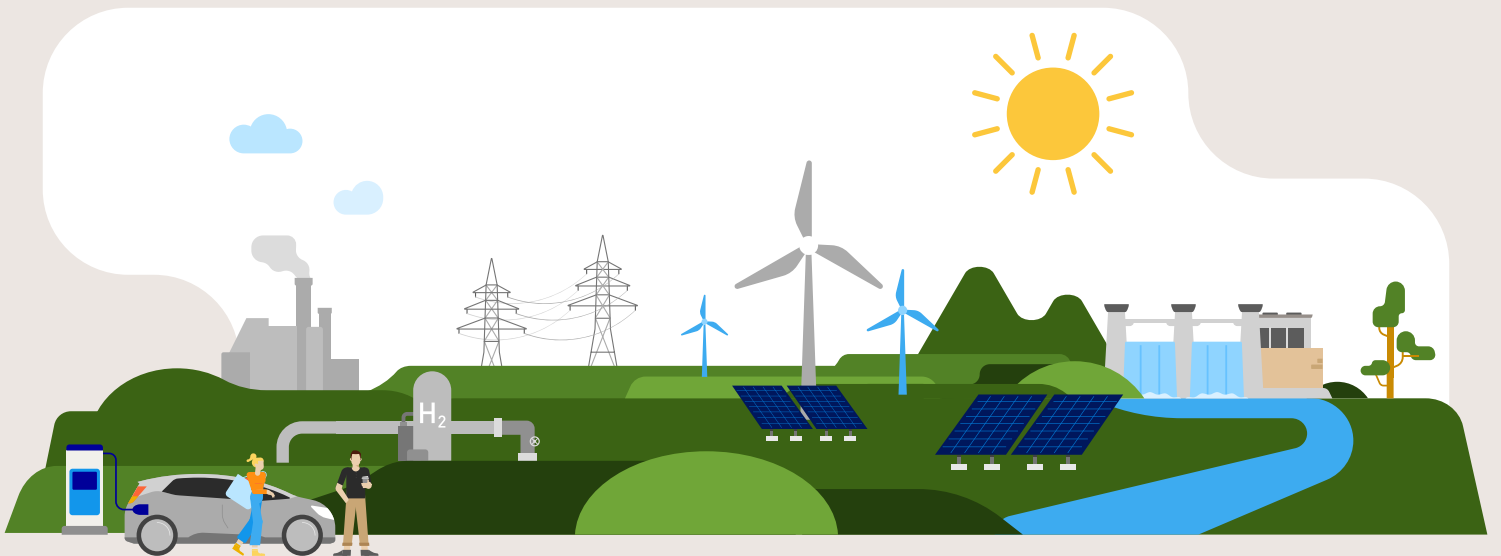


# Shaping the future with energy



Integrated  
Annual Report 2023

# Performance indicators of the EnBW Group

## Financial and strategic performance indicators

in € million	2023	2022	Change in %
External revenue	44,430.7	56,002.6	-20.7
<b>TOP</b> Adjusted EBITDA <sup>1</sup>	6,365.2	3,967.1	60.4
<b>TOP</b> Share of adjusted EBITDA accounted for by Smart Infrastructure for Customers in € million/in % <sup>1</sup>	239.5/3.8	498.4/12.6	-51.9/-
<b>TOP</b> Share of adjusted EBITDA accounted for by System Critical Infrastructure in € million/in % <sup>1</sup>	1,772.0/27.8	1,057.8/26.7	67.5/-
<b>TOP</b> Share of adjusted EBITDA accounted for by Sustainable Generation Infrastructure in € million/in % <sup>1</sup>	4,647.6/73.0	2,616.2/65.9	77.6/-
Share of adjusted EBITDA accounted for by Other/Consolidation in € million/in % <sup>1</sup>	-293.9/-4.6	-205.3/-5.2	-43.2/-
EBITDA	5,738.3	4,473.2	28.3
Adjusted EBIT <sup>1</sup>	4,678.9	2,351.9	98.9
EBIT	3,341.3	2,141.2	56.0
Adjusted Group net profit <sup>1,2</sup>	2,779.5	1,413.1	96.7
Group net profit <sup>2</sup>	1,537.6	1,738.0	-11.5
EnBW share price as of 31/12	79.20	87.00	-9.0
Earnings per share from Group net profit (€) <sup>2</sup>	5.68	6.42	-11.5
Dividend per share (€) / dividend payout ratio in % <sup>3,4</sup>	1.50/15	1.10/31	36.4/-
Retained cash flow <sup>1</sup>	4,831.5	3,216.5	50.2
<b>TOP</b> Debt repayment potential in % <sup>1,5</sup>	41.3	29.7	-
Net cash investment	2,739.8	2,767.7	-1.0
Net debt <sup>5</sup>	11,703.1	10,847.0	7.9
Net financial debt <sup>5</sup>	7,558.2	7,214.2	4.8
Return on capital employed (ROCE) in % <sup>1</sup>	17.6	10.9	-
Weighted average cost of capital before tax in %	7.4	6.8	-
Average capital employed	27,310.0	22,690.5	20.4
<b>TOP</b> Value spread in % <sup>1</sup>	10.2	4.1	-

## Non-financial performance indicators

	2023	2022	Change in %
<b>Customers and society goal dimension</b>			
<b>TOP</b> Reputation Index	55	58	-5.2
<b>TOP</b> EnBW/Yello Customer Satisfaction Index	130/161	139/166	-6.5/-3.0
<b>TOP</b> SAIDI electricity in min./year	19.3	16.6	16.3
<b>Environment goal dimension</b>			
<b>TOP</b> Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %	5.7/46.9	5.4/41.7	5.6/12.5
<b>TOP</b> CO <sub>2</sub> intensity in g/kWh <sup>6</sup>	347	491	-29.3
<b>Employees goal dimension</b>			
<b>TOP</b> People Engagement Index (PEI) <sup>7</sup>	82	81	1.2
<b>TOP</b> LTIF for companies controlled by the Group <sup>8,9</sup> / LTIF overall <sup>8</sup>	2.4/3.7	2.6/4.1	-7.7/-9.8

## Employees<sup>10</sup>

	31/12/2023	31/12/2022	Change in %
Employees	28,630	26,980	6.1
Employee equivalents <sup>11</sup>	26,943	25,339	6.3

1 The figures for the previous year have been restated.

2 In relation to the profit/loss attributable to the shareholders of EnBW AG.

3 The dividend payout ratio for 2022 was calculated based on the adjusted Group net profit before the restatement of the figure for the previous year.

4 For 2023, subject to approval from the ordinary Annual General Meeting on 07/05/2024.

5 For the calculation of the net debt and debt repayment potential, please refer to the section "The EnBW Group" of the management report.

6 The calculation for this performance indicator does not include nuclear generation and the share of positive redispatch that cannot be controlled by EnBW. If the share of positive redispatch that cannot be controlled by EnBW is taken into account, CO<sub>2</sub> intensity would be 393 g/kWh for the reporting year (previous year: 508 g/kWh). CO<sub>2</sub> intensity including nuclear generation for the reporting year was 366 g/kWh (previous year: 401 g/kWh). We publish a five-year comparison of the performance indicators in our "Multi-year overview" on p. 312<sup>7</sup>.

7 Variations in the group of consolidated companies (all companies with more than 100 employees are considered [except ITOs]).

8 The LTIF for companies controlled by the Group excluding waste management and LTIF overall, which includes the area of waste management, only includes companies with more than 100 employees excluding external agency workers and contractors.

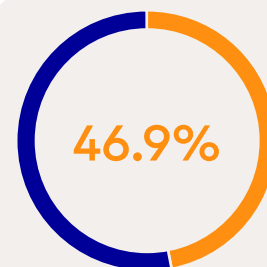
9 Newly fully consolidated companies are not included for a maximum transition period of three years.

10 Number of employees excluding apprentices/trainees and inactive employees.

11 Converted into full-time equivalents.

## Selected performance indicators 2023

# EnBW at a glance



The share of the generation capacity accounted for by renewable energies (RE)

Expansion in RE capacity: 284 MW

More details on p. 93 f.<sup>7</sup>

in MW	2023
● Thermal power plants	6,498
● Renewable energies	5,728
Installed output	12,226

Our business portfolio is split into three segments:



Smart Infrastructure for Customers

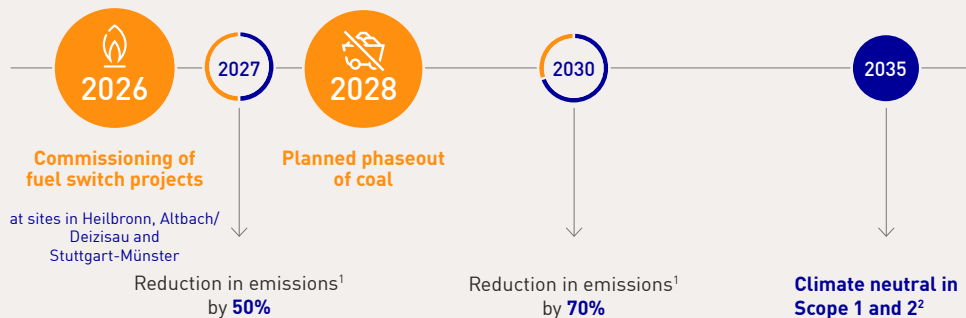


System Critical Infrastructure



Sustainable Generation Infrastructure

## Our climate protection goals



<sup>1</sup> Reduction in Scope 1 and 2 emissions compared to the reference year 2018.

<sup>2</sup> Achievement of our climate protection targets in line with the 1.5 degree path of the Paris Agreement.

More details on p. 30 ff.<sup>7</sup>



## -29.3%

reduction in CO<sub>2</sub> intensity

347 g/kWh

More details on p. 95 ff.<sup>7</sup>

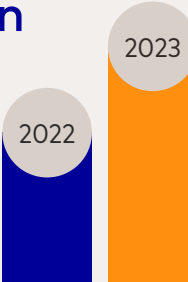


## €6.4 billion

adjusted EBITDA

More details on

p. 71 f.<sup>7</sup>





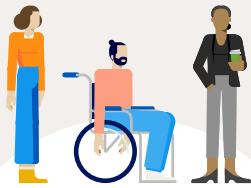
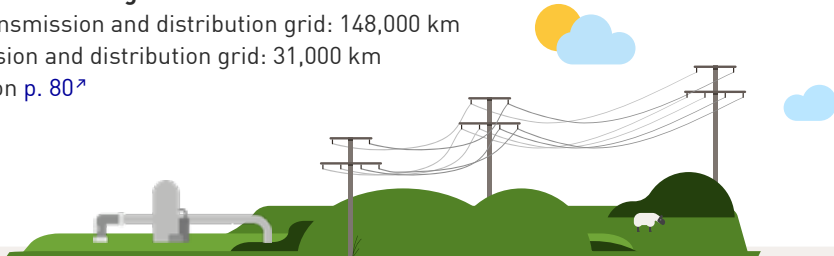
# €2,671.9 million

## gross investment in the System Critical Infrastructure segment

Electricity transmission and distribution grid: 148,000 km

Gas transmission and distribution grid: 31,000 km

More details on [p. 80](#)<sup>↗</sup>



## People Engagement Index (PEI)

# 82 points

More details on [p. 101](#)<sup>↗</sup>



# Over 600,000

## charging points in the EnBW HyperNetwork

in 17 countries in Europe (as of March 2024)

More details on [p. 90](#)<sup>↗</sup>



# 28,630

## employees and 1,212 trainees and students

More details on [p. 104](#)<sup>↗</sup>



# 5.5 million

## customers B2C and B2B

More details on [p. 25](#)<sup>↗</sup>



# €5.5 billion

## green bonds (as of January 2024)

successfully placed on the market since 2018

More details on [p. 32](#)<sup>↗</sup>



# Contents

- 1 Performance indicators of the EnBW Group
- 2 Selected performance indicators 2023 – EnBW at a glance
- 5 Service
- 7 Letter to shareholders
- 10 Report of the Supervisory Board
- 14 The Board of Management

## Combined management report of the EnBW Group and EnBW AG

### Fundamentals of the Group

- 17 Business model
- 26 Strategy, goals and performance management system
- 37 Corporate governance
- 42 In dialog with our stakeholders
- 47 Research, development and innovation
- 52 Procurement

### Business report

- 58 General conditions
- 69 The EnBW Group
- 117 EnBW AG
- 123 Overall assessment of the economic situation of the Group
- 124 Forecast
- 130 Report on opportunities and risks
- 142 Disclosures pursuant to sections 289a (1) and 315a (1) German Commercial Code (HGB) and explanatory report of the Board of Management
- 145 Indexes and tables

### Declaration of the legal representatives

- 160 Declaration of the legal representatives

### Declaration of corporate management

- 161 Declaration of corporate management

### Financial statements of the EnBW Group

- 175 Income statement
- 176 Statement of comprehensive income
- 177 Balance sheet
- 178 Cash flow statement
- 179 Statement of changes in equity
- 180 Notes to the 2023 financial statements of the EnBW Group
- 202 Notes to the income statement and the balance sheet
- 239 Other disclosures
- 289 Independent auditor's report

### Corporate bodies

- 303 The Supervisory Board
- 306 Offices held by members of the Board of Management
- 307 Other offices held by members of the Supervisory Board

### Further information

- 311 Multi-year overview
- 314 Glossary
- 321 Important notes
- 322 Financial calendar and imprint



# About this report

## Integrated reporting

Further information on **integrated reporting** at EnBW can be found on our website.

[Online ↗](#)

We have been publishing an Integrated Annual Report based on the recommendations of the International Integrated Reporting Framework since 2014, which combines the traditional contents of a financial report with a sustainability report. We do this in order to provide a holistic representation of the performance of the company. The dimensions of ecology, economy and social aspects are firmly embedded in the EnBW 2025 strategy, reflecting the highly integrated nature of our corporate management system. An important element is measuring the achievement of our goals using key performance indicators.

## Important aspects of reporting

Further information on our **experiences with applying the EU sustainable finance taxonomy** can be found here.

[Online ↗](#)

EnBW started reporting on the EU taxonomy on a voluntary basis in the 2020 financial year and has been continuously developing its reporting since then. Alongside the environmental objectives “climate change mitigation” and “climate change adaptation,” the other four environmental objectives “sustainable use and protection of water and marine resources,” “pollution prevention and control,” “transition to a circular economy” and “protection and restoration of biodiversity and ecosystems” are now also being taken into account for the first time in the 2023 financial year. Alongside the information on revenue, capex and opex required by the Taxonomy Regulation, we also report on the taxonomy KPIs for adjusted EBITDA and capex including the proportion for entities accounted for using the equity method (expanded capex).

