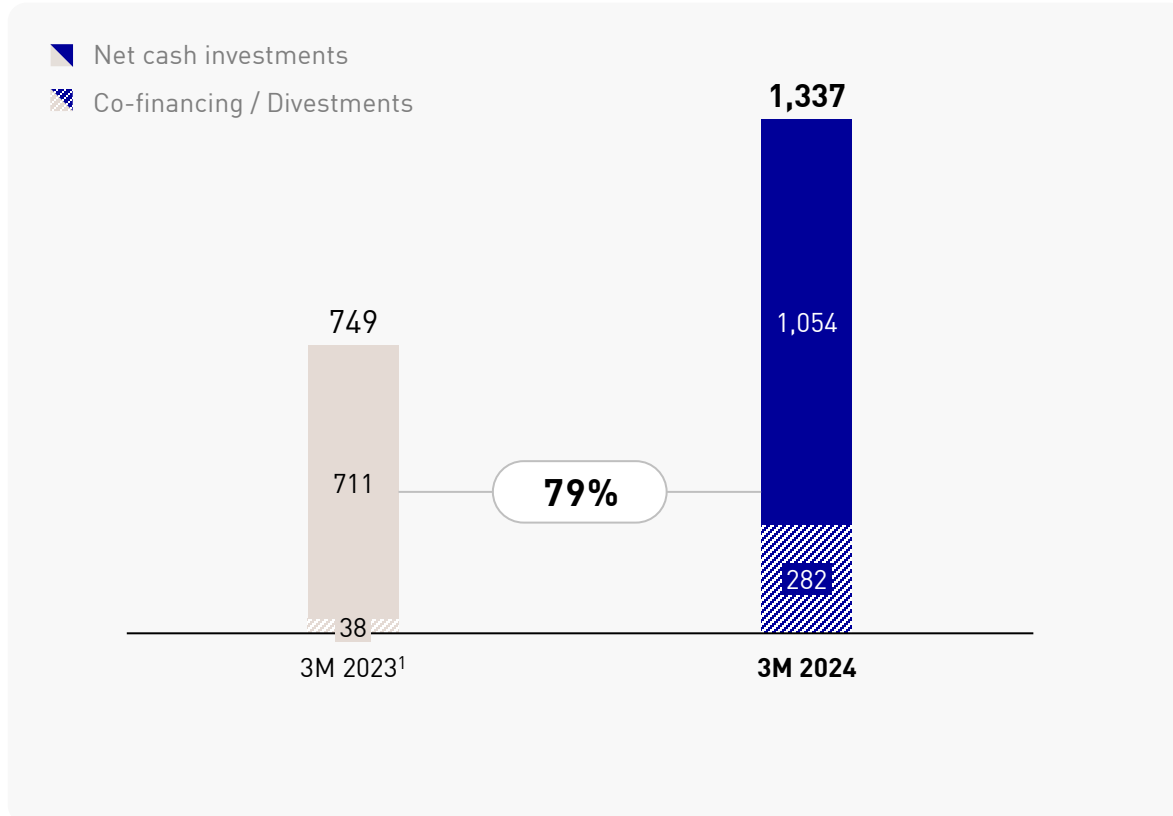
<sup>1</sup> Attributable to the shareholders of EnBW AG. | <sup>2</sup> Previous year's figures restated.



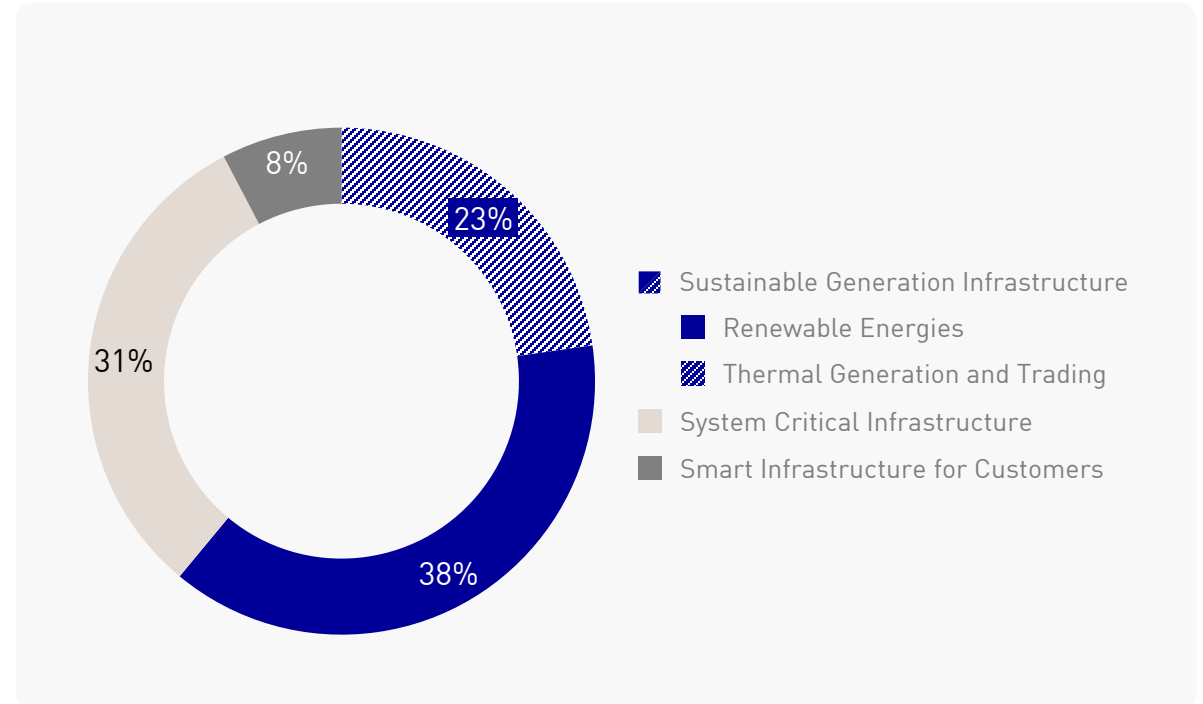
# Reinforcing our investments in the energy transition with strong focus on renewables and grid