The reporting period comprises the 2023 financial year. We took into account all relevant information up to 11 March 2024. The identification of key themes for our reporting is anchored in the materiality analysis process [\(p. 43<sup>7</sup>\)](#).

Our reporting is based on the International Integrated Reporting Framework and the recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD) [\(p. 146<sup>7</sup>\)](#). The reporting of sustainability issues is based on the GRI Standards, including the Electric Utilities Sector Supplement. EnBW has reported for the period from 1 January to 31 December 2023 in compliance with the GRI Standards. An audit will be carried out in the second quarter of 2024 as part of the GRI content index service. Our sustainability reporting also complies with the Communication on Progress (COP) requirements for the UN Global Compact and is based to an increasing extent on the UN Sustainable Development Goals.

Further information on the **GRI content index** can be found here.

[Online ↗](#)

## Presentation and auditing

The information about the net assets, financial position and results of operations of the EnBW Group is based on the requirements of the International Financial Reporting Standards (IFRS), and, where applicable, the German Commercial Code (HGB) and German Accounting Standards (GAS). On the basis of our integrated reporting, the non-financial declaration [\(p. 145f.<sup>7</sup>\)](#) pursuant to sections 315b and 289b HGB is fully integrated into the combined management report of the EnBW Group and EnBW AG and was audited with reasonable assurance by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft. Any differences between statements made for the EnBW Group and for EnBW AG are clearly identified in the text.


# A brief explanation of our Integrated Annual Report

## How to read this report:

**Link** ↗ Jump marks are linked to content within the PDF.

**Online** ↗ The "Online" button links you to additional content on the Internet.

**TOP** Key performance indicators

 We have labeled all activities that made a contribution to the implementation of the EnBW Sustainability Agenda in the reporting period with this symbol.

Cross-references and Internet links do not form part of the audited management report.



Visit our Integrated Annual Report online. There you will find further information such as videos, key figure comparisons and much more.

**Online** ↗

## Overview of the 2023 financial publications



### Integrated Annual Report 2023

The report includes the combined management report of the EnBW Group and EnBW AG, the declaration of corporate management and the financial statements of the EnBW Group.



### Declaration of corporate management 2023

This document is included in the Integrated Annual Report and is also available as a separate publication.

These and other documents such as tables and graphics can be found in our download center.

**Online** ↗



### Financial statements of EnBW AG 2023



### Remuneration report of EnBW AG 2023

All publications are exclusively available online.





**Dr. Georg Stamatelopoulos**  
Chairman of the  
Board of Management

## Dear Readers,

As we look back on an eventful year marked by a prolonged war in Europe and weak growth in the European Union, EnBW has been able to show during this period that it is in a strong position and capable of quickly adapting to political and social change.

In 2023, we used all available production capacity at our power plant sites both on the market and to stabilize to grid. We have further expanded our renewable energy capacity, secured gas from additional sources and continued to keep supplies for our customers at the highest level. The crises of recent years have not stopped us from striving to achieve an ambitious goal: We want to become a climate-neutral company by 2035.

# 2035

is the year by which we want  
to achieve **climate neutrality** in  
Scopes 1 and 2.

We had this target certified by the Science Based Targets initiative (SBTi) in 2023. As far as renewable energy sources are concerned, we are already seeing positive developments: Last year, for the first time, they covered more than half of Germany's gross electricity consumption. In June, electricity generated by photovoltaic power plants in Germany reached a new all-time record figure of 9.8 billion kWh. As EnBW, we played our part last year with considerable investment, increasing the share of renewable energy sources in our generation capacity from around 42% to just under 47%.



## 1.1 million

households could be supplied with electricity following the construction of the **EnBW offshore wind farm He Dreiht**.

In addition, we have taken the decision to press ahead with a milestone project: the construction of our offshore wind farm aptly named He Dreiht – Low German for “It Spins.” With an output of 960 MW, it will be capable of supplying the equivalent of around 1.1 million households – or the residents of an entire city – with electricity. And it shouldn’t be forgotten that we will not receive any EEG funding for this project and will only generate revenue from operating the wind farm on the market, either through direct electricity sales or through long-term power purchase agreements (PPAs) with industrial companies.

For the energy transition to succeed, we also need to invest in flexible power plant capacity that is available at all times. This will become the natural partner of renewable energy sources at times when they are unable to cover the demand due to weather conditions or when the grid needs to be stabilized. Last year, we celebrated the start of construction work on our power plant modernization projects in Altbach/Deizisau and Stuttgart-Münster, followed by Heilbronn in February of this year. Lower-emission gas power plants are being built at all three sites, which are set to be powered by climate-neutral hydrogen in the 2030s. The previous coal power plants will be decommissioned once the new plants have been commissioned.

“The measures we put in place today will also benefit future generations.”



These new power plants are an impressive example of the further investment that we as a company need in order to achieve our goal of achieving climate neutrality by 2035. With the power plant strategy, the German government has announced the setting of an important political course for a suitable regulatory environment for this year. Decisive steps are also set to follow in terms of the hydrogen infrastructure and support for the hydrogen market ramp-up. We will look closely at how we can prioritize our investment on this basis.

Around

## €900 million

is the sum we have invested over the past year in the **expansion of our distribution grid**.

At the same time, the expansion of renewable energy sources across a wider area and the electrification of heating and mobility will continue and in all likelihood be stepped up. That is why it remains important to expand our distribution grid. Last year, we invested around 900 million euros in strengthening and constructing power lines, upgrading substations and rolling out smart meters. In addition to the distribution grid, improving the connection with the windy north by upgrading the transmission grids is essential for securing the power supply in the south. The two major projects SuedLink and ULTRANET are making good progress – and I am delighted that construction work on the SuedLink converter in Leingarten began last year.

Around

**€200 million**

is the annual sum we invest in  
**e-mobility.**

At EnBW, however, we are not only helping to bring about the energy transition, but also the transport transition. We are investing around 200 million euros annually in e-mobility. With our quick-charging solutions, we are providing attractive conditions for e-mobility in Germany and beyond – within the EnBW HyperNetwork, our customers can now charge their vehicles at over 600,000 points in 17 different countries (as of March 2024).

In the 2023 financial year, we achieved an adjusted EBITDA of 6.4 billion euros. This is a strong result that will allow us to pursue our ambitious investment program for the energy transition. We will be investing a gross figure of around 40 billion euros until 2030 – in renewable energy sources, in grids, in available power and in digital solutions for our customers. Most of the funds are being invested in projects in Germany. We are taking on a great deal of responsibility here, because this new infrastructure is designed to last for several decades. Our work is visible, our decisions are made for the long-term. The measures we put in place today will also benefit future generations. It is clear that the energy transition holds huge potential for us at EnBW, but above all for the future viability of the place we call home. Our investment in the energy transition provides the best protection against crises. It will make us less dependent on imports, improve our cost structures and protect our climate. I wish to thank my colleagues for their efforts over the past year. With their commitment, they have taken another step toward bringing about the energy transition. We want to continue on this path. Together, doing everything in our power.

Best regards,



Dr. Georg Stamatelopoulos  
Chairman of the Board of Management

You can also visit our website to read the Integrated Annual Report online. There you will find further information, such as our video featuring top subjects, key figure comparisons and much more besides.

[Online](#) <sup>7</sup>



**Lutz Feldmann**

- Born 1957
- Chairman of the Supervisory Board since May 2016

[Curriculum vitae ↗](#)

## Report of the Supervisory Board

The Supervisory Board dutifully and comprehensively performed all of the tasks incumbent on it in the 2023 financial year as required by law and the Articles of Association. It regularly advised the Board of Management on its management of the company and continuously accompanied and monitored all important management measures for the Group. The supervisory and advisory activities of the Supervisory Board also dealt with issues related to sustainability, in particular. The Supervisory Board was involved in all decisions of fundamental importance to the company and the Group.

The Board of Management regularly, comprehensively and promptly informed the Supervisory Board about all relevant aspects of intended business policies and other fundamental issues relating to business planning, and also provided reasons for any discrepancies between the actual development of business and the plans and targets reported at an earlier date. In the reporting period, this once again included discussions on questions relating to the war between Russia and Ukraine and its impact on the business of EnBW and its subsidiaries. In addition, the Board of Management informed the Supervisory Board about the economic position of the company and the Group including, among other things, the profitability of the company (especially the equity), the development of business (especially the revenue and earnings, the net assets, financial position and results of operations, as well as HR development at the company) and those business transactions that could be of significant importance for the profitability or liquidity of the company. Furthermore, the Board of Management informed the Supervisory Board about the risk situation of the Group and of individual areas of the Group, corporate strategy and planning, risk management, the internal control system and compliance.

### Key topics of the discussions at the plenary meetings of the Supervisory Board

In the 2023 financial year, the Supervisory Board dealt extensively with verbal and written reports and proposals for resolutions issued by the Board of Management at seven ordinary meetings on 15 February, 22 March, 11 May, 13 July, 28 September, 10 November and 7 December 2023 and two extraordinary meetings on 23 May and 27 November 2023. Furthermore, the Supervisory Board requested reports and information from the Board of Management on individual topics, which were comprehensively provided in a timely manner in each case. The discussions and resolutions at the plenary meetings of the Supervisory Board focused on the following key issues:

- Consultations and discussions with the Board of Management about the latest developments in the war between Russia and Ukraine and its impact
- Determining the level of the short-term single-year variable remuneration for members of the Board of Management for 2022 and the long-term multi-year variable remuneration for members of the Board of Management for 2020 (performance period 2020 to 2022)
- Selection of the sustainability criteria for the performance period 2024 to 2026 and defining the targets for the variable remuneration for members of the Board of Management for 2024
- Consultation on the annual compliance report and the agenda for the subsequent period
- Consultation on the annual data protection report and the agenda for the subsequent period
- Approval of the proposals to be made at the ordinary Annual General Meeting 2023, particularly those regarding the appropriation of retained earnings for the 2022 financial year, the discharge of Board of Management and Supervisory Board members, the election of the auditor for the 2023 financial year, the election of members of the Supervisory Board, approval of the remuneration report, approval of the Board of Management remuneration system for the members of the Board of Management, approval of the remuneration for members of the Supervisory Board and the amendment to articles 16 and 17 of the Articles of Association
- Approval of the remuneration report for 2022 that was produced and checked in cooperation with the Board of Management in accordance with section 162 AktG
- Approval of the annual financial statements presented by the Board of Management and endorsement of the consolidated financial statements as of 31 December 2022
- Election of the Deputy Chairman of the Supervisory Board and appointment of new members of the committees of the Supervisory Board due to a change in the employee representatives on the Supervisory Board
- Replacement and reassignment of members on the committees of the Supervisory Board due to a member leaving the Supervisory Board
- Reappointment of Thomas Kusterer, Dirk Güsewell and Dr. Georg Stamatelopoulos as members of the Board of Management
- In-depth consultations and discussions with the Board of Management about the Group and portfolio strategy EnBW 2030
- In-depth consultations and discussions with the Board of Management about long-term strategic planning (with a focus on the energy industry, market, trading, gas, expansion of renewable energies, sustainability and climate change mitigation) and consultation on portfolio discussions of selected business fields of EnBW
- Approval for the sale of shares in an offshore wind farm
- Approval for the release of bank credit lines and increasing the counterparty limits for financial investments
- Regular reporting by the Board of Management on the development of market prices for electricity, fuels and CO<sub>2</sub>
- Approval for the conclusion of a financial contract for the financing of an offshore wind farm
- Reporting on the SBTi certification
- Reporting on the status of the HR strategy
- Approval for optimizing existing LNG positions and the further expansion of LNG activities, as well as approval for the rental of additional LNG ships and conclusion of new LNG procurement contracts
- Approval for the conclusion of further contracts for the construction of broadband networks
- Approval for participation in the German offshore wind auction
- Approval for the investment decisions about new construction projects
- Approval for the sale of shares in TransnetBW
- Approval for the submission of a binding bid for participation in an offshore auction

- Consultation on the post-contractual non-competition agreement with Dr. Frank Mastiaux who stepped down as Chairman of the Board of Management on 30 September 2022
- Regular consultation on the development of the financial ratings of EnBW AG
- Revision of the Board of Management remuneration system
- Examining the appropriateness of the Board of Management and Supervisory Board remuneration
- Regular reporting by the Board of Management on the development of business activities in subsidiaries
- Regular consultation on the development of the markets relevant to EnBW
- Consultation on the self-assessment of the Supervisory Board
- Regular reporting by the Board of Management on the development of business activities in Turkey
- Regular reporting by the Board of Management on the operation, safety and, where relevant, dismantling of the nuclear power plants
- Consultation on the results of the EnBW Employee Survey 2022
- Approval of the financing strategy for 2024
- Approval for the issuing of the annual declaration of compliance and (Group) declaration of corporate management
- Approval of the budget for the 2024 financial year and acknowledgment of the medium-term planning for the period 2024 to 2026, consisting of the plans for Group earnings, finance, investment and HR, as well as for the result (HGB) and liquidity of EnBW AG; the corporate planning incorporates both financial and sustainability targets
- Approval for covering the financial needs of subsidiaries
- Approval for a budget supplement for an IT project
- Approval for the submission of binding bids for IT projects

Aside from the meetings, the Board of Management informed the Supervisory Board in writing about all business transactions of particular importance for the company or the Group. In addition, there was ongoing communication between the Chairman of the Supervisory Board and the Board of Management, particularly with the Chairman of the Board of Management, in order to discuss issues relating to strategy, planning, business development, the risk situation, risk management, compliance, the impact of the war between Russia and Ukraine, important individual transactions and currently pending decisions.

There was a consistently very high attendance rate at the individual meetings of the Supervisory Board. The majority of the members of the Supervisory Board attended all meetings of the Supervisory Board. No member of the Supervisory Board participated in less than half of the meetings.

### Work of the committees

The committees set up by the Supervisory Board once again met regularly in the 2023 financial year, so that the Supervisory Board could perform its functions efficiently. The respective members of the committees are listed on [p. 305<sup>7</sup>](#) of the Integrated Annual Report 2023. The Chairpersons of the committees regularly reported in detail on the work of the committees at each subsequent plenary meeting of the Supervisory Board.