## Total investments

in € m



## Investments by segments

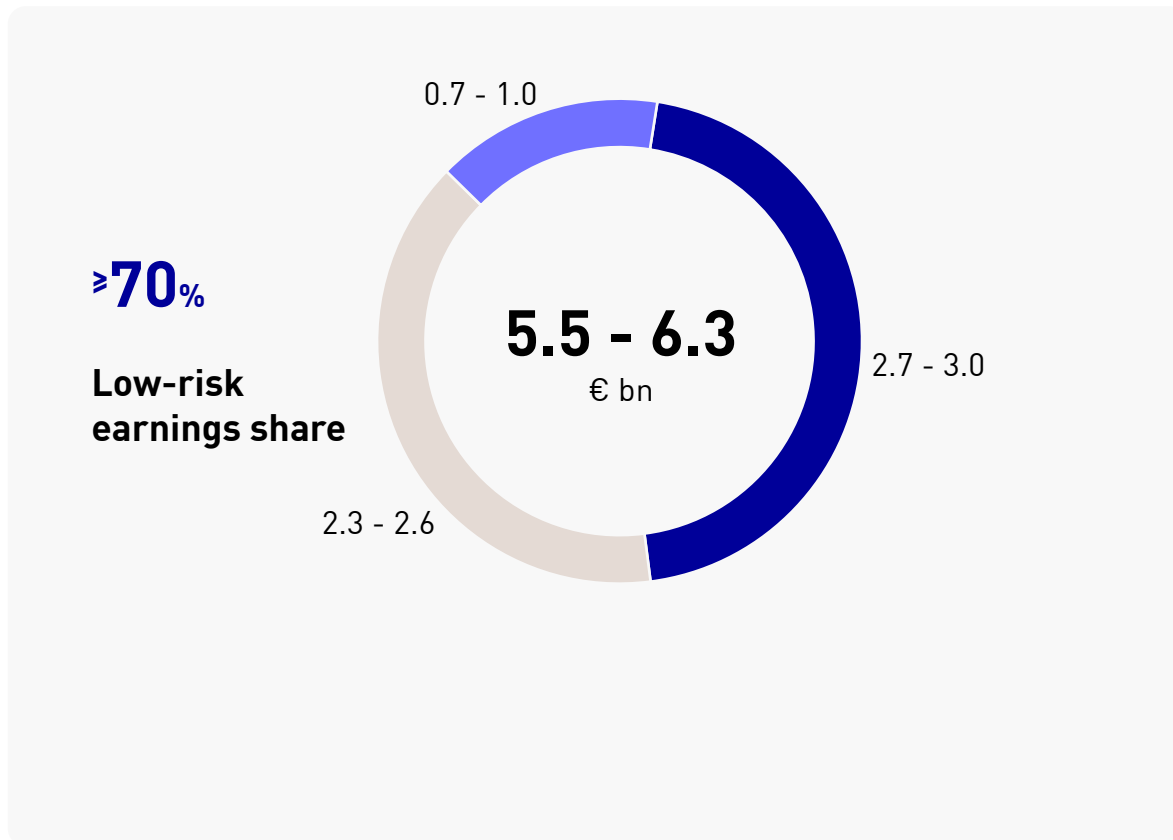


**> 90% of total investments in growth projects**

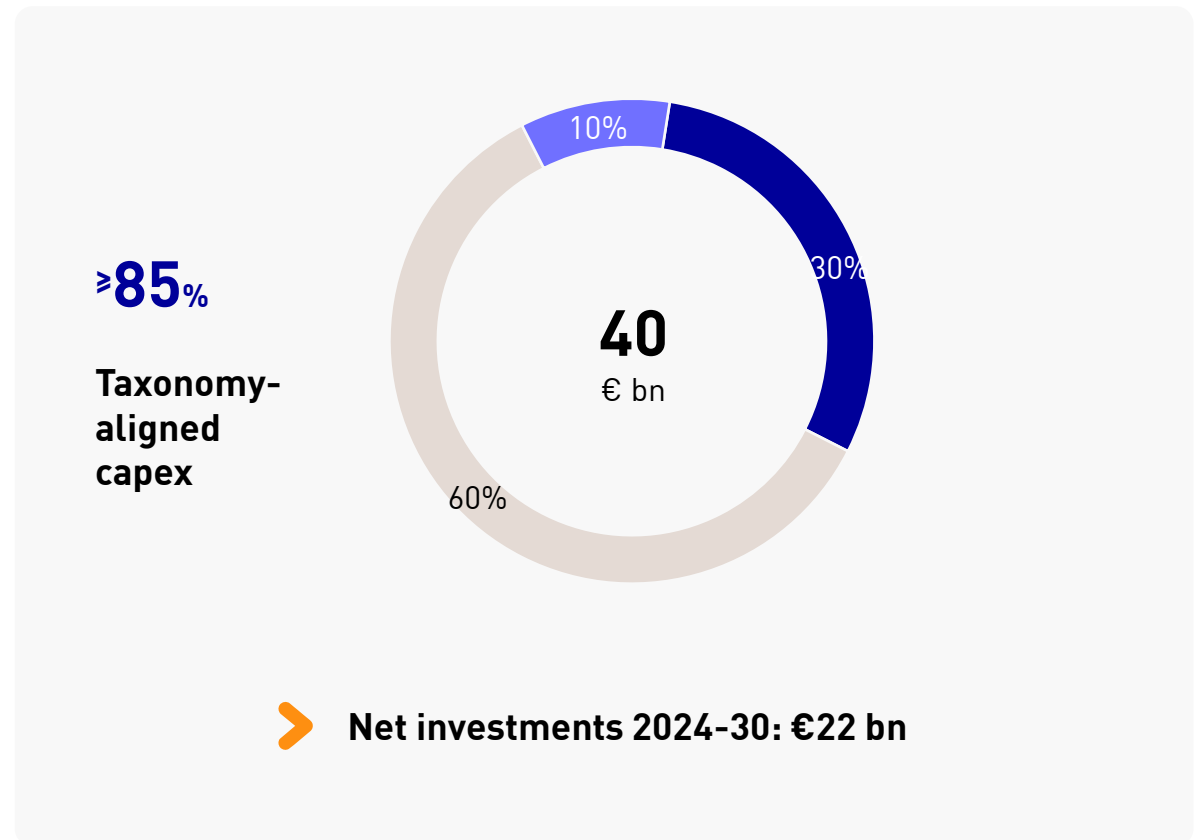
<sup>1</sup> Previous year's figures restated.

# Outlook 2030: Integrated setup with profitable growth while building green future

## Adj. EBITDA target 2030

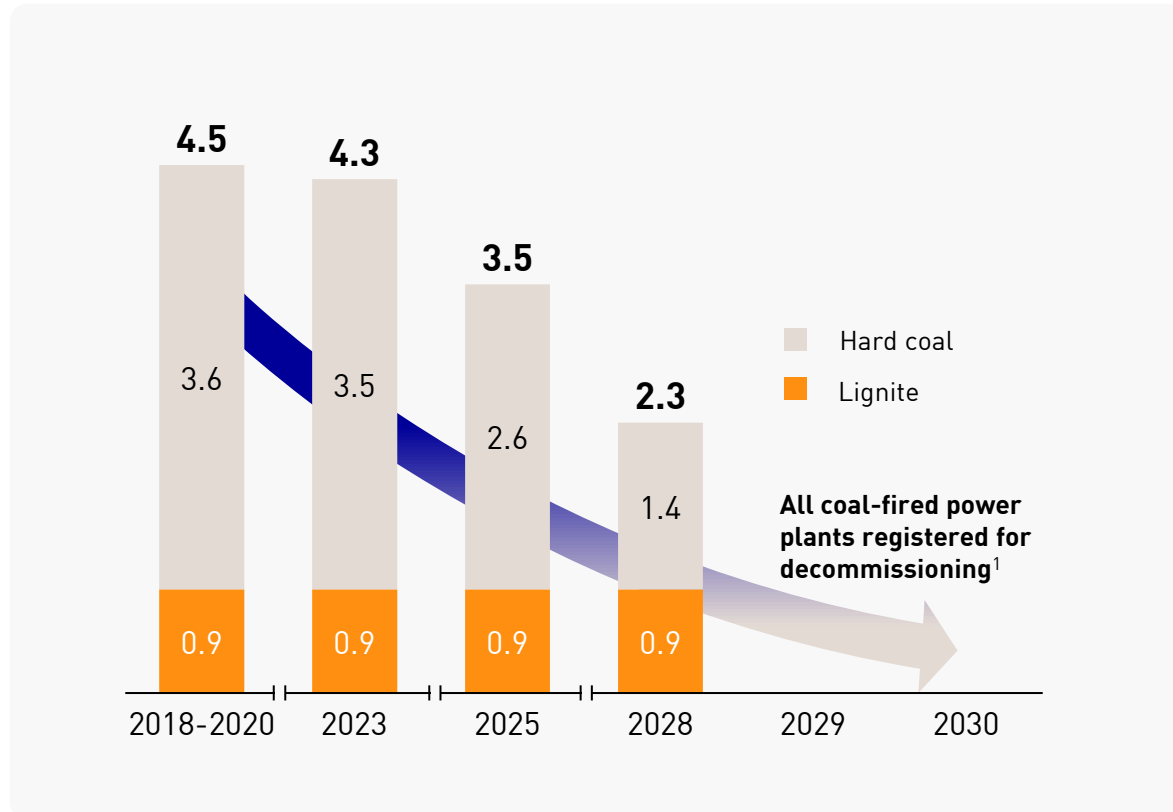


## Gross investments 2024-30

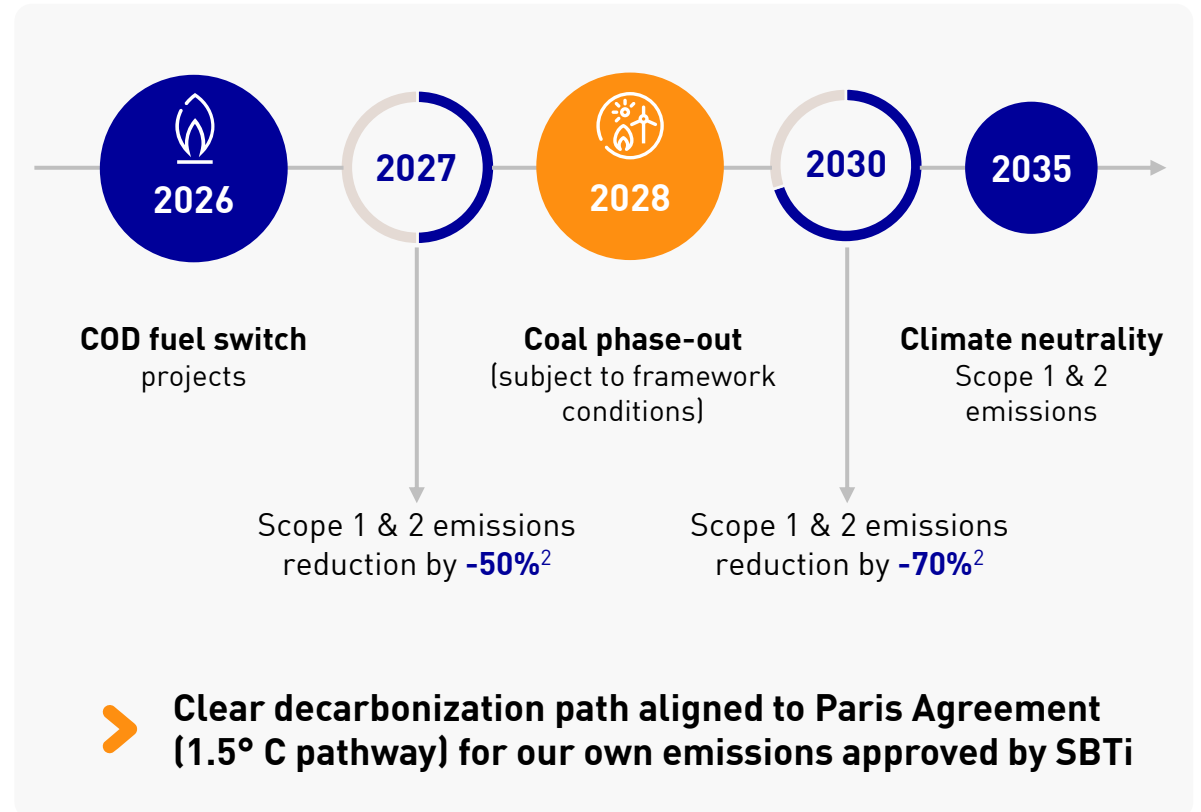


# Our continued progress in ESG

## Phase out coal by 2028 in line with our SBTi targets in GW



## Well on track with our climate neutrality roadmap



<sup>1</sup> Provided the energy transition progress allows a coal exit by 2028. <sup>2</sup> Compared to the base year 2018.

A thick, horizontal orange bar with rounded ends, positioned to the left of the main text.

# Funding strategy and credit strength

# Diversified funding strategy



## Funding volumes

€2.5 - 3 bn p.a.  
on average

- Refinancing of maturing liabilities
- Funding of corporate growth



## Tenors

2 - 30 years

- EnBW's assets are typically characterized by long life cycles
- Decision based on market demand, maturity profile & interest levels



## Green financing

Outstanding volume  
of €5.5 bn<sup>1</sup>

- First Green Bond issued in 2018
- Target 2030: at least 85% of all new issues to be sustainable
- Green Financing Framework use of proceeds 100% EU taxonomy aligned



## Currencies

EUR, CHF, USD, GBP  
& JPY outstanding

- Asset base related: main focus EUR but also CHF, USD & GBP
- Flexible use of opportunities



## Diversification

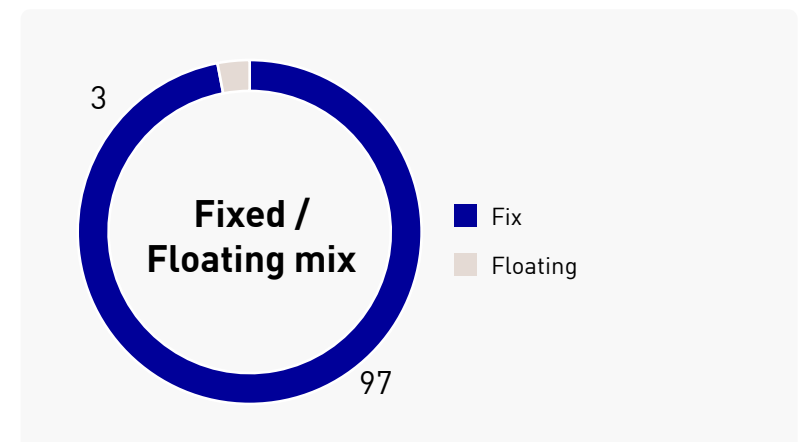
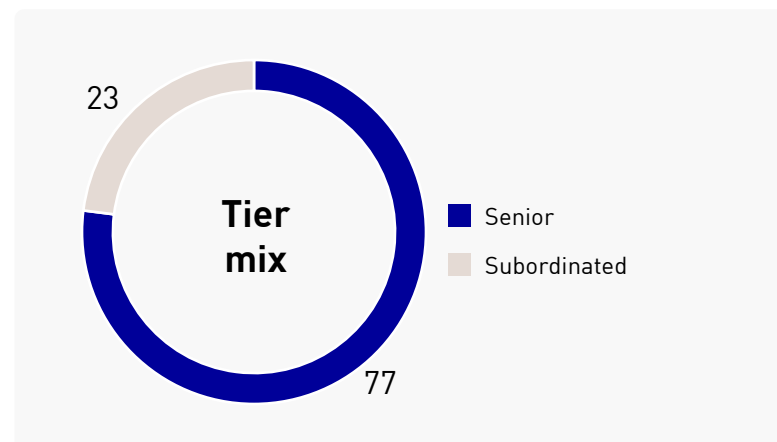
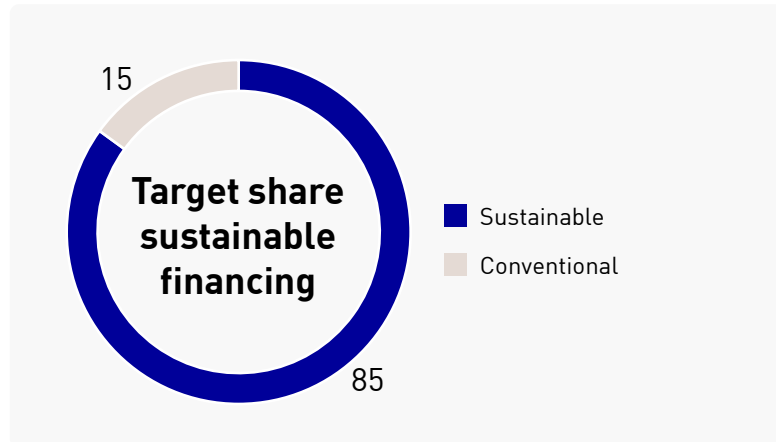
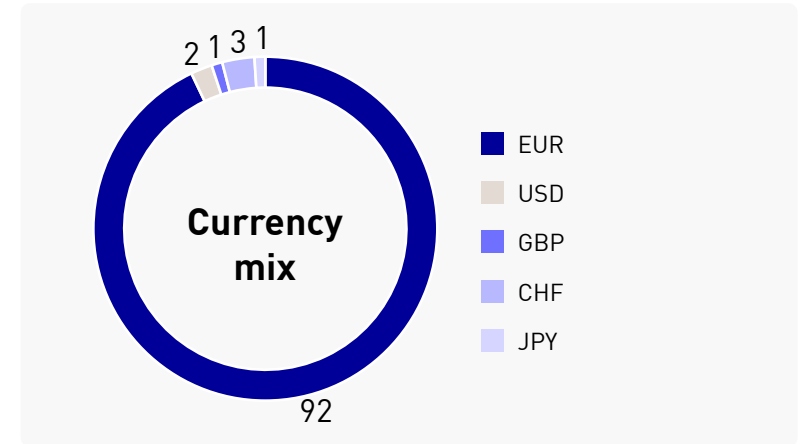
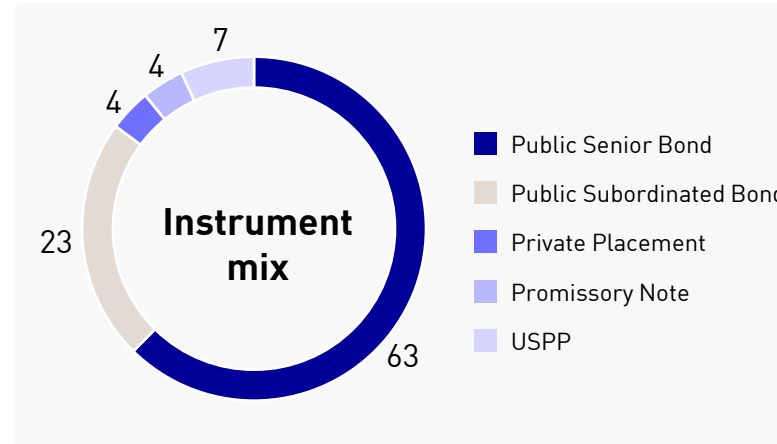
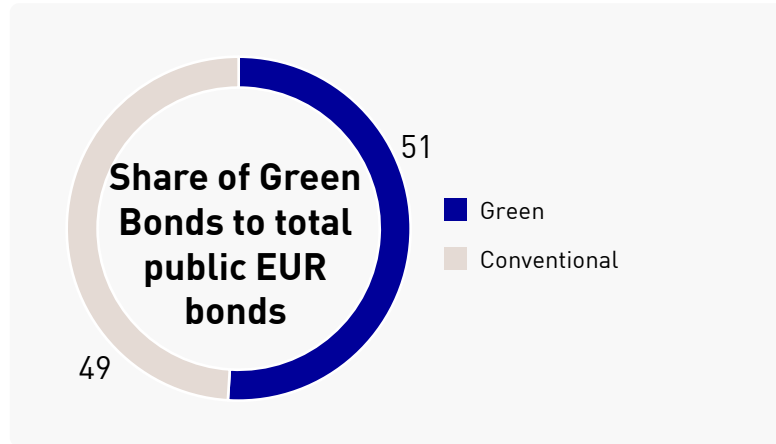
... in instruments,  
currencies & markets

- Bonds, promissory notes, USPP
- Exploring new markets to make use of existing opportunities
- Public offerings & private placements

<sup>1</sup> As of January 2024.

# EnBW is prepared to scale up in diversification

in %



<sup>1</sup> As of 27 March 2024.