### Corporate governance

The Supervisory Board also paid close attention to the various issues relating to corporate governance in the 2023 financial year and discussed the declaration of compliance in accordance with section 161 AktG. These topics are explained in detail in the declaration of corporate management ([p. 161ff.<sup>7</sup>](#)). The company also published the declaration of corporate management in accordance with section 289f (1) sentence 2 and section 315d sentence 2 HGB on its website.

The **declaration of corporate management** can also be found on our website as a separate document.

[Corporate governance <sup>7</sup>](#)



**Audit of the annual and consolidated financial statements**

Following a thorough examination by the audit committee, the Supervisory Board undertook a detailed review of the annual financial statements and consolidated financial statements as of 31 December 2023 that were audited and issued with an unqualified audit opinion by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, and of the combined management report including the non-financial declaration for the 2023 financial year. The final results of its own reviews did not lead to any reservations on behalf of the Supervisory Board. It approved the audit results of the independent auditor and endorsed the annual financial statements prepared by the Board of Management as of 31 December 2023 – which have thus been ratified – and the consolidated financial statements as of 31 December 2023, as well as the combined management report including the non-financial declaration for the 2023 financial year.

**Reference to the complete version of the Report of the Supervisory Board**

Further details on the topics “Work of the committees,” “Corporate governance,” “Audit of the annual and consolidated financial statements” and “Personnel changes at the level of the Supervisory Board and Board of Management” can be found in the full version of the Report of the Supervisory Board made available to the public on the company’s website.

Karlsruhe, 25 March 2024

The Supervisory Board



Lutz Feldmann  
Chairman

The full version of the **Report of the Supervisory Board** can be found here.

Corporate governance ↗

# The Board of Management

**Colette Rückert-Hennen**

- Born in 1961 in Leverkusen-Opladen
- Member of the Board of Management and Director of Personnel
- Chief Sales and Human Resources Officer since 1 March 2019
- Appointed until 28 February 2027

[Curriculum vitae <sup>7</sup>](#)**Dr. Georg Stamatelopoulos**

- Born 1970 in Athens
- Chairman of the Board of Management
- Chief Executive Officer since 9 March 2024
- Chief Operating Officer Sustainable Generation Infrastructure (on an interim basis) since 1 June 2021
- Appointed until 31 May 2029

[Curriculum vitae <sup>7</sup>](#)**Thomas Kusterer**

- Born 1968 in Pforzheim
- Deputy Chairman of the Board of Management
- Deputy Chief Executive Officer since 9 March 2024
- Chief Financial Officer since 1 April 2011
- Appointed until 31 March 2029

[Curriculum vitae <sup>7</sup>](#)**Dirk Güsewell**

- Born 1970 in Radolfzell (Bodensee)
- Member of the Board of Management
- Chief Operating Officer System Critical Infrastructure since 1 June 2021
- Appointed until 31 May 2029

[Curriculum vitae <sup>7</sup>](#)



# Combined management report

of the EnBW Group and EnBW AG

## Fundamentals of the Group

### 17 Business model

- 17 Business principles
- 18 Assessment of the robustness of our business model against the background of climate change
- 19 Value added
- 22 Our operating segments
- 23 Group structure and business radius

### 26 Strategy, goals and performance management system

- 26 Strategy
- 32 Goals and performance management system

### 37 Corporate governance

- 37 Corporate management
- 37 Management and supervision
- 39 Compliance and data protection

### 42 In dialog with our stakeholders

- 42 Our stakeholders
- 43 Materiality analysis
- 43 Sustainable Development Goals
- 44 Corporate citizenship and social activities
- 45 Corporate guidelines for party donations and lobbying
- 46 In dialog with citizens

### 47 Research, development and innovation

- 47 Research and development
- 50 Innovation

### 52 Procurement

- 52 Efficient and sustainable procurement processes
- 54 Responsible raw materials procurement in the coal sector
- 56 Responsible raw materials procurement in the gas sector

## Business report

### 58 General conditions

- 58 Macroeconomic trends
- 59 Development of the sector and competitive situation
- 59 Cross-segment framework conditions
- 61 Smart Infrastructure for Customers segment
- 64 System Critical Infrastructure segment
- 65 Sustainable Generation Infrastructure segment

### 69 The EnBW Group

- 69 Finance and strategy goal dimensions
- 87 Customers and society goal dimension
- 93 Environment goal dimension
- 101 Employees goal dimension
- 107 EU taxonomy

### 117 EnBW AG

- 117 Results of operations of EnBW AG
- 119 Net assets of EnBW AG
- 121 Financial position of EnBW AG
- 121 Overall assessment of the economic situation and the development of EnBW AG
- 122 Opportunities and risks
- 122 Comments on reporting
- 122 EnBW share and dividend policy

### 123 Overall assessment of the economic situation of the Group

### 124 Forecast

- 124 Expected trends in the finance and strategy goal dimensions
- 127 Expected trends in the customers and society goal dimension
- 128 Expected trends in the environment goal dimension
- 128 Expected trends in the employees goal dimension
- 129 Overall assessment of anticipated developments by the management

### 130 Report on opportunities and risks

- 130 Principles of the integrated opportunity and risk management system
- 131 Structure and processes of the integrated opportunity and risk management system
- 132 Structure and processes of the accounting-related internal control system
- 133 Appropriateness and effectiveness of the risk management system and the internal control system (iRM)
- 134 Non-financial declaration
- 136 Classification of opportunities and risks
- 137 Opportunity and risk position
- 141 Overall assessment by the management

### 142 Disclosures pursuant to sections 289a (1) and 315a (1) German Commercial Code (HGB) and explanatory report of the Board of Management

### 145 Indexes and tables

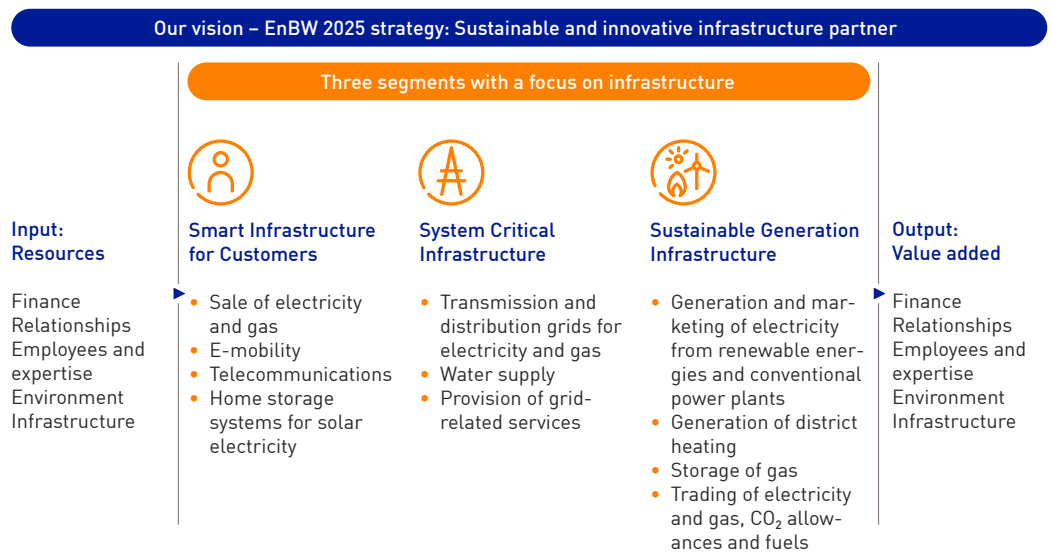
- 145 Index for the non-financial declaration of the EnBW Group and EnBW AG
- 146 Index for the Task Force on Climate-related Financial Disclosures (TCFD)
- 147 Key performance indicators for the EU taxonomy

## Fundamentals of the Group

# Business model

## Business principles

## Business model



Our company is transforming itself from an energy supply company into a sustainable and innovative infrastructure partner, also outside of the energy sector. Sustainability is an important element of our business model and acts as a compass for our strategic alignment. We draw on a variety of resources – from finances through to infrastructure – for our corporate activities. As a result of the efficient use of these resources, we create value for ourselves and our stakeholders.



Our business portfolio is split into **three segments** that encompass the following activities:

- The **Smart Infrastructure for Customers** segment comprises the sale of electricity and gas, the provision and expansion of quick-charging infrastructure and digital solutions for electromobility, activities in the telecommunications sector and other household-related solutions such as photovoltaics and home storage systems.
- The transmission and distribution of electricity and gas are the main components of the **System Critical Infrastructure** segment. Our activities in this segment are designed to guarantee the security of supply and system stability. The provision of grid-related services and the supply of water are other activities in this segment.
- The **Sustainable Generation Infrastructure** segment encompasses our activities in the areas of renewable energies and conventional generation, district heating, waste management and energy services. In order to guarantee the security of supply, we maintain the power plants that have been transferred to the grid reserve. In addition, this segment includes the storage of gas and the trading of electricity, gas, CO<sub>2</sub> allowances and fuels, as well as the direct distribution of renewable energy power plants.

A main goal of our **EnBW 2025 strategy** is to develop a balanced and diversified business portfolio along the entire value-added chain via these three growth fields. Our portfolio is also characterized by a high proportion of stable, regulated business and an attractive risk-return profile. We have updated the 2025 strategy with an outlook to the period up to 2030. You can find more about the strategy in the chapter “Strategy, goals and performance management system” (p. 26 ff.<sup>7</sup>).

The themes of **sustainability and climate protection** continue to be issues of intense public interest and will also influence social acceptance for our business activities to a greater extent in future. We have set ourselves the goal of continuing to develop our business model in line with the economic, ecological and social dimensions of sustainability. As an energy company, we can make a particularly effective contribution to climate protection. In the Group, we aspire to reduce our greenhouse gas

emissions by 70% by 2030 in comparison to the reference year 2018 and become climate neutral with respect to our own emissions (Scope 1 and 2) (p. 30 ff.<sup>7</sup>) by the end of 2035 at the latest.

We believe that **digitalization** does not only form an important basis for sustainable growth, profitability and competitiveness but is also fundamentally important for the success of the energy transition. Through our digitalization agenda 2030 and especially our emphasis on the application of data and artificial intelligence (AI and GenAI), we are intensifying our activities and developing other, Group-wide initiatives. Our focus lies on the digital evolution of our business activities, developing skills and supporting our sustainability activities (examples can be found on p. 40<sup>7</sup>, 41<sup>7</sup>, 50<sup>7</sup>, 52 ff.<sup>7</sup>, 64<sup>7</sup> and 87 ff.<sup>7</sup>).

In order to achieve a necessary level of resilience, EnBW has introduced specific guidelines and methods for a systematic crisis, emergency and **business continuity management system (BCM)**. The BCM exists in all relevant organizational units Group-wide with the aim of maintaining or restoring normal operational processes (examples can be found on p. 100<sup>7</sup>, 101 f.<sup>7</sup>, 93<sup>7</sup> and 135<sup>7</sup>). It is tasked with developing and implementing measures to maintain value-added processes so that the company is able to respond in an optimal way to events that may cause operational shutdowns, emergencies or crises. Our subsidiary Netze BW had its BCM – implemented in the main areas of the company – audited in accordance with DIN ISO 22301 for the first time in 2023 and received its certification at the beginning of 2024.

Our company's **business model** has proved itself to be **robust and flexible** even in times of crisis. The reliable supply of electricity, gas, water and heating to our customers was not at risk at any time. Furthermore, reliable infrastructure has become an increasingly important issue in the social consciousness.

Our **portfolio** has also proved itself to be fundamentally **stable** in crisis situations. Our integrated approach thus enabled us to compensate for varying developments in different business fields in the 2023 financial year. Further information on the impact of the economic situation on our business activities can be found in the chapter "General conditions" (p. 58 ff.<sup>7</sup>).



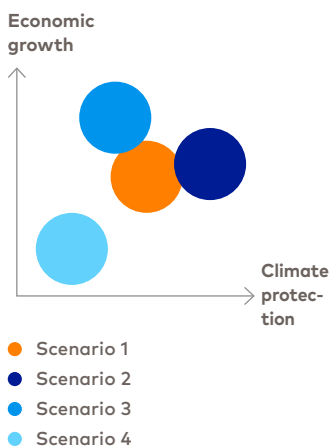
## Assessment of the robustness of our business model against the background of climate change

We analyze the robustness of our business model now with an increasing focus on climate change due to the growing importance of climate-related risks and the recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD). Our strategic considerations take into account the requirements of the energy transition and the profound changes that will take place due to the transformation towards climate neutrality with the effects they will have on all business sectors and private households. We place particular focus on the expansion of renewable energies, electricity consumption, the expansion of the grids, grid stability and the security of supply. In this context, we examine the requirements with respect to climate protection, possible implementation paths and the implications for the EnBW business. Accordingly, a main component of our analyses of energy industry conditions is **evaluating the different ways in which the energy transition and the transformation to climate neutrality** could possibly develop. This acts as an important basis for assessing the opportunities and risks for our business (p. 135 f.<sup>7</sup>) that will arise due to climate change and the dynamic regulatory environment associated with it.

In order to evaluate these opportunities and risks, we use real developments to derive **realistic future scenarios that take into account all of the different aspects of the energy transition**. These scenarios are primarily characterized by two dimensions. The **first dimension** is climate protection and encompasses our transformation to a climate-neutral company with its impact on all of the variables influencing the energy industry. It is thus of crucial importance for our business, as well as for the opportunities and risks along the entire value-added chain. The sustainable economic growth that is achievable in the long term is the **second dimension**. The level of growth that can be achieved in the long term will also have an impact on key variables such as the demand for electricity or commodity prices.

In the space defined by these dimensions, we describe **four scenarios that are particularly relevant to EnBW**. We fundamentally believe that we will achieve our goal of becoming a climate-neutral company. However, the speed at which this transformation can be implemented differs in the various scenarios. Two scenarios assume “normal” economic growth within the scope of so-called potential growth (scenarios 1 and 2). In scenario 2, the climate targets defined in the EU Green Deal will be largely achieved within the defined time span up to the middle of the century. In scenario 1, there will be a slight delay in achieving the goal of climate neutrality because it will not be possible to comprehensively solve the practical challenges associated with the implementation of the energy transition. In addition, we describe two other scenarios in which there is a long-term, permanent deviation in economic development that lies outside the scope of potential growth. In scenario 3, it is assumed that a higher priority will be assigned by society and politics to short and medium-term economic growth than to the quick implementation of a transformation towards climate change mitigation. Greater growth will thus be achieved during the period under consideration. In contrast, a period characterized by ongoing crises and weaker economic growth is assumed in scenario 4. In this scenario, the transformation to climate neutrality will be achieved at the slowest pace because the opportunities to secure the required investment in a timely manner will be significantly restricted.

#### Energy industry scenarios for EnBW



Within the scenarios, **variables** that have different characteristics depending on the scenario in question determine how the energy market develops. These include assumptions on the development of demand, the restructuring of the power plants as part of the phaseout of coal and the full decarbonization of electricity generation, the development of the transmission grids, and the prices and pricing structures for fuels. In addition, estimates about relevant market trends, such as in the area of renewable energies, electromobility or the development of a hydrogen market, play an important role. Based on the assumptions made for specific variables, possible paths for how the energy markets (especially electricity and gas) will develop in the long term are derived for the four scenarios. In the process, we predict the wholesale market prices for electricity in simulated calculations using computer models. These simulations also take into account physical risks, such as the influence meteorological fluctuations may have on the electricity market due to the availability of wind and sunlight, and thus make it possible to incorporate potential changes to the physical environment due to climate change into the calculations. The scenarios produced in this way can provide us with quantitative descriptions that serve as the basis for assessing our business and, in particular, also allow us to evaluate the opportunities and risks associated with climate change.

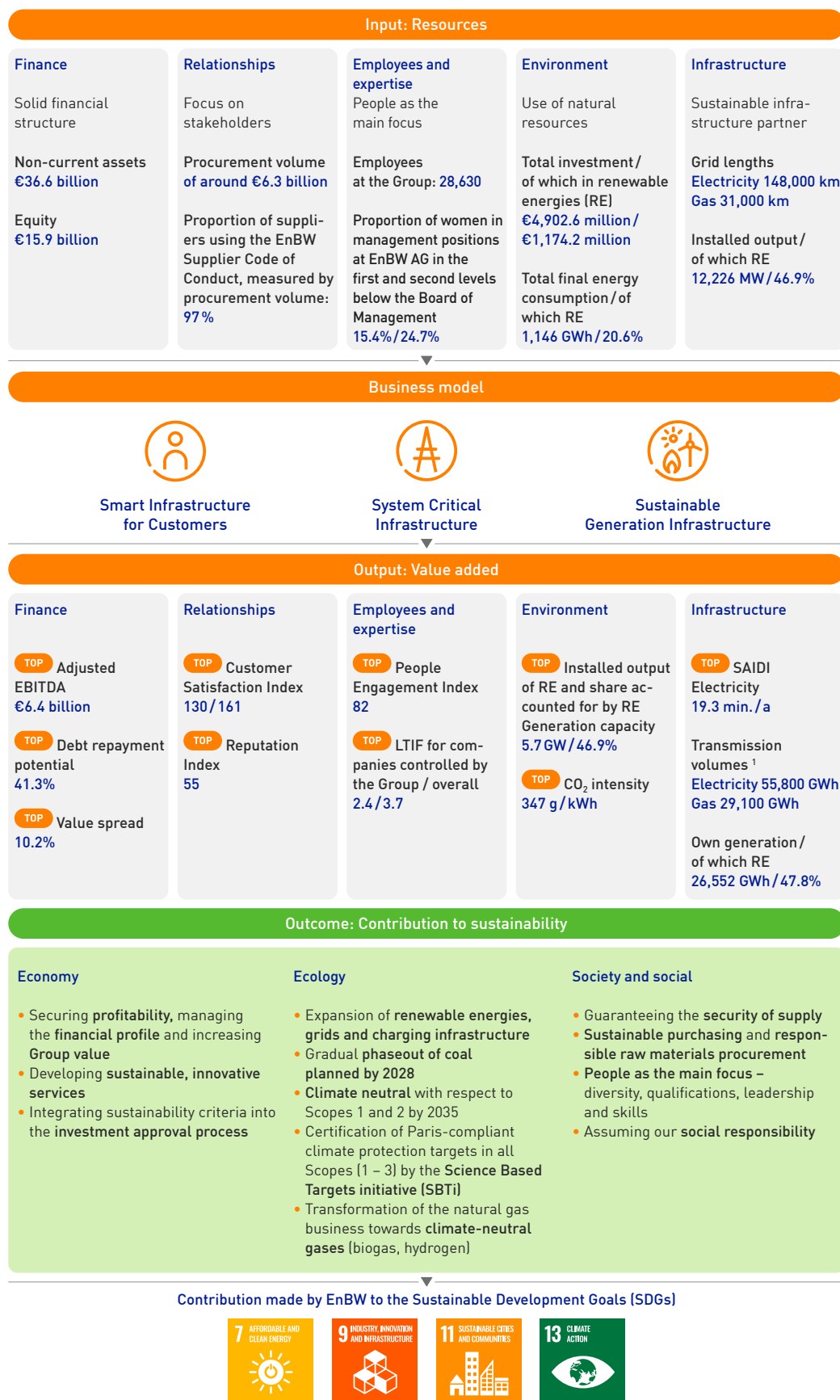
### Value added

#### Value added for EnBW and its stakeholders

The aim of our corporate activities is to add value in the short, medium and long term. This reflects corporate success, as well as competitiveness and future viability, and does not only depend on the company itself but also on the business environment, relationships with stakeholders (p. 42 ff.<sup>7</sup>) and the use of a variety of different resources. The efficient usage of these resources creates value for ourselves and our stakeholders. We associate the concept of sustainable economic development with our aspiration to conduct all of our business activities in a responsible way.



## Value added 2023 for EnBW and its stakeholders



<sup>1</sup> In the System Critical Infrastructure segment.

We present how EnBW adds value and how we use our resources to this end by means of our key performance indicators (p. 32 ff.<sup>7</sup>) and other selected performance indicators. With respect to the resource **finances**, it is critically important that we maintain a solid financial structure at all times so that we can finance our business activities. Sustainable financing instruments are playing an increasingly important role in this area (p. 32<sup>7</sup>). The value we generate for ourselves and our main stakeholders is presented in our value-added statement (p. 21<sup>7</sup>). An important factor for the resource **relationships** is building customer loyalty to strengthen trust in EnBW as a partner and supplier. Active dialog with stakeholders builds trust and social acceptance (p. 42 ff.<sup>7</sup>). We generate added value in this area by engaging in social issues relevant to our various target groups. Always having the right **employees** with the right **expertise** in the right place is a key focus of the HR policy. Expertise, experience and diversity contribute to the success of the company (p. 101 ff.<sup>7</sup>). We also engage in a range of research and development activities to identify market opportunities and trends and develop innovative products (p. 47 ff.<sup>7</sup>). We create room for personal development, offer apprenticeships and courses for students, run a multistage career integration program for refugees and migrants and are active in the area of diversity (p. 102 ff.<sup>7</sup>). With respect to the **environment**, we generate energy using the natural resources wind, water, sun, biomass and geothermal energy. We generate value in this area by improving our carbon footprint, expanding our renewable energy power plants and connecting them to the grid, developing energy-efficient products and ensuring that we engage in sustainable and responsible procurement (p. 93 ff.<sup>7</sup>). Our resources related to **infrastructure** comprise the expansion and operation of power plants, grids and gas storage facilities. Furthermore, we are continuing to expand our quick-charging infrastructure and the telecommunications and broadband business (p. 91 ff.<sup>7</sup>). EnBW mainly generates value here by pushing forward the energy and mobility transition.

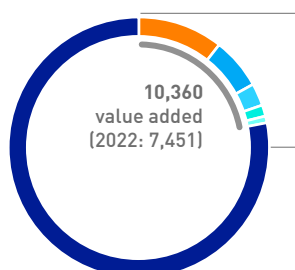
## Value-added statement

The value-added statement indicates the degree to which we contribute to the continuing economic development of the company and our stakeholders using our financial resources. Further information on the dialog with our stakeholders is summarized in the chapter “In dialog with our stakeholders” (p. 42 ff.<sup>7</sup>).

### Value added of the EnBW Group<sup>1</sup>

Output: value  
in € million

● **36,919** suppliers  
and service providers:  
material and  
other operational  
expenditure<sup>2</sup>  
(2022: 53,698)



**47,279** cash-relevant  
business performance  
(2022: 61,149)

### Use of value added

	2023	2022
● EnBW Group: retained cash flow	47%	43%
● Active and former employees: primarily wages and salaries	29%	36%
● State: taxes	13%	10%
● Shareholders: dividends	6%	7%
● Outside investors: interest	4%	4%

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

<sup>2</sup> Includes interest and dividends received, as well as the dedicated financial assets contribution.

We define value added as our cash-relevant business performance in the past financial year less cash-relevant expenses (suppliers and service providers). The value added is derived from the cash flow statement and corrected based on the use of funds. In the reporting year, we generated value added of 21.9% (previous year restated: 12.2%). Despite the decrease in cash-relevant business performance, value added was higher than in the previous year because the fall in cash-relevant cost of materials was greater. As well as being used in the form of wages, salaries and pension payments for active and former employees, a further share is dedicated to payments to the state in the form of income taxes and electricity and energy taxes. After consideration of other stakeholder groups, the retained cash flow is available to the company for future investments without the need to raise additional debt (p. 82<sup>7</sup>).



## Our operating segments



We identified the material events of the 2023 financial year by using the materiality analysis process that we describe in detail on p. 43<sup>7</sup>. These are shown in the following diagram allocated to our three segments.

### Overview of the segments



#### Smart Infrastructure for Customers

##### Significant events in 2023

- E-mobility growth strategy continues with EnBW mobility+ reaching the milestone of 1,000 quick-charging stations nationwide and providing access to more than 500,000 charging points in the EnBW HyperNetwork (p. 89 f.<sup>7</sup>)
- New cooperations for the expansion of charging infrastructure at retail properties (p. 89 f.<sup>7</sup>)
- Resolute ongoing expansion of the fiber-optic network (p. 91<sup>7</sup>)



#### System Critical Infrastructure

##### Significant events in 2023

- Sale of two 24.95% shareholdings in the transmission grid operator TransnetBW to each of Südwest Konsortium and KfW (p. 26<sup>7</sup>)
- Start of construction of SuedLink (converter and subproject for the excavation work) and ULTRANET (line construction) (p. 64<sup>7</sup>)
- Implementation of a comprehensive expansion and renewal program for the distribution grids at Netze BW (p. 92<sup>7</sup>)
- Progress with the south German natural gas pipeline (SEL) project (p. 65<sup>7</sup>)
- Participation in the development of a core hydrogen network on behalf of the German government (p. 64<sup>7</sup>)



#### Sustainable Generation Infrastructure

##### Significant events in 2023

- Investment decision for the He Dreiht offshore wind farm; sale of minority shareholding to a consortium (p. 27<sup>7</sup>)
- Conclusion of multiple power purchase agreements for the He Dreiht wind farm (p. 27<sup>7</sup>)
- Purchase of further delivery capacities for liquefied natural gas (LNG) in Stade (p. 56<sup>7</sup>)
- Decommissioning of the nuclear power plant GKN II, receipt of the final dismantling approvals, all nuclear power plants currently being dismantled (p. 68<sup>7</sup>)
- Start of construction on the three fuel switch projects in Stuttgart-Münster, Altbach/Deizisau and Heilbronn at the beginning of 2024 (p. 27<sup>7</sup>)

### Important cross-segment events in 2023

Acceleration of the coal phaseout plan and certification of EnBW's reduction targets by the Science Based Targets initiative (SBTi) to confirm they are line with the Paris Agreement (p. 30 ff.<sup>7</sup>)

#### Sales in 2023



#### Number of customers in 2023

B2C and B2B	5.5 million
-------------	-------------

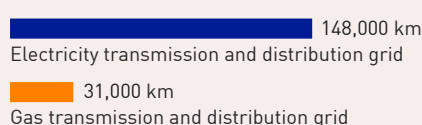
#### Development of adjusted EBITDA in € billion

2023	0.2	0.6	0.7 – 1.0
		Target for 2025	Target for 2030

#### Key figures in 2023

Employees (as of 31/12/2023)	5,711
Investment	€383.0 million
Adjusted EBITDA	€239.5 million
Share of adjusted EBITDA <sup>2</sup>	3.8%

#### Grid lengths in 2023



#### Transmission volumes in 2023

Electricity	55,800 GWh
Gas	29,100 GWh

#### Development of adjusted EBITDA in € billion

2023	1.8	1.3	2.3 – 2.6
		Target for 2025	Target for 2030

#### Key figures in 2023

Employees (as of 31/12/2023)	11,635
Investment	€2,671.9 million
Adjusted EBITDA	€1,772.0 million
Share of adjusted EBITDA <sup>2</sup>	27.8%

#### Installed output in 2023



#### Generation portfolio in 2023<sup>1</sup>

Electricity generation	26,500 GWh
Installed output	12,208 MW

#### Development of adjusted EBITDA in € billion

2023	4.6	1.3	2.7 – 3.0
		Target for 2025	Target for 2030

#### Key figures in 2023

Employees (as of 31/12/2023)	7,563
Investment	€1,783.5 million
Adjusted EBITDA	€4,647.6 million
Share of adjusted EBITDA <sup>2</sup>	73.0%

<sup>1</sup> The values stated for electricity generation and installed output are not identical to the totals for the EnBW Group. Several power plants are allocated to the other two segments. The total generation of the EnBW Group is 26,552 GWh (excluding positive redispatch volumes), of which 12,680 GWh is generated from renewable energy sources. The total installed output of the EnBW Group is 12,226 MW, of which 5,728 MW is from renewable energy power plants. The totals for generation and installed output for the Group are shown in detail on p. 94<sup>7</sup>.

<sup>2</sup> The sum of the three segments does not correspond to the adjusted EBITDA for the EnBW Group. €-293.9 million (-4.6%) is attributable to Other/Consolidation in the 2023 financial year (p. 71 f.).

## Group structure and business radius

EnBW is organized according to the model of an integrated company. EnBW AG is managed through business units and functional units: Core operating activities along the entire energy industry value chain are concentrated in the business units. The functional units carry out Group-wide support and governance tasks. The EnBW Group consists of EnBW AG as the parent company and 256 fully consolidated companies, 25 companies accounted for using the equity method and 3 joint operations. Further information on the organizational structure can be found in the chapter “Corporate governance” under “Management and supervision” on p. 37 ff.<sup>7</sup>.

## Baden-Württemberg, Germany and Europe

Further information on **selected companies of EnBW AG** can be found under the following link.