# EnBW Green Financing Framework – in line with all relevant market standards

## Key facts

- Published in 2018 and most recently updated in 2023
- Alignment with **ICMA Green Bond Principles & LMA Green Loan Principles**
- Alignment with **EuGBS**
- **Second-party opinion** by ISS-Corporate



**EnBW Green Financing Framework**

## Use of proceeds

**100%**  
EU taxonomy-  
aligned

Green activity	Project categories	Contribution to EU taxonomy	UN SDGs
Renewable energies	<ul style="list-style-type: none"> <li>• Offshore wind</li> <li>• Onshore wind</li> <li>• Solar (PV)</li> </ul>	4.3 Electricity generation from wind power (NACE: D.35.11)	
Electricity Networks	<ul style="list-style-type: none"> <li>• Electricity distribution infrastructure</li> </ul>	4.9 Transmission and Distribution of Electricity (NACE: D.35.12, D.35.13)	
Energy efficiency	<ul style="list-style-type: none"> <li>• Smart meters</li> </ul>	7.5. Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings (NACE: D.35.13)	
Clean transportation	<ul style="list-style-type: none"> <li>• E-mobility charging infrastructure</li> </ul>	6.15 Infrastructure enabling low-carbon road transport and public transport (NACE: D.35.12, D.25.13, F.42.21)	

# Allocation of Eligible Green Assets to Green Bonds covers the entire value chain of being a fully integrated utility



## Offshore & Onshore wind



### Allocated to

- €500 m October 2018 Green Senior
- €1 bn August 2019 Green Subordinated
- €500 m June 2020 Green Subordinated
- €500 m August 2021 Green Subordinated
- €1 bn November 2022 Green Senior
- €1.5 bn November 2023 Green Senior



## Solar



### Allocated to

- €500 m October 2018 Green Senior
- €1 bn August 2019 Green Subordinated
- €500 m June 2020 Green Subordinated
- €500 m August 2021 Green Subordinated
- €1 bn November 2022 Green Senior
- €1.5 bn November 2023 Green Senior



## Electricity distribution infrastructure



### Allocated to

- €1 bn November 2022 Green Senior
- €1.5 bn November 2023 Green Senior



## EV charging infrastructure



### Allocated to

- €500 m October 2018 Green Senior
- €500 m August 2021 Green Subordinated
- €1 bn November 2022 Green Senior
- €1.5 bn November 2023 Green Senior



# Key credit strengths



## High share of low-risk business

- Target: >70% share of regulated grids and mainly contracted/guaranteed renewables earnings
- Growing number of green PPAs



## Attractive investments in energy transition

- €40 bn 2024-30 gross investments: 60% in grids, 30% in renewables and low-carbon dispatchable generation, 10% e-mobility
- >85% taxonomy-aligned capex



## Strict balance sheet management and high credit ratings

- Commitment to solid investment grade ratings
- Debt repayment potential 41% in 2023; target of >15%
- High diversification of funding sources



## Robust capital market funding used for sustainable investments

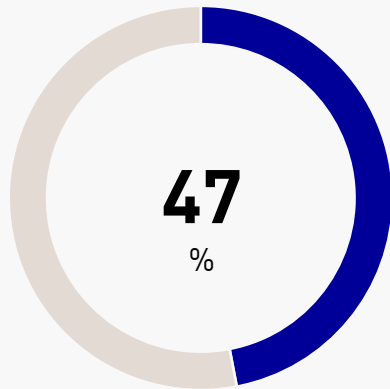
- €2 bn Commercial Paper & €10 bn Debt Issuance Programme
- €5.6 bn bilateral bank lines & €1.5 bn syndicated loan facility
- €5.5 bn green bonds outstanding



- 19 Segment overview
- 27 Net debt
- 28 Retained cash flow
- 29 Total investments
- 30 Financial calendar
- 31 IR contacts
- 32 Important note

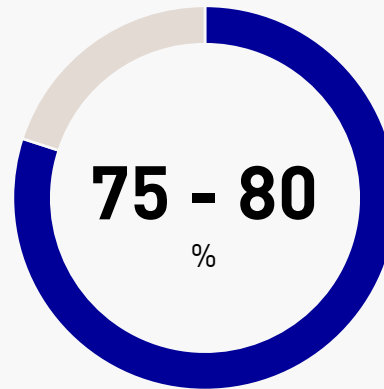
# Sustainable Generation Infrastructure

## Share of generation capacity accounted for by renewables 2023



in GW	2023
Thermal power plants	6.5
Renewable Energies	5.7
<b>Installed output</b>	<b>12.2</b>

## Share of generation capacity accounted for by renewables target 2030



in GW	2023
Renewable Energies	10 - 11.5

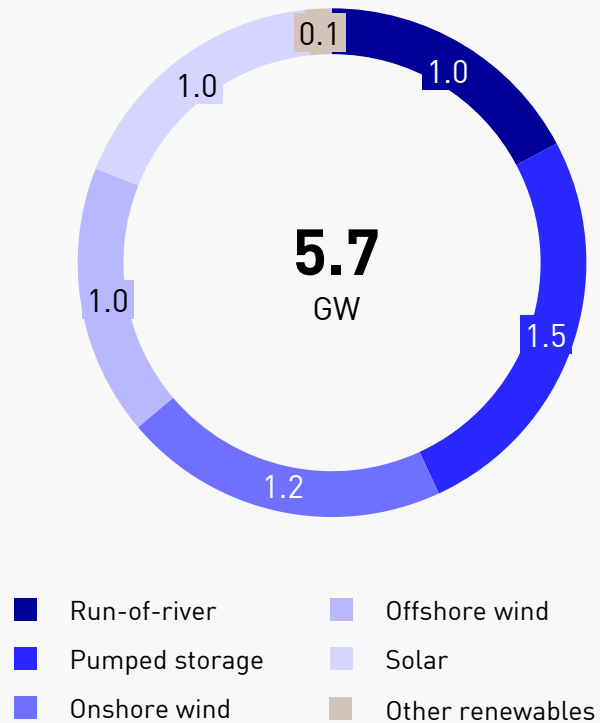
## Energy trading

- EnBW follows a risk mitigating hedging strategy focused on reducing the earnings impact from price fluctuations
- Forward hedging up to 3 years in advance of our expected electricity generation, whilst also hedging the prices for necessary fuels and emission allowances
- Sales contracts closed on back-to-back basis
- Hedge levels<sup>1</sup>  
2024: already almost fully hedged,  
2025: 70 - 90%, 2026: 30 - 60% , 2027: 0 - 20%

<sup>1</sup> As of 31 March 2024.

# Sustainable Generation Infrastructure Renewable energies

## Generation capacity renewable energies 2023



- **Adj. EBITDA:** €1.1 bn  
Share of total adj. EBITDA: 17%
- **Generation capacity:** 5.7 GW, share of 47%
- **Electricity generated:** 13 TWh, share of 48%
- **Investments:** €0.6 bn
- **Under construction:** 137 MW onshore and 320 MW solar in Germany, 960 MW offshore in Germany
- **Employees:** 1,309

# Our lighthouse projects – offshore wind

He Dreiht



<b>Location</b>	Germany, North Sea
<b>Capacity</b>	960 MW 64 turbines (Vestas V236 15 MW)
<b>Area</b>	63 km <sup>2</sup>
<b>Water depth</b>	38 - 41 m
<b>Commissioning</b>	2025
<b>Remuneration</b>	Without EEG funding >50% capacity secured via PPAs
<b>Shareholders</b>	50.1% EnBW 49.9% consortium of Allianz Capital Partners, AIP and Norges Bank Investment Management

Mona and Morgan



<b>Location</b>	UK, 30 km off the coast of Britain
<b>Capacity</b>	3 GW (leases)
<b>Area</b>	~300 km <sup>2</sup> Morgan ~500 km <sup>2</sup> Mona
<b>Water depth</b>	35 m
<b>Commissioning</b>	2029/30e Depending on grid connection
<b>Remuneration</b>	CfD, PPA and/or merchant offtake in 55 years operation time
<b>Shareholders</b>	50% EnBW 50% bp

Morven



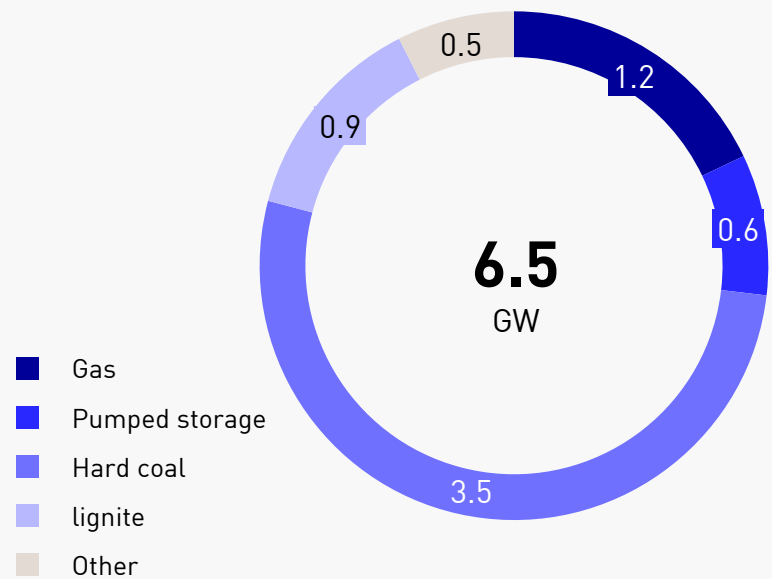
<b>Location</b>	UK, 60 km off the coast from Aberdeen
<b>Capacity</b>	~2.9 GW
<b>Area</b>	~860 km <sup>2</sup>
<b>Water depth</b>	65 - 75 m
<b>Commissioning</b>	2035e Depending on grid connection
<b>Remuneration</b>	CfD, PPA and/or merchant offtake in 55 years operation time
<b>Shareholders</b>	50% EnBW 50% bp