[Online ↗](#)

### Selected EnBW companies

#### ● Baden-Württemberg

EnBW Energie Baden-Württemberg AG, Karlsruhe  
 EnBW mobility+ AG & Co. KG, Karlsruhe  
 EnBW Ostwürttemberg DonauRies AG, Ellwangen  
 Erdgas Südwest GmbH, Karlsruhe  
 NetCom BW GmbH, Ellwangen  
 Netze BW GmbH, Stuttgart  
 terranets bw GmbH, Stuttgart  
 TransnetBW GmbH, Stuttgart  
 ZEAG Energie AG, Heilbronn

#### Germany

- ONTRAS Gastransport GmbH, Leipzig
- Plusnet GmbH, Cologne
- SENEC GmbH, Leipzig
- Stadtwerke Düsseldorf AG, Düsseldorf
- VNG AG, Leipzig
- Yello Strom GmbH, Cologne

#### ● Denmark

Connected Wind Services A/S, Balle

#### ● France

Valeco SAS, Montpellier

#### ● Great Britain

Mona Offshore Wind Holdings Limited,  
 Sunbury-on-Thames<sup>1</sup>

Morgan Offshore Wind Holdings Limited,  
 Sunbury-on-Thames<sup>1</sup>

Morven Offshore Wind Holdings Limited,  
 Sunbury-on-Thames<sup>1</sup>

#### ● Austria

SMATRICS EnBW GmbH, Vienna

#### ● Sweden

EnBW Sverige AB, Falkenberg

#### ● Switzerland

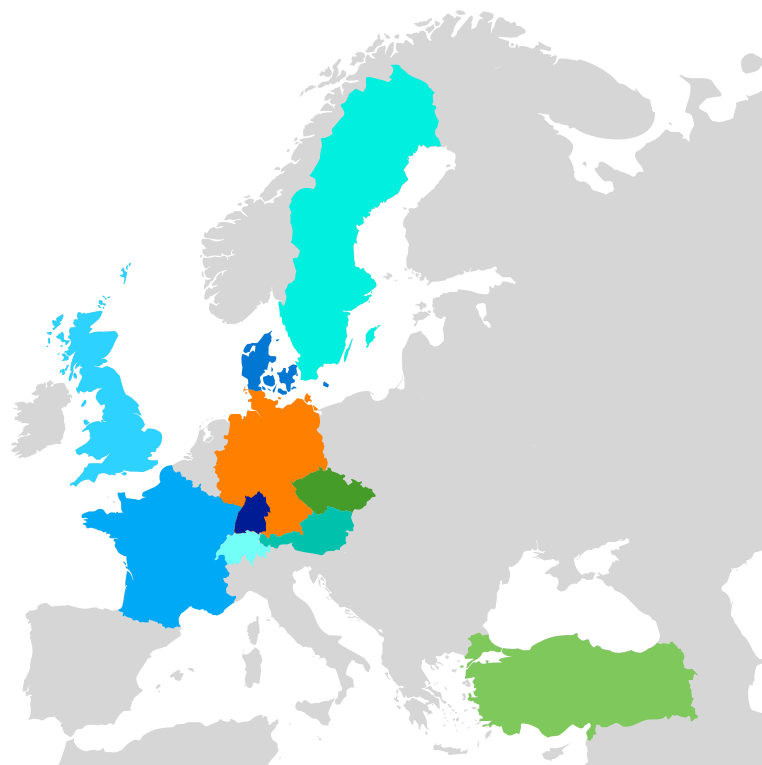
Energiedienst Holding AG, Laufenburg

#### ● Czech Republic

Pražská energetika a.s., Prague

#### ● Turkey

Borusan EnBW Enerji yatırımları ve Üretim A.Ş., Istanbul<sup>1</sup>



<sup>1</sup> 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 [38] “Additional disclosures.”

Our **roots lie in Baden-Württemberg**, where we are positioned as a market leader. We rely here on EnBW AG, Netze BW and a series of other important subsidiaries.

We also operate throughout the rest of **Germany** and in **selected markets abroad** via our various subsidiaries. We are pushing forward the **expansion of renewable energies** through Valeco, the French project developer and operator of wind farms and solar parks. We are represented by our subsidiaries Connected Wind Services (CWS) in Denmark and EnBW Sverige in Sweden. In Turkey, we work together in the renewable energies sector with our partner Borusan. In Great Britain, we have secured the rights to build several offshore wind farms together with our partner bp. The companies Energiedienst (ED) in Switzerland and Pražská energetika (PRE) in the Czech Republic, in both of which EnBW has held participating interests for many years, also have a strong focus on renewable energies.

We are actively engaged in **the operation of the charging infrastructure and provide a range of products and services necessary for electromobility** in many European countries through our subsidiary EnBW mobility+. We are the market leader for quick charging in Germany and are now also expanding onto the Austrian market with SMATRICS EnBW. Our subsidiary SENEK, based in Leipzig, offers holistic energy solutions for customers to meet their own energy needs using solar electricity and home storage. The telecommunications company Plusnet based in Cologne supplements our portfolio in our nationwide **broadband business**, while our subsidiary NetCom BW has its main focus in this sector in Baden-Württemberg.

Click on the respective logos to access the websites of our **most important subsidiaries**.



**Energiedienst (ED)**, based in Laufenberg, Switzerland, has around 1,200 employees and is an ecologically oriented German-Swiss listed company with various subsidiaries that is active in South Baden and Switzerland. ED exclusively generates green electricity using primarily hydropower and has already been measuring and regulating its Scope 1, Scope 2 and parts of its Scope 3 emissions since 2020 to ensure they remain climate neutral. Alongside the production, sale and supply of electricity, this group of companies offers its customers smart, networked products and services, including photovoltaic plants, heat pumps, electricity storage systems, electromobility and e-car sharing.



**Pražská energetika (PRE)**, based in Prague, Czech Republic, has around 1,800 employees and its core business activities include the sale of electricity and gas, the distribution of electricity in Prague and Rožtoky, the generation of electricity from renewable energies, the operation and expansion of fiber-optic infrastructure, the expansion of the charging infrastructure for electromobility and the provision of energy services. PRE is the third-largest electricity supplier in the Czech Republic. As part of its activities, PRE promotes the use of modern technological solutions and advises on the implementation of innovative technologies and achieving energy savings.



**Stadtwerke Düsseldorf (SWD)** is one of the largest municipal energy supply companies in Germany. It has around 3,300 employees and SWD and the companies in which it holds a majority shareholding supply customers in Düsseldorf and the surrounding region with electricity, natural gas, district heating and drinking water, as well as being responsible for waste disposal and street cleaning services in the metropolitan area of Düsseldorf. In addition, the company's focus is placed on the needs-based development of networked urban infrastructures in the areas of energy, mobility, the circular economy and real estate. SWD is supporting the state capital of North-Rhine Westphalia to achieve its target of becoming climate neutral with respect to Scope 1 and 2 emissions by 2035.



**VNG** and its subsidiaries as gas importers, wholesalers and operators of critical gas infrastructure ensure Germany is reliably supplied with gas. This group of over 20 companies is active across Europe and employs about 1,600 people. It has its headquarters in Leipzig and concentrates on the business areas of Trading and Sales, Transport, Storage, Biogas and Digital Infrastructure. VNG is also pursuing an ambitious path for a market ramp-up of renewable and decarbonized gases such as biogas and hydrogen, paving the way for a sustainable, secure supply and, in the long term, the climate-neutral energy system of the future.

## Customers and sales brands

We supply **around 5.5 million customers** with energy and differentiate between two customer groups: The B2C customer group includes retail customers, small commercial enterprises, the housing industry and agriculture. The B2B customer group encompasses major commercial enterprises and industrial companies, as well as redistributors, municipal utilities, local authorities and public entities.

We use our sales brands to orient ourselves to the needs of our customers. In the B2C sector, we sell green electricity, electricity, gas, district heating, energy industry services, energy solutions and drinking water under the **EnBW brand**. These products and services focus on Baden-Württemberg. We sell green electricity and gas products, as well as solutions and digital services related to energy, to retail and commercial customers throughout Germany through the **Yello brand**.

We are also represented in the B2C and B2B sectors via our subsidiaries through the **Erdgas Südwest, ODR** and **ZEAG brands**.

Under the **naturenergie brand**, Energiedienst (ED) sells green electricity across Germany and gas to retail customers in South Baden via a subsidiary. In addition, ED also offers many other sustainable products and services through this brand in the areas of heating, living, photovoltaics and mobility – from solar power plants and e-car sharing services through to heating concepts for districts. In Switzerland, the ED Group provides electricity to business customers. PRE sells electricity, gas and energy services to retail and commercial customers in Prague and the surrounding region under the **PRE brand**. PRE also supplies electricity, gas and energy services to industrial customers across the Czech Republic under the PRE brand. Electricity and gas are sold in the Czech Republic under the **Yello brand**, primarily via online channels to households and commercial customers. SWD supplies retail and commercial customers in the B2C sector and business and industrial customers in the B2B sector with electricity, gas, heating, energy solutions and drinking water under the **Stadtwerke Düsseldorf brand**. The sales focus is placed here on Düsseldorf and the local region. Under the **VNG brand**, VNG supplies around 400 public utilities and redistributors as well as large industrial customers with gas via a subsidiary and its investments at home and abroad. Under the **goldgas brand**, VNG also sells gas and electricity to private households and commercial customers in Germany and Austria via its subsidiary of the same name.

# Strategy, goals and performance management system

## Strategy

### Sustainable and innovative infrastructure partner

Our **EnBW 2025 strategy** has the motto “Making and shaping the infrastructure world of tomorrow” and is based on a holistic approach to stakeholders. It defines specific financial and non-financial targets in the dimensions of finance, strategy, customers and society, environment and employees. We have made sustainability an integral part of our corporate strategy because we want to ensure that we create economic, ecological and social added value for our stakeholders.

Our EnBW 2025 strategy increasingly places the company’s focus onto the infrastructure aspects of existing energy-related business fields and other activities that are aligned with our core expertise. Our core expertise – what we do well and do better than many others – lies in the safe and reliable construction, operation and management of critical infrastructure in the energy sector, such as the generation of power and heat or the distribution of energy by our grid subsidiaries. This can also be transferred to other **business fields related to infrastructure**. One example of this type of business field is our broadband business in which we have made major progress by winning various large contracts. We are also involved in the expansion of urban infrastructure, for example the smart networking of energy and heating supplies, telecommunications and e-mobility.

Our strategy and its integrated approach along the value-added chain has demonstrated its resilience in times of crisis. The war between Russia and Ukraine, high volatility on the markets and the possibility of regulatory interventions on the market increase the level of uncertainty with which predictions about the future development can be made. Therefore, we continuously monitor and evaluate conditions with respect to their possible impact on our business. We remain committed to our overarching strategic alignment as an integrated energy and infrastructure provider, even more so because of our **robustness in times of crisis** (p. 17f.<sup>7</sup>).



We are following these **strategic goals** in our three segments:

Our **Smart Infrastructure for Customers** segment encompasses our end-customer business. In the next few years, we will especially focus on the growth area of electromobility. We aim to further expand our quick-charging infrastructure to around 30,000 quick-charging points by 2030 in order to promote electromobility, maintaining our position as the market leader in this sector in the process (p. 89f.<sup>7</sup>). And in the area of B2C sales for electricity and gas, we will continue to rely on digitalization to deliver an improved customer experience and increase our cost efficiency. We are also expanding our household-related energy solution business (such as in the area of photovoltaics and storage systems).

In the **System Critical Infrastructure** segment, our grid subsidiaries for electricity and gas will further expand the transmission grids as they form an important cornerstone of our earnings alongside the distribution grids. At our subsidiary TransnetBW, we sold two minority shareholdings of 24.95% each to the Südwest consortium headed by SparkassenVersicherung and to the KfW. In addition, our grid companies will upgrade the electricity distribution grids so that they are ready to meet the challenges of the future and ensure they are prepared for the additional demands that will be placed on them by electromobility, the increasing number of heat pumps and the decentralized feed-in of energy. Numerous local authorities have invested in our distribution grids via the “EnBW connects” participation model (p. 90<sup>7</sup>). To support the decarbonization of the gas sector, our grid companies are preparing their grid infrastructure for the use of climate-friendly and climate-neutral gases in the future, such as hydrogen.

In the **Sustainable Generation Infrastructure segment**, the main focus is the expansion of renewable energies and disposable capacity, i.e., flexibly deployable power plants. The expansion of renewable energies will cover further selective internationalization and the realization of projects without state funding. The generation capacity of our wind power plants is due to increase to 4.0 GW by 2025 and our portfolio of photovoltaic projects to 1.2 GW. In addition, EnBW and bp plan to build

three offshore wind farms through joint ventures that will have a total capacity of 5.9 GW and lie off the coast of Great Britain. They will be placed into operation from 2029. Long-term power purchase agreements (PPAs) with industrial customers will be used to safeguard this investment. With respect to coal-based conventional generation, we plan to phase out coal by 2028 based on the assumption that renewable energies will be ramped up as necessary and that the significant progress in expanding the grids in accordance with the plans announced by the German government can be achieved. As a replacement for several of our coal power plants and to secure our portfolio of renewable energies, we already decided in 2022 to construct gas power plants (fuel switch) that could also be operated using hydrogen in the future (H<sub>2</sub>-ready). The operation of Block II of our Neckarwestheim nuclear power plant ended as planned on 15 April 2023 in accordance with the amended German Atomic Power Act. We are adapting our trading activities to the changes in our generation portfolio and the energy markets and further expanding our market position with a focus on Europe.

We had planned to use this portfolio to increase our **adjusted EBITDA** to €3.2 billion by 2025 in accordance with our EnBW 2025 strategy. It was possible to exceed this target in the 2023 financial year and in our current plans we now also expect to exceed this earnings target (p. 125<sup>7</sup>).

We had also originally planned **net investment** of around €12 billion in total between 2021 and 2025 as part of our EnBW 2025 strategy, of which 80% was intended for growth projects. We are now expecting that our net investment will be higher due to, among other things, a faster energy transition and the rise in inflation (p. 124 f.<sup>7</sup>). There was investment of €8 billion between 2021 and 2023. The main focus of our investment will be the expansion of the grids, especially the SuedLink and ULTRANET projects of our grid subsidiary TransnetBW that are central to the future energy supply in Germany, the expansion of renewable energies, such as the planned realization of the EnBW He Dreiht offshore wind farm, the construction of H<sub>2</sub>-ready gas power plants in Altbach/Deizisau, Stuttgart-Münster and Heilbronn, and further developments in the Smart Infrastructure for Customers segment, such as the further expansion of electromobility. We resolutely apply sustainability criteria when taking investment decisions (p. 36<sup>7</sup>) and align our growth accordingly (p. 80 f.<sup>7</sup>).