# Sustainable Generation Infrastructure

## Thermal Generation

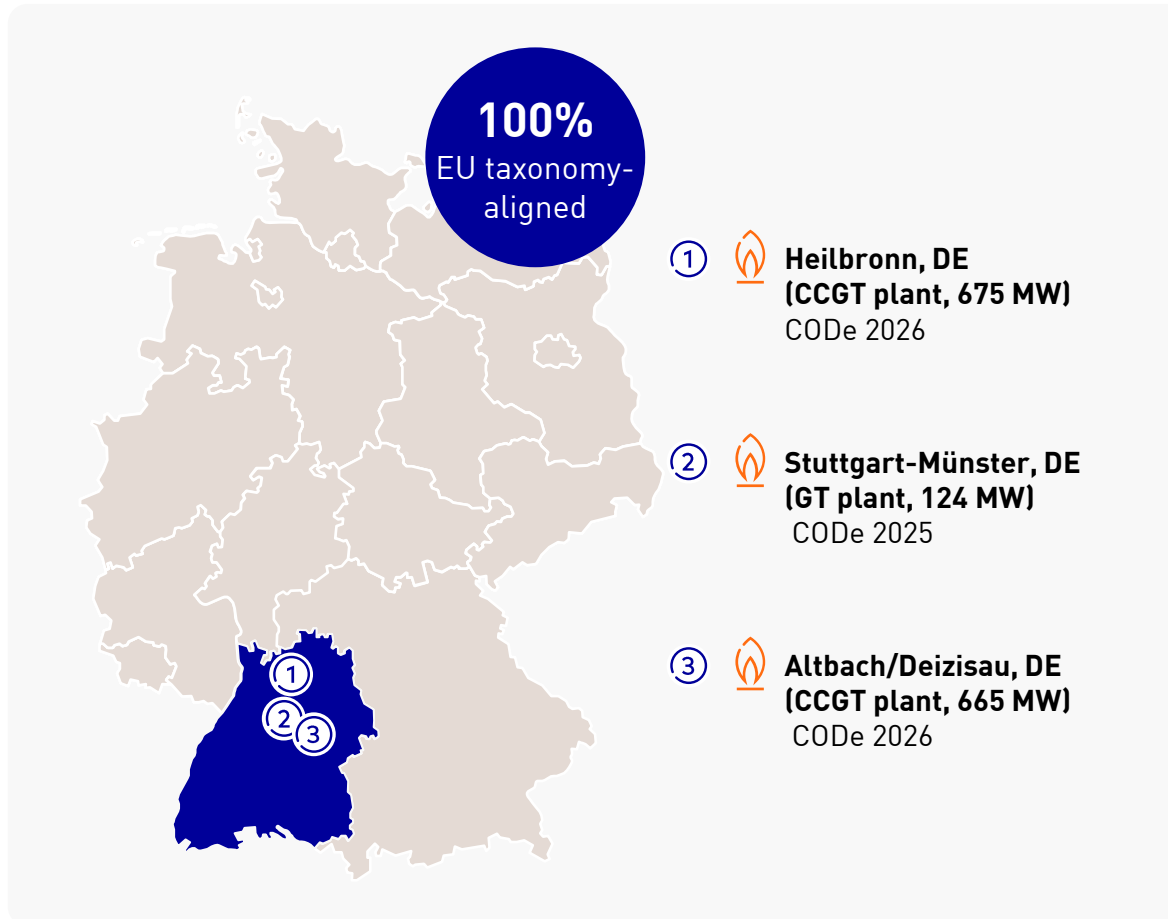
### Generation capacity thermal power plants 2023



- > • **Coal based revenues:** 4%
- **Own CO<sub>2</sub> emissions YoY:** -37%

- **Adj. EBITDA** (including trading): €3.6 bn  
Share of total adj. EBITDA (including trading): 56%
- **Generation capacity:** 6.5 GW, share of 53%
- **Electricity generated:** 14 TWh, share of 52%
- **Investments:** €1.2 bn
- **Under construction:** 3 H<sub>2</sub>-ready dispatchable CCGTs, 1.5 GW in total (CODe 2025/26)
- **Employees:** 6,254

# Our lighthouse projects – fuel switch



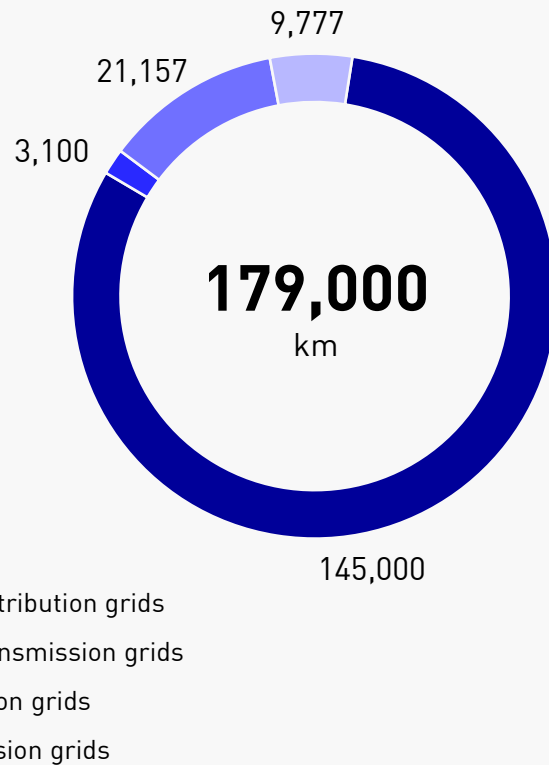
3 major fuel switch projects from coal to natural gas to climate neutral gases reduce CO<sub>2</sub> from dispatchable generation significantly

- FID March 2022
- All 3 projects under construction
- Cuts carbon emissions immediately by 55%
- Dispatchable power CCGT plants pave the way to exit coal
- Driven by heat energy transition, priority on locations with integrated district heat provision
- Keeps locations economically viable and contributes to security of supply
- Operation with climate-neutral gases from mid-2030s

# System Critical Infrastructure

## Electricity and gas grids

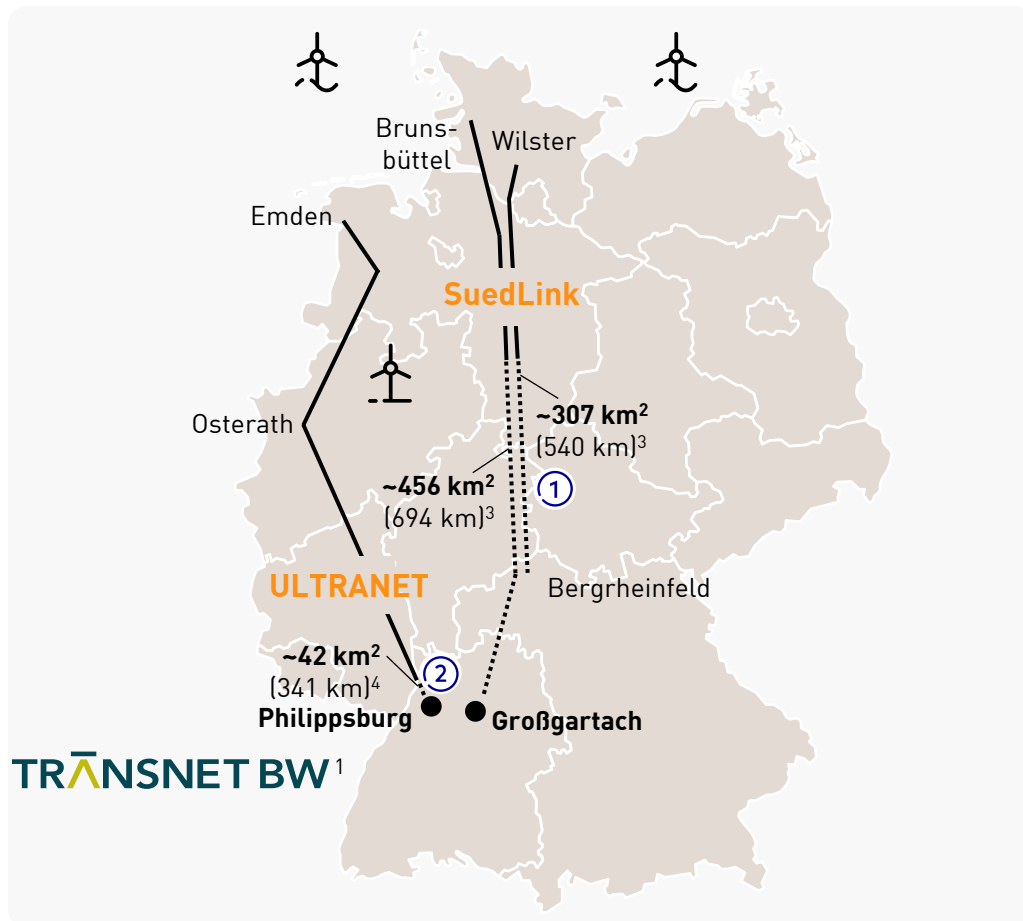
### Grid lengths 2023



- **Adj. EBITDA:** €1.8 bn  
Share of total adj. EBITDA: 28%
- **Transmission volumes:** electricity 55.8 TWh, gas 29.1 TWh
- **Investments:** €2.7 bn
- **Sale of 49.9% minority stake in TransnetBW (TSO)** to long-term partners
- **Large-scale TSO projects under construction:** Start of SuedLink converter, start for the southernmost section of ULTRANET project (both in Germany)
- **Employees:** 11,635



# Our lighthouse projects – electricity transmission grids



## Expansion of electricity transmission grids to ensure security of supply in Germany

### DC expansion

### Scheduled completion

#### **SuedLink** 4 GW corridor

2028

①

#### **TransnetBW contribution**

- Investment volume: >€5 bn
- 1 converter, ~763 km power lines<sup>2</sup>

#### **ULTRANET** 2 GW corridor

2026

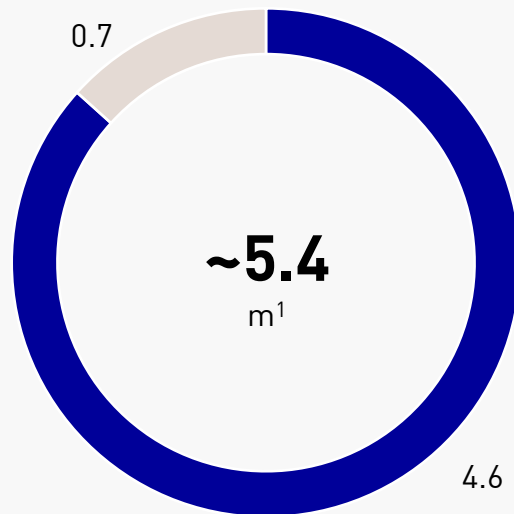
②

#### **TransnetBW contribution**

- Investment volume: €1.6 bn
- 1 converter, ~42 km power lines<sup>2</sup>

# Sustainable engagement for our customers

## B2C electricity and gas customers



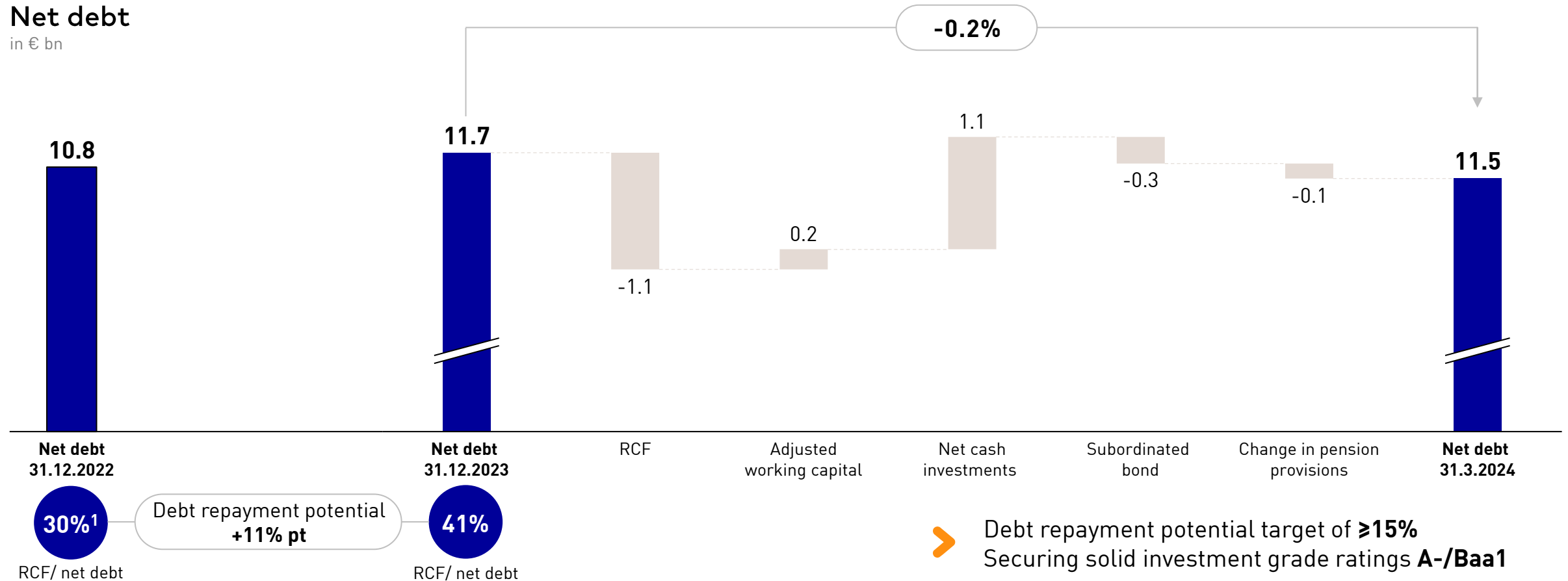
■ Electricity  
■ Gas

- **Adj. EBITDA:** €0.3 bn  
Share of total adj. EBITDA: 4%
- **B2B and B2C customers<sup>2</sup>:** 5.5 m
- **Leading charge point operator (CPO) and e-mobility provider (EMP) in Germany**  
EBITDA break-even expected 2024  
CPO: Biggest fast-charging network in Germany with >4,200 fast-charging points  
Aim: around 30,000 fast-charging points in 2030 with annual invest of up to €0.2 bn  
EMP: Access to >600,000 charging points in 17 European countries  
EnBW mobility+ app downloaded >2.4 m times
- **Investments:** €0.4 bn, mainly in e-mobility
- **Employees:** 5,711

# Net debt - investments offset by equally high RCF

## Net debt

in € bn

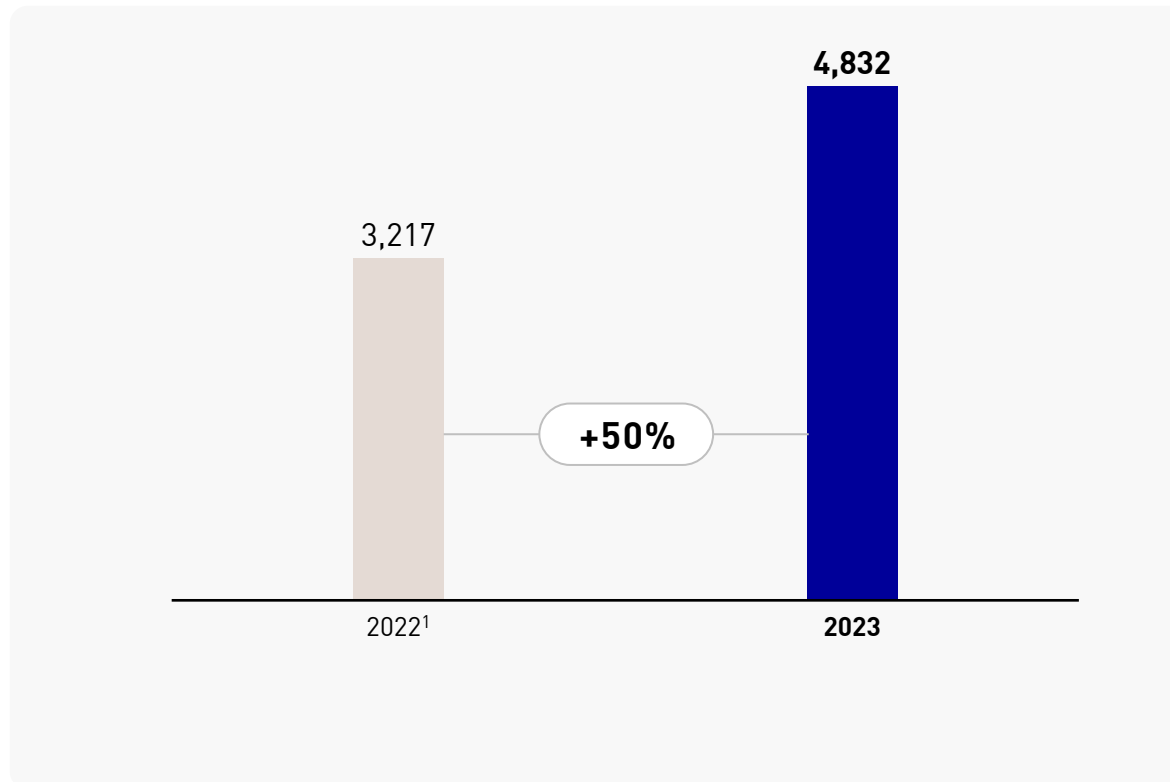


<sup>1</sup> Previous year's figures restated.