## Outlook 2030

EnBW has updated the 2025 strategy with an outlook to the period up to 2030. Based on our integrated approach, we will rigorously push forward the expansion of the energy infrastructure. Our main focus will be placed on the accelerated expansion of renewable energies and the grid infrastructure, as well as the development of smart products and services for our customers that support the energy transition at home and on the move.

In the period from 2024 up to and including 2030, we are planning gross investment totaling around €40 billion. Approximately 60% of this investment will be in the expansion of the grids in the System Critical Infrastructure segment and approximately 30% will be on the expansion of wind farms and solar parks and the construction of climate-friendly, hydrogen-ready power plants in the Sustainable Generation Infrastructure segment. The remaining amount of around 10% will primarily flow into the expansion of electromobility in the Smart Infrastructure for Customers segment. The vast majority of the investment will be made in Germany, while about 10% will be in our other markets. EnBW will further accelerate the pace of the energy transition with its planned investment up to 2030. At the same time, our aim is to comply with the strict sustainability criteria in the EU taxonomy in more than 85% of the investment. We want to continue implementing the projects associated with this investment in cooperation with partners. Taking into account these partnerships, we expect total net investment of around €22 billion by 2030. We have already been able to secure almost half of the expected cash returns, especially via the participation model for our He Dreiht offshore wind farm and the investments made by financing partners in the transmission grid operator TransnetBW. We will largely finance our net investment from retained cash flow until 2030 and otherwise will mainly rely on green financing instruments. At the same time, we will always strive to maintain a solid investment-grade rating based on a debt repayment potential of at least 15%.

In terms of adjusted EBTDA, we expect to increase earnings to between €5.5 and €6.3 billion by 2030, of which between €0.7 and €1.0 billion will be accounted for by the Smart Infrastructure for Customers segment, between €2.3 and €2.6 billion by the System Critical Infrastructure segment and between €2.7 and €3.0 billion by the Sustainable Generation Infrastructure segment. With our

balanced portfolio across these three segments and a proportion of low-risk adjusted EBITDA of at least 70%, we want to continue to play a leading role in reshaping the energy sector in Germany.



## EnBW Sustainability Agenda

More detailed information on the **Sustainability Agenda** can be found on our website.

Online <sup>7</sup>

Sustainability is closely linked to the core business at EnBW and has thus been consistently taken into account in the development of the company for many years. Our long-term business success is oriented towards achieving economic, ecological and social goals. In 2022, we began the **implementation of the EnBW Sustainability Agenda** and continued to implement it in 2023. We developed it in a multistage process that incorporated our stakeholder groups and took our corporate values into consideration. The 15 measures developed as part of the EnBW Sustainability Agenda have made an important contribution to the corporate success of EnBW over the last two years and are helping to anchor sustainability even more strongly into our activities and solutions. As a consequence, they make a noticeable contribution to value added and minimize the risks facing our company. Four strategic focus areas covering all of the ESG dimensions provide a framework for the 15 measures.

### Strategic themes and measures for the EnBW Sustainability Agenda

#### New energy and climate neutrality

1. Expansion of renewable energies and taking biodiversity criteria into account in major projects
2. Climate-neutrality road map and socially responsible phaseout of coal
3. Further development towards becoming a system partner for hydrogen provision and infrastructure

#### Infrastructure transition

4. Eco-efficient quick-charging parks and climate-neutral corporate mobility
5. Strengthening the grid infrastructure for the energy and mobility transitions
6. Sustainable districts and real estate
7. Promoting forms of working and mobility that are ready for the future by laying new fiber-optic cables in rural areas

#### Culture of sustainability

8. Board of Management and management remuneration aligned to sustainability criteria
9. Expanding the area of sustainable finance, financing via green bonds
10. Holistic consideration of sustainability in the investment process
11. Expanding the evaluation of risks and opportunities to include climate risks
12. Expanding the sustainable HR strategy

#### Protecting the natural environment

13. Anchoring sustainability criteria in the purchasing process
14. Increasing the use of low carbon materials and the efficient use of resources, reducing harmful emissions and water consumption
15. Protecting employees and local residents

We made important progress with all of the measures in the 2023 financial year. Here are some **selected examples**:

**New energy and climate neutrality:** EnBW is transforming energy and heating generation to shape the path towards climate neutrality. Following the endorsement of our climate protection targets by the renowned Science Based Targets initiative (SBTi), the Board of Management and Supervisory Board have now approved precisely defined, science-based reduction paths for all Scopes (1 to 3). The key to reducing emissions will be the planned phaseout of coal by 2028. Another important milestone will be the planned fuel switch projects for generating electricity and heating using more climate-friendly gases at the sites in Baden-Württemberg from 2026 onwards (**measure 2**) (p. 30ff.<sup>7</sup>). As part of **measure 3**, we aim to make EnBW a pioneer in all market segments related to climate-neutral gases. EnBW, including its subsidiaries such as Netze BW and VNG, is engaged in several hydrogen projects along the entire value-added chain. We are concentrating here on developing a product range certified according to EU standards.

**Infrastructure transition:** As the market leader in the expansion of the charging infrastructure for electromobility, EnBW is committed to creating a sustainable customer experience. This begins with using 100% green electricity in the operation of our charging stations. As part of the EnBW Sustainability Agenda, we have been investigating how we can design more sustainable charging parks. We carried out a life cycle analysis of a pilot project at the "Next Level" charging park in Chemnitz to test which elements can be transferred to charging park planning (**measure 4**). The charging park was presented at IAA MOBILITY in Munich and not only serves the purpose of reducing CO<sub>2</sub> emissions but is also designed to meet the needs of drivers of electric vehicles, with a special focus on aspects



Netze BW won the **German Sustainability Award** in the grid infrastructure category.

Online <sup>7</sup>

such as creating a family-friendly and barrier-free experience. The two EnBW subsidiaries EnBW mobility+ and Netze BW both won the German Sustainability Award 2024 at the end of 2023. Explaining its decision, the jury recognized EnBW mobility+ as a pioneer in the construction and operation of quick-charging infrastructure for electric cars and a trailblazer in the mobility transition. As part of **measure 5**, Netze BW is addressing the challenges posed by the decentralization of electricity and heating generation and the ramping up of electromobility using technical solutions. For this purpose, the largest distribution grid operator in Baden-Württemberg has introduced more than 150 measures focusing on the environment, energy transition, people, climate and society. **Measure 6** addresses both EnBW's own real estate and the development of sustainable districts for third parties. It is laying the foundations for a climate-neutral real estate portfolio by 2035. To this end, we have implemented the first steps of the agreed road map that lays out the measures required to reduce CO<sub>2</sub> emissions.

**Culture of sustainability: Measure 9** is designed to strengthen the area of sustainable finance. Two green senior bonds with volumes of €650 million and €850 million, respectively, (p. 32<sup>7</sup>) have been issued as part of measure 9, each on the basis of taxonomy-aligned activities. EnBW is actively engaged in promoting sustainable finance across all sectors. For example, we are a member of corporate networks such as econsense, the sustainability network of German business, and represented in expert groups such as the Accounting Standards Committee of Germany and the Sustainable Finance Advisory Committee of the German Federal Government. In a project to implement the requirements in the Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS), we are working to adapt our sustainability reporting in good time for the 2024 reporting year. As part of **measure 10**, we extended the investment approval process to cover other business categories, while almost doubling the number of assessments we carried out in 2023. An evaluation of the CO<sub>2</sub> emissions and thus the impact on the climate of a new project has also been made a standard part of the process. In order to strengthen the resilience of the business model and against the background of growing physical risks, a new IT system has been introduced at the Group as part of **measure 11** that will allow us to carry out climate risk analyses at the sites in the Group for the EU taxonomy. Based on the future scenarios RCP2.6, RCP4.5 and RCP8.5 developed by the Intergovernmental Panel on Climate Change (IPCC), we are carrying out climate risk analyses of existing and future EnBW sites to assess the impact of possible extreme weather events. The analyses will allow the specialist departments and business areas to test and implement suitable mitigation and adaptation measures at an early stage.

**Protecting the natural environment:** EnBW laid the foundations for exercising due diligence with respect to human rights in compliance with the legal requirements with the ratification of the Declaration on Human Rights in spring 2023 and the first EnBW policy statement in accordance with the Act on Corporate Due Diligence Obligations in Supply Chains (Lieferkettensorgfaltspflichtengesetz, LkSG) as part of **measure 13**. This includes robust control and implementation structures, as well as comprehensive risk analyses of our own business areas and throughout the supply chain. In addition, we have automated and digitalized the business partner audit for the purchasing of raw materials and this has enabled us to carry out comprehensive due diligence checks on business partners even more efficiently and effectively since fall 2023 (p. 52 ff.<sup>7</sup>). We carried out a status quo analysis with the aim of increasing our resource efficiency and strengthening the circular economy, by recording and analyzing the measures that had been carried out up to now across the Group. Using this as a basis, we identified key areas of focus for pilot projects and potential areas for adding value. In this context, we are investigating, for example, whether used electric car batteries can be recycled in the construction of new electricity storage systems. As part of **measure 15**, we have examined the Group-wide implementation of an occupational safety management system (ISO 45001) and held workshops to inform individual business areas and companies in which we have a participating interest about the system. The aim, in particular, is to promote expertise in the area of occupational safety at those companies in which we have a participating interest and which have a high risk potential. Our own occupational medicine department has continued to offer a variety of services to employees to help them improve their physical and mental health since the end of the coronavirus pandemic (p. 102<sup>7</sup>).

The EnBW Sustainability Agenda is supported by a **governance structure** that continuously monitors the implementation of the agenda using performance indicators. The individual measures can be adjusted if necessary. The results of the Sustainability Agenda have been analyzed and will serve as the basis for the updated Sustainability Agenda 2.0 in 2024.



Learn more about our **Sustainability Agenda** here.

Online ↗

Further information on the **SBTi** can be found on our website.

Online ↗

Further information on our **climate protection targets** can be found here.

Online ↗

## Our climate protection goals

Two key elements of the **EnBW Sustainability Agenda** are compliance with science-based targets and the achievement of our goal of climate neutrality. Our goals for reducing greenhouse gas emissions along the value-added chain are aligned with these aims.

### Science Based Targets initiative (SBTi)

The **Science Based Targets initiative (SBTi)** helps companies to develop their own **science-based climate protection targets**. In October 2021, EnBW announced its intention to set science-based targets according to the SBTi. We concluded this process as planned in spring 2023. We have thus aligned our climate protection targets with the targets of the Paris Agreement. The reduction targets cover the entire value-added chain for EnBW and are split into three emission categories or so-called Scopes: Scopes 1 and 2 include, in particular, the greenhouse gas emissions produced by our power plants as they generate electricity and heat, and when energy is distributed in the grids operated by our subsidiaries. Our Scope 3 emissions are mainly influenced by the gas consumption of our customers (p. 95 ff.<sup>7</sup>). We aim to follow a 1.5 degree-aligned path for Scopes 1 and 2 emissions and a “well below 2 degrees”-aligned path for Scope 3 emissions. We also aim to reduce our CO<sub>2</sub> emissions in Scopes 1 and 2 by 83% by 2035 (based on the reference year 2018). In the same period, we aim to reduce our emissions from gas sales in Scope 3 by 43% in comparison to the reference year 2018. These targets have been certified by the SBTi. We will offset any residual Scope 1 and 2 emissions in the period after 2035 on a transitional basis by purchasing CO<sub>2</sub> certificates and thus by supporting recognized climate change mitigation projects until the emissions have been completely reduced to zero. Along this path we have also defined various intermediate targets and milestones: We will reduce our Scope 1 and 2 emissions by 50% by 2027 and by 70% by 2030 (based on the reference year of 2018).

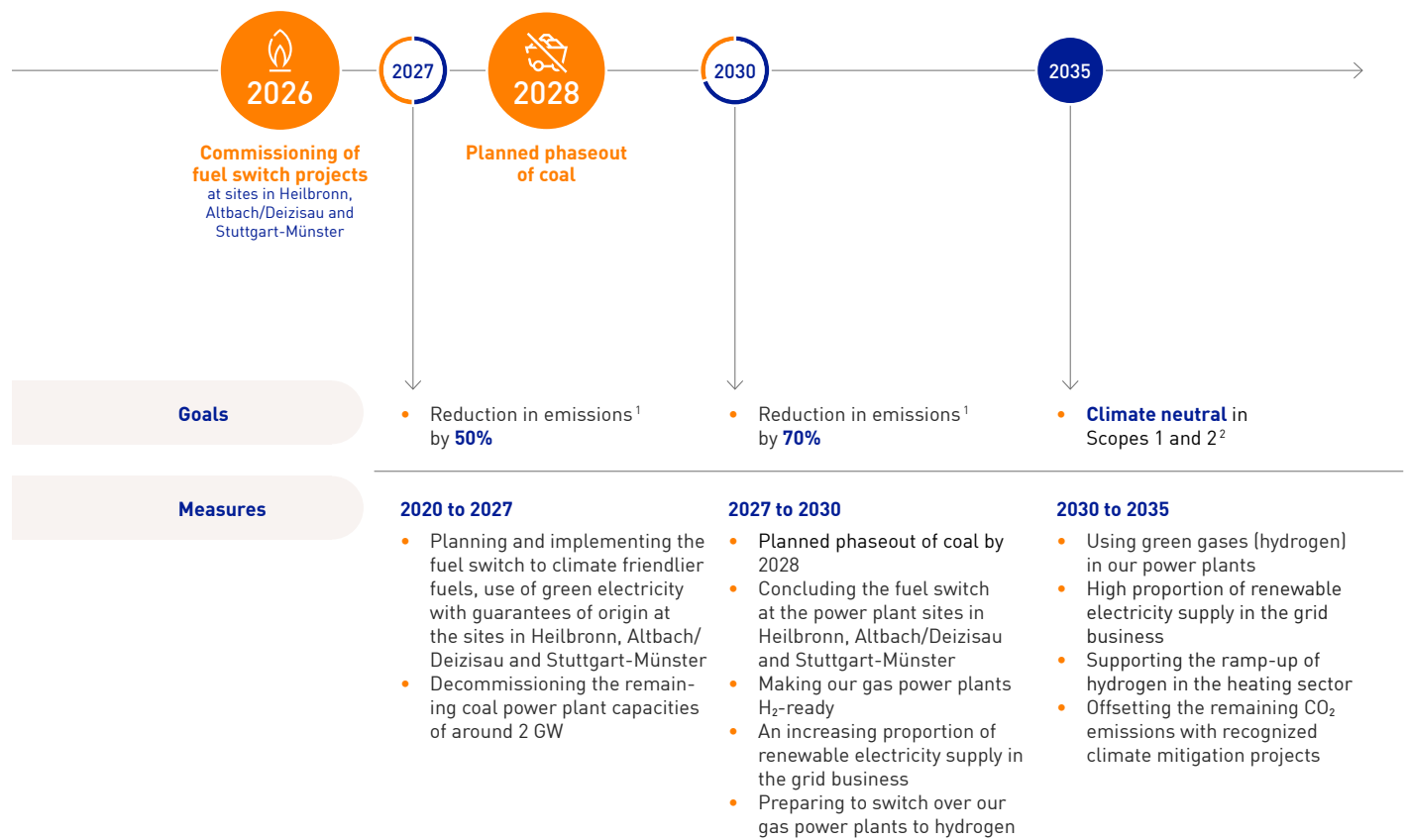
As an integrated energy company with its own generation portfolio – which is increasingly characterized by renewable energies – we can make an important contribution to decarbonization and thus to safeguarding the livelihoods of future generations.