# Retained cash flow

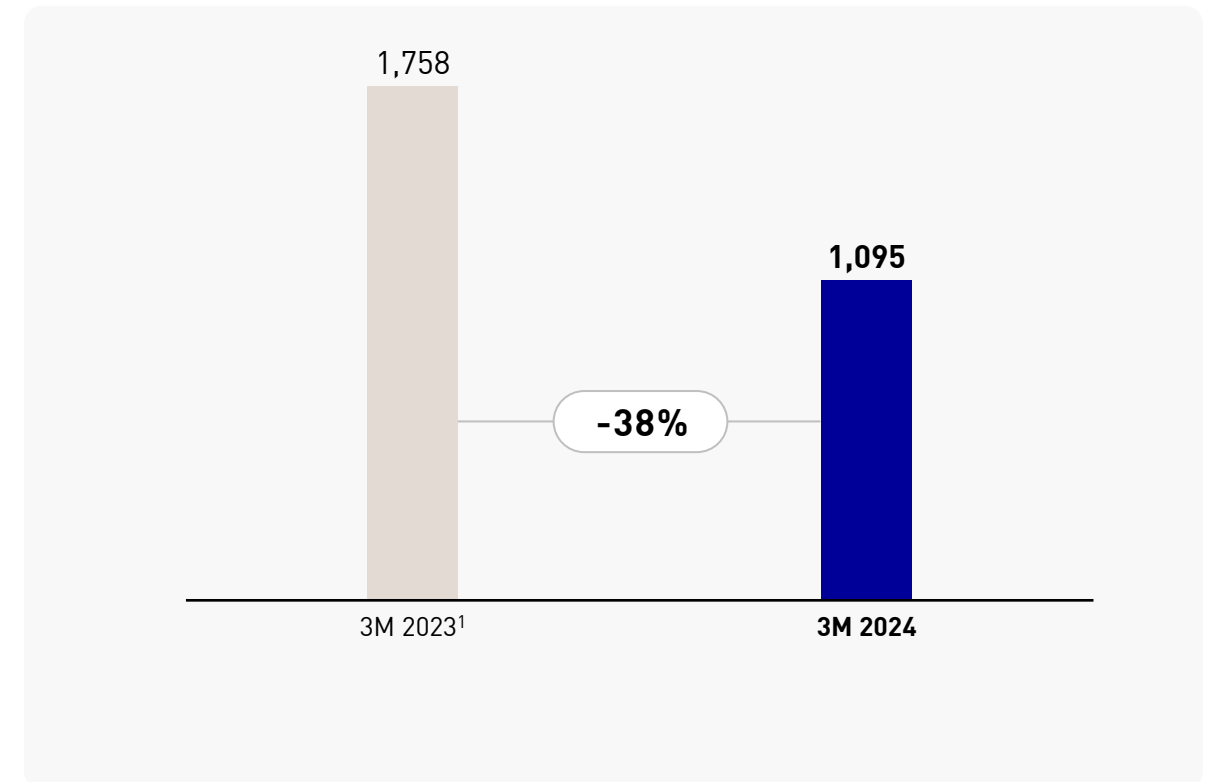
RCF increased to €~4.8 bn in light of higher FFO driven by strong operating earnings

in € m



RCF marked by lower operating earnings and higher dividends

in € m

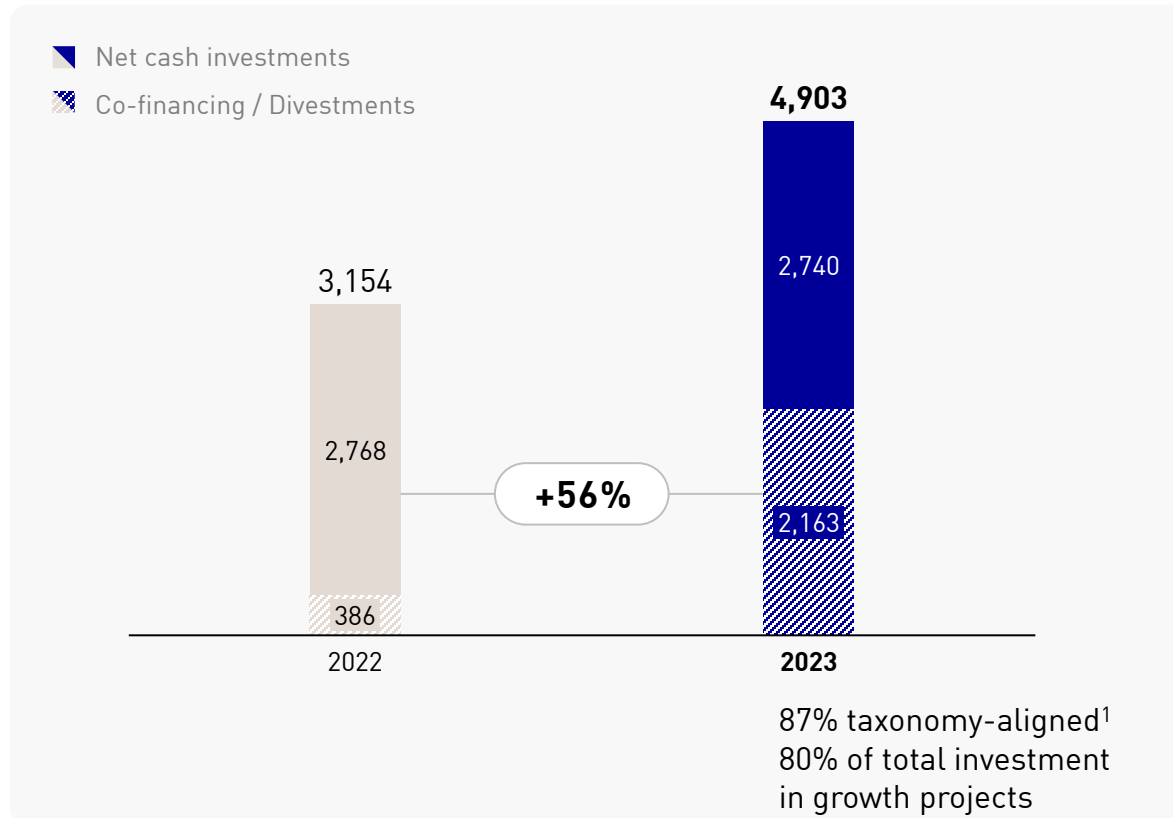


<sup>1</sup> Previous year's figures restated.

# Reinforcing our investments in the energy transition with strong focus on renewables and grid

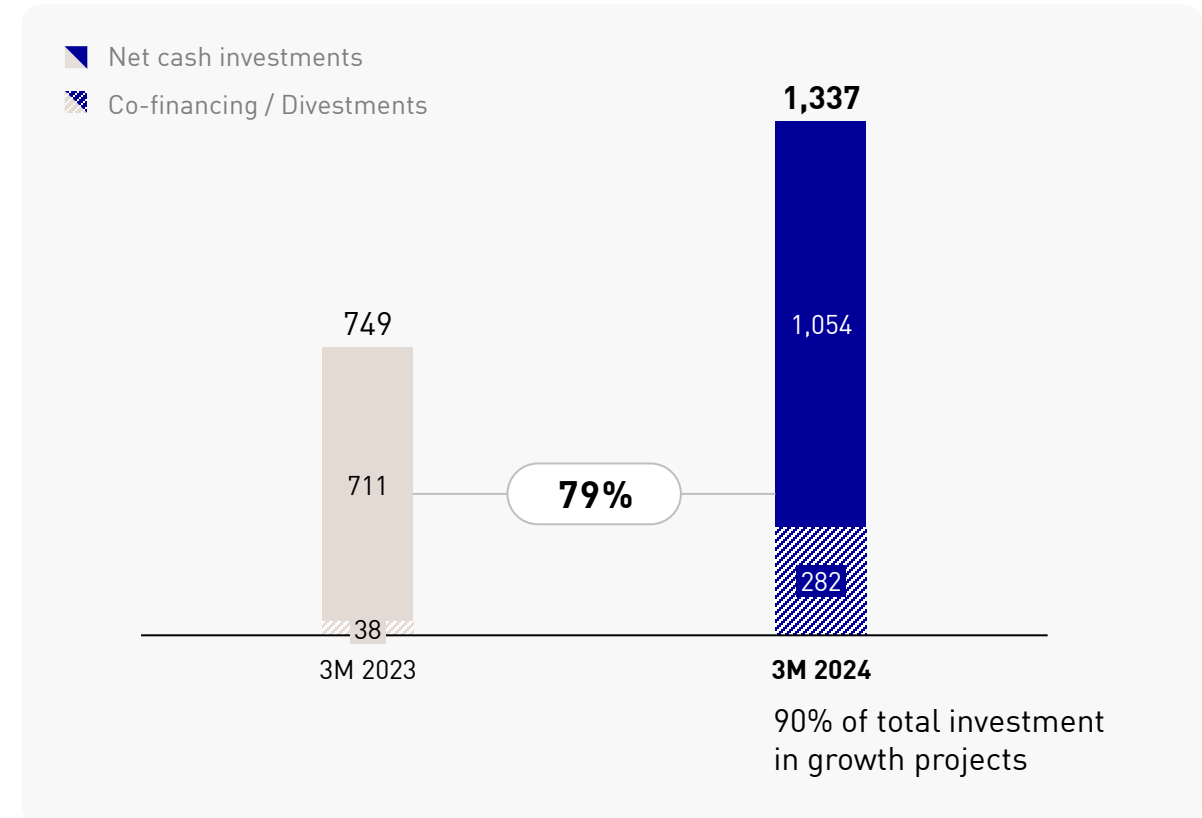
## Total investments 2023

in € m



## Total investments 3M 2024

in € m



<sup>1</sup> Taxonomy-aligned capex according to the EU taxonomy definition incl. expanded capex for our taxonomy-compliant at equity business activities.

# Financial calendar and important links

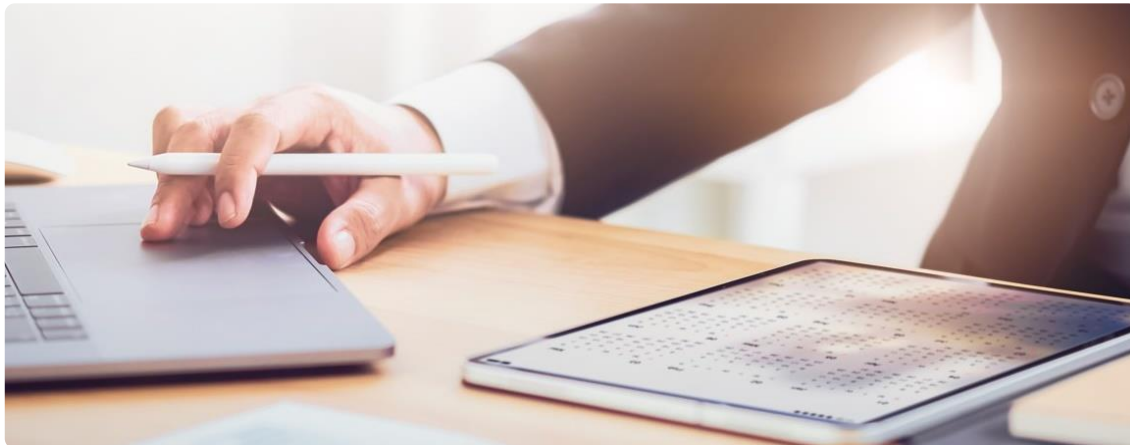
## Upcoming events



**Publication of figures for 6M 2024**  
 09 August 2024, 01:00 p.m. CEST  
 Investor and analyst conference call



**Publication of figures for 9M 2024**  
 12 November 2024, 01:00 p.m. CET  
 Investor and analyst conference call



## Important links



**Integrated Annual Report 2023** [Download now](#) (PDF, 4.7 MB)

**Green Bond Impact Report 2023** [Download now](#) (PDF, 3.6 MB)

**Factbook 2023** [Download now](#) (PDF, 11.5 MB)


**ESG Figures 2023** [Download now](#) (XLS, 128 KB)

**ESG Factbook 2024** [Download now](#) (PDF, 8.6 MB)

**EnBW Climate Transition Plan 2024** [Download now](#) (PDF, 2.5 MB)

**EnBW Investor website** [Open in browser now](#)

# IR contacts

 EnBW Investor website

 [investor.relations@enbw.com](mailto:investor.relations@enbw.com)



**Marcel Münch**  
SVP Finance, M&A  
and Investor Relations  
 +49 721 63 16 102  
 [ma.muench@enbw.com](mailto:ma.muench@enbw.com)



**Lenka Zikmundova**  
Head of Investor Relations  
 +49 721 63 12 210  
 [l.zikmundova@enbw.com](mailto:l.zikmundova@enbw.com)



**Julia von Wietersheim**  
Senior Manager  
Investor Relations  
 +49 721 63 10 060  
 [j.vonwietersheim@enbw.com](mailto:j.vonwietersheim@enbw.com)





**Lea Gantz**  
Manager  
Investor Relations  
 +49 721 63 13 646  
 [l.gantz@enbw.com](mailto:l.gantz@enbw.com)



**Regina Martin**  
Manager  
Investor Relations  
 +49 721 63 13 613  
 [r.martin@enbw.com](mailto:r.martin@enbw.com)



**Julia Reinhardt**  
Manager  
Investor Relations  
 +49 721 63 12 697  
 [julia.reinhardt@enbw.com](mailto:julia.reinhardt@enbw.com)

# Important note

## No offer or investment recommendation

This presentation is prepared for information purposes only. It does not constitute an offer, an invitation or a recommendation to purchase or sell securities and other financial instruments issued by EnBW AG, a company of the EnBW Group or any other company. Our presentation does not constitute a request, solicitation or recommendation to vote or give consent. All descriptions, examples and calculations in this publication is for illustrative purposes only.

## Information contained in this presentation

The information contained in this presentation has been provided by EnBW and has not been verified independently. Unless otherwise stated, EnBW is the source of information. Unless indicated otherwise, all data contained herein refers to the EnBW Group and is calculated according to IFRS. Statements contained in this presentation regarding past events or performance should not be taken as a guarantee of future events or performance. Accordingly, EnBW makes no representations as to the accuracy or completeness of that information and such information should not be relied upon as being comprehensive or accurate.

## Non-IFRS figures

This presentation contains certain financial measures (including forward-looking measures) that are not calculated in accordance with IFRS and are therefore considered as "Non-IFRS financial measures". The management of EnBW believes that the Non-IFRS financial measures used by EnBW, when considered in conjunction with (but not in lieu of) other measures that are computed in accordance with IFRS, enhance an understanding of EnBW's results of operations, financial position or cash flows. These Non-IFRS financial measures should not be considered in isolation as a measure of EnBW's profitability or liquidity, and should be considered in addition to, rather than as a substitute for, net income and the other income or cashflow data prepared in accordance with IFRS. In particular, there are material limitations associated with the use of Non-IFRS financial measures, including the limitations inherent in the determination of each of the relevant adjustments. The Non-IFRS financial measures used by EnBW may differ from, and not be comparable to, similarly-titled measures used by other companies.

## Rounding

Certain numerical data, financial information and market data (including percentages) in this presentation have been rounded according to established commercial standards. As a result, the aggregate amounts (sum totals or interim totals or differences or if numbers are put in relation) in this presentation may not correspond in all cases to the amounts contained in the underlying (unrounded) figures appearing in the consolidated financial statements. Furthermore, in tables and charts, these rounded individual figures and percentages may not add up precisely to totals or subtotals contained in tables or mentioned elsewhere in this presentation.

## Forward-looking statements

This presentation, which has been prepared by EnBW, includes statements that are, or may be deemed to be, "forward-looking statements", which can be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "plans", "projects", "anticipates", "expects", "intends", "may", "will", "should" or, in each case, their negative or other variations or comparable terminology. These forward-looking statements include matters that are not historical facts and include statements regarding EnBW's intentions, beliefs or current expectations. In so far as forecasts or expectations are expressed herein or where statements concern the future, these forecasts, expectations or statements may involve known or unknown risks and uncertainties.

Actual results or developments may vary, depending on changes in the operating environment. Any forward-looking statements in this presentation reflect EnBW's view with respect to future events as at the date of this presentation and are subject to risks relating to future events and other risks, uncertainties and assumptions relating to the Company's operations, results or operations, growth strategy and liquidity. Neither EnBW nor its group companies nor any of their respective officers, employees or affiliates nor any other person shall assume an obligation to update the forecasts, expectations or statements contained in this presentation or to reflect new events or circumstances or to correct any inaccuracies which may become apparent subsequent to the date hereof. Neither EnBW nor its group companies nor any of their respective officers, employees or affiliates nor any other person shall assume or accept any responsibility, obligation or liability whatsoever (in negligence or otherwise) for any loss howsoever arising from any use of this presentation or the statements contained herein as to any statements of future expectations and other forward-looking statements, or the fairness, accuracy, completeness or correctness of statements contained herein.

## Intellectual Property Rights

The contents of this presentation, including but not limited to all designs, text, images, and charts, are the property of EnBW or its licensors and may be protected by copyright and other intellectual property laws. The unauthorized use, reproduction, or distribution of any material from this presentation without the prior written consent of EnBW is strictly prohibited.



## EnBW Energie Baden-Württemberg AG

### Investor Relations

✉ [investor.relations@enbw.com](mailto:investor.relations@enbw.com)

☎ +49 721 63-12060

Durlacher Allee 93

76131 Karlsruhe, Germany

Companies registered office: Karlsruhe, Germany

Local court Mannheim · HRB no. 107956

Chairman of the Supervisory Board: Lutz Feldmann

Board of management: Dr. Georg Stamatelopoulos (Chairman), Thomas Kusterer (Deputy Chairman),

Dirk Güsewell, Peter Heydecker, Colette Rückert-Hennen