### Measures

Our climate protection targets **are in line with the requirements and targets of the Paris Agreement**. They should also strike a balance between the different expectations of our stakeholders, with whom we remain in constant dialog. This includes above all the provision of affordable and climate-friendly energy and ensuring the security of supply.

The most important step for achieving our climate protection goals is the early phaseout of coal. Based on the assumption that renewable energies will be ramped up as necessary and the significant progress in expanding the grids in accordance with the plans announced by the German government will be achieved, we will phase out the use of coal at EnBW by 2028. Even before the Coal Phaseout Act, we voluntarily divested ourselves of 2,700 MW of particularly carbon-intensive generation capacity. We have already implemented appropriate human resources measures such as further training and forward-looking human resources planning for employees working in conventional generation. Some employees from the area of conventional generation are already bringing their technical expertise to other areas of the company, such as at our offshore wind turbines.

## Our climate protection goals



<sup>1</sup> Reduction in Scope 1 and 2 emissions compared to the reference year 2018.

<sup>2</sup> Achievement of our climate protection targets in line with the 1.5 degree path of the Paris Agreement.

## Milestones

## Scope 1 and 2: emissions in our value added-chain

An important milestone for reducing our CO<sub>2</sub> emissions will be the fuel switch at the power plants in Heilbronn, Altbach/Deizisau and Stuttgart-Münster. Specific emissions from electricity generation will be reduced by around 60% as a result of the switch from hard coal to natural gas. The conversion work at the plants is already underway and is due to be completed in 2026. The aim is to operate the plants from the middle of the 2030s onwards with climate-neutral gases, primarily green hydrogen, so that they will then generate climate-neutral energy. We plan to phase out coal power plants with around 2,000 MW of generation capacity that are still on the market by 2028.

Various measures will be required to reduce our indirect emissions from purchased or acquired energy (Scope 2). The CO<sub>2</sub> emissions from the general electricity mix will be reduced in the coming years by the expansion of renewable energies and the gradual phaseout of fossil fuel-fired generation. This will also lead to a reduction in our Scope 2 emissions. Furthermore, we plan to specifically utilize green electricity.

## Scope 3

When it comes to reducing our Scope 3 emissions, the volume of our gas sales is particularly important. This will be dependent on various developments in the heating sector. Alongside a further increase in the use of heat pumps, the partial mixing of the natural gas used to generate heat with climate-neutral gases and the expansion of climate-neutral district heating, there will be a general reduction in the need to heat buildings due to energy-efficient refurbishment and a fall in the average age of the residential building stock. We will push forward these developments as a partner, especially when establishing a hydrogen infrastructure. This will enable us to offer our gas customers a more environmentally friendly energy supply in future as we align our sales portfolio towards green gases.

This video explains our **reduction path**.

[Online ↗](#)

Netze BW won the **German Sustainability Award** in the grid infrastructure category.

Online <sup>7</sup>



Further information on our **sustainable financial instruments** can be found on our website.

Online <sup>7</sup>

Information on how the funds from the green bonds are used can be found in the **Green Bond Impact Report** on our website.

Online <sup>7</sup>

Our Chief Financial Officer Thomas Kusterer has been named **“CFO of the Year”** and our sustainable financing was one of the reasons for this award.

Online <sup>7</sup>

### The last step to reaching climate neutrality

We already set ourselves the target in 2020 of becoming climate neutral with respect to Scope 1 and 2 emissions by 2035. We plan to offset any non-reducible, residual greenhouse gas emissions by supporting recognized climate change mitigation projects that are carried out according to the highest standards (such as the Gold Standard). Just like Netze BW, our subsidiary Energiedienst was already in previous years measuring its Scope 1, Scope 2 and some of its Scope 3 emissions to ensure they remain climate neutral.

### Sustainable financing

The use of **sustainable financing instruments** underpins our corporate strategy and makes a contribution to achieving national and international sustainability targets, above all the Paris climate protection targets and the UN Sustainable Development Goals (SDGs) (p. 30 ff.<sup>7</sup>). Since 2018, we have successfully issued several **green bonds** on the capital market. As of 31 December 2023, these bonds had a total volume of €5 billion. We issued a green subordinated bond with a volume of €500 million on 23 January 2024. In accordance with our Green Financing Framework, the proceeds from our green bonds are exclusively used in the areas of renewable energies (offshore wind, onshore wind and photovoltaics), clean transport (charging infrastructure for electromobility) and the project category electricity grids that was newly added in 2022.

We provide detailed information on the allocation of the funds every year in our **Green Bond Impact Report**, which is published at the same time as the Integrated Annual Report. The green bonds thus support our investment in sustainability and in turn the key non-financial performance indicators in the environment dimension. The financing conditions for the **sustainability-linked syndicated credit line** are linked to selected non-financial key performance indicators. The proceeds from the **green promissory note of our subsidiary VNG** can only be used for environmentally sustainable projects: The focus in the medium to long term will be green gases, primarily biogas and sustainably produced hydrogen.

## Goals and performance management system

### Performance management system

The management of the company comprises financial, strategic and non-financial goals and, as well as the finance and strategy goal dimensions, includes the dimensions customers and society, environment and employees. The centerpiece of this **integrated corporate management** is the performance management system (PMS). The most important financial and non-financial Group goals have been broken down into target agreements insofar as they are considered a sensible performance indicator for the respective area. The value drivers for the most important operating performance indicators that contribute to the achievement of targets for the key performance indicators (finance, strategy and environment goal dimensions) are reported in the quarterly performance reviews conducted at a Board of Management level. In terms of external communication, the PMS feeds into the **integrated reporting** of the financial and non-financial performance of the company based on the “International Integrated Reporting Framework.” This Integrated Annual Report 2023 incorporates the financial and non-financial aspects of our business activities. The key performance indicators enable us to measure the degree to which goals are achieved and to manage our company.

TOP

### Definition of the key performance indicators

We monitor the implementation of our strategy by means of a holistic goal and performance management system. This system strengthens integrated thinking in our company. At the same time, it underpins our comprehensive and transparent focus on performance and stakeholders. Our goal system comprises the five dimensions of finance, strategy, customers and society, environment and employees. A number of specific targets have been defined in each goal dimension and their achievement is continuously measured using key performance indicators. Linked with this goal system and the centerpiece of our corporate management is the performance management system (PMS). Quantitative target values are currently set for the key performance indicators for the 2025 strategy horizon and now for the first time also the 2030 strategy horizon.

The **financial key performance indicators** within the PMS are the adjusted EBITDA, the shares of the adjusted EBITDA accounted for by the segments, debt repayment potential, value spread and from 2024 onwards also the share of adjusted EBITDA accounted for by low-risk earnings and the proportion of taxonomy-aligned expanded capex:

- The **adjusted EBITDA** is the earnings before the investment and financial results, income taxes, depreciation and amortization and adjusted for non-operating effects. Adjusted EBITDA is a key performance indicator for the finance goal dimension, while the key performance indicators for the strategy goal dimension, which describe the shares of adjusted EBITDA accounted for by the segments (p. 71 f.<sup>7</sup> and p. 125<sup>7</sup>) are derived from it.
- The key performance indicator **debt repayment potential** describes the retained cash flow in relation to net debt. The debt repayment potential measures the ability of EnBW to repay its debts from its current earnings potential. This performance indicator should enable us to achieve a controlled growth in earnings within the scope of our financial targets, while maintaining a solid investment-grade rating at the same time. It will guarantee that the financial profile of EnBW complies with the quantitative requirements stipulated by the rating agencies. Therefore, we regularly check whether our target value for the debt repayment potential complies with the current requirements of Moody's and S&P. Our most recent review led to an increase in the target value from  $\geq 12$  to  $\geq 15$  (p. 83<sup>7</sup> and p. 126<sup>7</sup>).
- The **value spread** measures the surplus return over the minimum return on capital employed before taxes in a reporting period. It is calculated by deducting the minimum return on capital employed before tax, defined by the weighted average cost of capital (WACC), from the return on capital employed before taxes that was actually achieved (p. 84 f. and p. 126<sup>7</sup>). Value spread will no longer be classified as a key performance indicator relevant to the control of the company from the 2024 financial year onwards and will be replaced by the new key performance indicators share of adjusted EBITDA accounted for by low-risk earnings and proportion of taxonomy-aligned expanded capex.
- The **share of adjusted EBITDA accounted for by low-risk earnings** is the sum of the adjusted EBITDA for the System Critical Infrastructure segment and the adjusted EBITDA for the Renewable Energies area in relation to the adjusted EBITDA for the EnBW Group. The external financing of our necessary investment is an important part of the EnBW strategy. In contrast to some of its competitors, EnBW operates along the entire value added chain. Against this background, it is especially important for EnBW to determine the share of low-risk activities for the rating agencies. The target level for the debt repayment potential that is required to achieve a certain rating class is dependent on this performance indicator. At the moment, a share of low-risk business  $\geq 70\%$  should guarantee that a debt repayment potential of 15% is sufficient to retain the current rating target (p. 93 f.<sup>7</sup>).
- For a definition of the **proportion of taxonomy-aligned expanded capex**, please refer to our taxonomy section on p. 107 ff.<sup>7</sup>. External financing is an important tool for successfully implementing the EnBW strategy, while the EU taxonomy provides a central framework for the investment strategy of banks and investors who have a focus on sustainability. By reporting on sustainable investment both at our fully consolidated companies and also at entities accounted for using the equity method, we are placing great importance on the performance indicator proportion of taxonomy-aligned investment. Furthermore, financial institutions (banks and investors) are obligated in the EU Taxonomy Regulation to report on the proportion of sustainable investment in their investment strategies. Companies who are already aligning their investment strategies according to the criteria in the EU taxonomy are thus more attractive to investors and are able to position themselves for a sustainable future.

In addition to the financial key performance indicators, the PMS also includes **non-financial key performance indicators**:



The **customers and society goal dimension** comprises the Reputation Index, the Customer Satisfaction Index and the SAIDI (System Average Interruption Duration Index) Electricity:

- In order to calculate the **Reputation Index**, a total of around 5,000 people – from the stakeholder groups relevant for the EnBW brand of customers, the wider public, industrial companies, opinion leaders and investors – are asked about their impressions of the EnBW brand by an external market research institute. Results are collected for each stakeholder group about the distinctiveness of the brand and their assessment of the competence of and emotional attitude towards the EnBW

brand. These are merged together to form a Reputation Index. The individual reputation indices for each stakeholder group are weighted equally to form a consolidated and reported Reputation Index (p. 87<sup>7</sup> and p. 127<sup>7</sup>).

- The key performance indicator **Customer Satisfaction Index** assesses the average satisfaction of private end customers for electricity over the year, which is directly linked to customer loyalty. The information is compiled using customer surveys about the two brands EnBW and Yello conducted by an external service provider. The Customer Satisfaction Index allows us to draw conclusions about how well we are meeting the needs and wishes of surveyed customers (p. 88<sup>7</sup> and p. 127<sup>7</sup>).
- **SAIDI Electricity** serves as the key performance indicator of supply reliability. It specifies the average length of supply interruption in the electricity distribution grid experienced annually by each connected customer. SAIDI Electricity includes all unscheduled interruptions to supply that last more than three minutes for the end consumer. The definition and calculation of this performance indicator is based on the guidelines issued by the Network Technology / Network Operation Forum (FNN) of the VDE (German Association for Electrical, Electronic & Information Technologies) (p. 92<sup>7</sup> and p. 127<sup>7</sup>). The reliability of the supply in the grid areas operated by our grid subsidiaries builds on our comprehensive investment in grids and facilities as well as our system expertise.



The key performance indicators in the **environment goal dimension** are the installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE and CO<sub>2</sub> intensity:

- **The installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE** are measures of the expansion of renewable energies and refer to the installed output of the power plants and not to their weather-dependent contribution to electricity generation (p. 93 f.<sup>7</sup> and p. 128<sup>7</sup>).
- The emissions of CO<sub>2</sub> from own generation of electricity for the Group, as well as the volume of electricity generated by the Group without the contribution made by the nuclear power plants, form the basis for the calculation of the key performance indicator **CO<sub>2</sub> intensity**. This performance indicator is calculated as the ratio between the emissions and the generated volume of electricity and thus specifically describes the amount of CO<sub>2</sub> released per kilowatt hour. By discounting the electricity generated by nuclear power plants, the performance indicator will not be influenced by the phasing out of nuclear energy (p. 95 ff.<sup>7</sup> and p. 128<sup>7</sup>).








The People Engagement Index (PEI) and LTIF (Lost Time Injury Frequency) are utilized as performance indicators in the **employees goal dimension**:

- The **PEI** expresses how engaged employees are in their work at EnBW. It is compiled at all companies with more than 100 employees (except for the Independent Transmission Operators [ITOs]) as part of an employee survey carried out by an external, independent service provider. It is determined based on the first question of the standardized list of questions "How happy are you working for the EnBW Group / a company in the Group?" It is a question that uses a rating scale from 1 (I do not agree at all) to 5 (I agree completely). The value determined is then converted to a scale of 0 to 100 (p. 101<sup>7</sup> and p. 128<sup>7</sup>).
- **LTIF** is calculated on the basis of LTI (Lost Time Injuries), which denotes the number of accidents during working hours which have occurred exclusively because of a work assignment from the company and result in at least one day of absence. LTIF indicates how many LTI occurred per one million working hours performed. According to the current definition, the calculation of the LTIF overall includes all companies with more than 100 employees. For the calculation of the LTIF for companies controlled by the Group, those companies engaged in the area of waste management are excluded because the number of accidents deviates significantly from that in the core business in the energy industry. Moreover, companies that are fully consolidated in the EnBW Group for the first time in the respective reporting year will not be included in the LTIF for companies controlled by the Group for a transitional period of three years if the LTIF calculated for the respective company deviates significantly from the LTIF for companies controlled by the Group. This transitional period will make it possible to take measures to improve the area of occupational safety. External agency workers and contractors are not taken into account in either performance indicator. In future, the existing LTIF performance indicators will be replaced by LTIF energy (excluding waste management) and LTIF overall, which includes waste management. According to the new definition, both performance indicators cover the entire group of consolidated companies for the financial reports, including companies with less than 100 employees.



Newly fully consolidated companies will not be included in LTIF energy (excluding waste management) for a maximum transitional period of three years if the LTIF calculated for the respective company deviates significantly from the LTIF at a Group level. Contractors are not taken into account in either performance indicator (p. 105<sup>7</sup> and p. 129<sup>7</sup>).

#### TOP Financial and non-financial key performance indicators and targets

Goal dimension	Goal	Key performance indicator	2023	Target for 2025	Target for 2030
 Finance	Securing profitability	Adjusted EBITDA in € billion	6.4	3.2 <sup>1</sup>	5.5 – 6.3
	Managing the financial profile	Debt repayment potential in %	41.3	≥ 15 <sup>2</sup>	≥ 15 <sup>2</sup>
	Increasing Group value	Value spread in %	10.2	– <sup>3</sup>	– <sup>3</sup>
	Robustness of the earnings potential	Share of adjusted EBITDA accounted for by low-risk earnings in % <sup>4</sup>	–	≥ 70	≥ 70
	Focus on the energy transition	Proportion of taxonomy-aligned expanded capex in % <sup>4</sup>	–	≥ 85	≥ 85
The EnBW Group, p. 71 f. <sup>7</sup>   Forecast, p. 125 f. <sup>7</sup>   Report on opportunities and risks, p. 130 ff. <sup>7</sup>   Multi-year overview, p. 311 <sup>7</sup>					
 Strategy <sup>5</sup>	Share of result accounted for by “Smart Infrastructure for Customers”	Share of overall adjusted EBITDA in € billion	0.2/3.8%	0.6/20.0%	0.7 – 1.0
	Share of result accounted for by “System Critical Infrastructure”	Share of overall adjusted EBITDA in € billion	1.8/27.8%	1.3/40.0%	2.3 – 2.6
	Share of result accounted for by “Sustainable Generation Infrastructure” in € billion	Share of overall adjusted EBITDA	4.6/73.0%	1.3/40.0%	2.7 – 3.0
The EnBW Group, p. 71 f. <sup>7</sup>   Forecast, p. 125 <sup>7</sup>   Report on opportunities and risks, p. 130 ff. <sup>7</sup>   Multi-year overview, p. 311 <sup>7</sup>					
 Customers and society	Reputation	Reputation Index	55	55 – 59	56 – 60
	Customer proximity	EnBW/Yello Customer Satisfaction Index	130/161	125 – 136/ 148 – 159	148 – 157/ 155 – 175
	Supply reliability	SAIDI Electricity in min./year	19.3	< 20	< 20
The EnBW Group, p. 87 ff. <sup>7</sup>   Forecast, p. 127 <sup>7</sup>   Report on opportunities and risks, p. 135 <sup>7</sup>   Multi-year overview, p. 312 <sup>7</sup>					
 Environment	Expand renewable energies (RE)	Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	5.7/46.9	6.5 – 7.5/> 50	10.0 – 11.5/ 75 – 80
	Climate protection	CO <sub>2</sub> intensity in g/kWh <sup>6</sup>	347	380 – 440	90 – 110
The EnBW Group, p. 93 ff. <sup>7</sup>   Forecast, p. 128 <sup>7</sup>   Report on opportunities and risks, p. 135 f. <sup>7</sup>   Multi-year overview, p. 312 <sup>7</sup>					
 Employees	Employee engagement	People Engagement Index (PEI) <sup>7</sup>	82	77 – 83	77 – 83
	Occupational safety	LTIF for companies controlled by the Group <sup>8,9</sup>	2.4	2.1	–
		LTIF overall <sup>8</sup>	3.7	3.5	–
		LTIF energy <sup>9,10</sup>	–	–	≤ 2
		LTIF overall <sup>10</sup>	–	–	≤ 3.3
The EnBW Group, p. 101 ff. <sup>7</sup>   Forecast, p. 128 f. <sup>7</sup>   Report on opportunities and risks, p. 136 <sup>7</sup>   Multi-year overview, p. 313 <sup>7</sup>					

<sup>1</sup> It was already possible to exceed this target in the 2023 financial year and in our current plans we now also expect to exceed the earnings target for 2025.

<sup>2</sup> EnBW regularly checks the target value for debt repayment potential to ensure it can maintain its rating target. In this context, the target value was raised to ≥ 15.

<sup>3</sup> Value spread will be replaced from 2024 onwards by the new key performance indicators share of adjusted EBITDA accounted for by low-risk earnings and proportion of taxonomy-aligned expanded capex.

<sup>4</sup> This performance indicator will be relevant to the ongoing management of the company from 2024 onwards.

<sup>5</sup> The sum of the three segments does not correspond to the adjusted EBITDA for the EnBW Group. €-293.9 million (-4.6%) is attributable to Other/Consolidation in the 2023 financial year (p. 71 f.). The target value for 2030 includes €-0.2 to €-0.3 billion in Other/Consolidation.

<sup>6</sup> The calculation for this performance indicator does not include nuclear generation and the share of positive redispatch that cannot be controlled by EnBW. If the share of positive redispatch that cannot be controlled by EnBW is taken into account, CO<sub>2</sub> intensity would be 393 g/kWh for the reporting year (previous year: 508 g/kWh). The CO<sub>2</sub> intensity including nuclear generation for the reporting year was 366 g/kWh (previous year: 401 g/kWh).

<sup>7</sup> Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered [except ITOs]).

<sup>8</sup> The LTIF for companies controlled by the Group excluding waste management and LTIF overall, which includes waste management, only includes companies with more than 100 employees excluding external agency workers and contractors.

<sup>9</sup> Newly fully consolidated companies are not included for a maximum transition period of three years.

<sup>10</sup> LTIF energy (excluding waste management) and LTIF overall, which includes waste management, cover the entire group of consolidated companies for the financial reports, including companies with less than 100 employees excluding contractors.

## Interdependencies

In order to give a comprehensive portrayal of the company, we are convinced that it is not only necessary to present economic, ecological and social aspects, but also to illustrate and provide an analysis of interdependencies between them. To further encourage the idea of a holistic corporate management approach within EnBW, we promote integrated thinking within all important company processes. In doing so, we anchor not only financial but also non-financial aspects into decision-making processes.



Since the 2021 financial year, we have illustrated the progress we have made in anchoring integrated thinking in our company using the investment approval process as an example, and have thus also been able to highlight the increasingly important role played by non-financial aspects.

Alongside economic and strategic factors, this type of sustainability evaluation has become a fixed component of the approval process followed by the EnBW investment committee and the EnBW Board of Management, providing information relevant to the decision-making process.

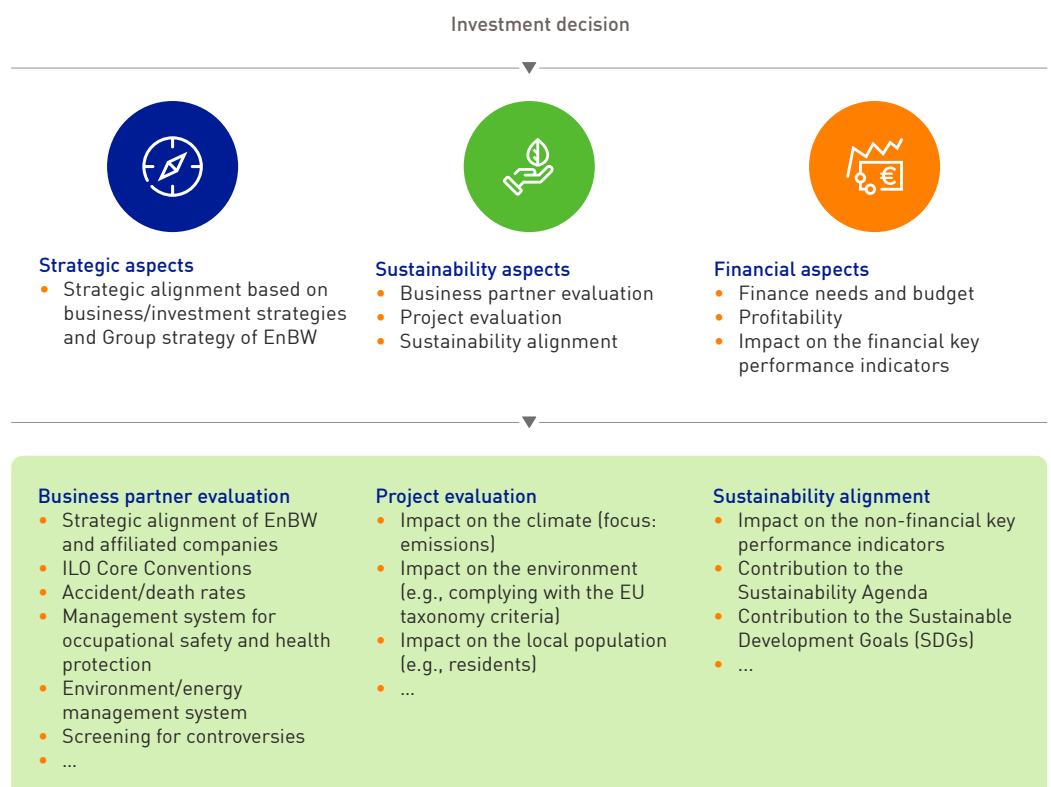
The investment approval process is defined by the entire Board of Management. Individual projects are discussed and recommendations drawn up by the investment committee (InC). Alongside the Chief Financial Officer, the members of the InC include representatives from all remits of the EnBW Board of Management and various specialist departments, including the sustainability department. The InC develops recommendations that are presented to the entire Board of Management together with the project documentation submitted by the specialist departments.



When evaluating individual investment projects, we not only evaluate the strategic alignment, funding requirements, profitability and impact of the project on the key financial performance indicators but also take **the following steps of the sustainability evaluation** into consideration on an equal basis in the investment approval process.

- **Business partner evaluation:** Every business partner (supplier, service provider, joint venture partner, company being acquired) is assessed with respect to its management of social and environmental sustainability. The business partner is also screened and evaluated to identify any controversies related to sustainability in the last five years with respect to corporate/compliance misconduct, labor law, human rights, environmental and product responsibility.
- **Project evaluation:** Examining the planned project and/or project category with respect to sustainability. We evaluate the impact of the project category (e.g., wind power, solar, fuel switch, fiber-optic) on the three areas of the climate, environment and people.
- **Sustainability alignment:** The project is examined from a strategic perspective to determine whether it complements our sustainability-aligned business plan.

#### Investment approval process



# Corporate governance

## Corporate management

Good corporate governance is an essential part of the corporate culture at EnBW. We are convinced that responsible and transparent corporate governance strengthens the trust and confidence that customers, capital providers, employees and the general public place in the company, thereby contributing to its long-term success. The Board of Management and Supervisory Board have the responsibility of managing and supervising the company above and beyond merely fulfilling statutory requirements, but to do so in accordance with recognized benchmarks for good corporate governance and in harmony with the principles of a social market economy, guaranteeing the continued existence of the company and ensuring a sustainable increase in its added value. Therefore, we also predominantly meet the recommendations of the German Corporate Governance Code (DCGK) in the version from 28 April 2022.

As the member of the Board of Management responsible for corporate governance, Colette Rückert-Hennen monitored conformity with the German Corporate Governance Code at EnBW and reported extensively to the Board of Management and Supervisory Board on all current themes pertaining to corporate governance. Both boards acknowledged her report and addressed the recommendations and suggestions in the Code. They subsequently approved the company's annual declaration of compliance pursuant to section 161 German Stock Corporation Act (AktG) on 7 December 2023. The current declaration of compliance is part of the Integrated Annual Report (p. 161 ff.<sup>7</sup>) and is also published at [www.enbw.com/declaration-of-compliance](http://www.enbw.com/declaration-of-compliance). The remuneration report can be found in a separate report at [www.enbw.com/corporate-governance](http://www.enbw.com/corporate-governance).

The **declarations of compliance from previous years** are published here.

Online ↗

## Management and supervision

### Board of Management

Allocation of responsibilities at Board of Management level (as of 9/3/2024)				
Dr. Georg Stamatelopoulos Chairman	Thomas Kusterer Finance, Deputy Chairman	Colette Rückert-Hennen Sales and Human Resources	Dr. Georg Stamatelopoulos (on an interim basis) Sustainable Generation Infrastructure	Dirk Güsewell System Critical Infrastructure
<ul style="list-style-type: none"><li>Corporate development</li><li>Sustainability</li><li>Strategy and energy economy</li><li>Communications / policy</li><li>IT and Digital Office</li><li>Corporate security</li><li>Enterprise development and transformation</li></ul>	<ul style="list-style-type: none"><li>Accounting and tax</li><li>Controlling</li><li>Finance</li><li>Investor Relations</li><li>M&amp;A</li><li>Digital finance and finance transformation</li><li>Equity investment management</li><li>Purchasing</li><li>Risk management/ICS</li><li>Risk management for trading</li><li>Venture Capital</li><li>Performance in growth</li></ul>	<ul style="list-style-type: none"><li>Personnel</li><li>HR strategy</li><li>Sales, marketing and operations</li><li>People-centered transformation</li><li>Legal</li><li>Auditing</li><li>Regulatory management</li><li>Compliance management and data protection</li><li>Boards and shareholder relationships</li><li>Occupational medicine and health management</li><li>Real estate management</li></ul>	<ul style="list-style-type: none"><li>Conventional generation/nuclear</li><li>Renewable generation</li><li>Coordination technology</li><li>Waste management / environmental services</li><li>Decentralized energy services</li><li>Occupational safety, environmental protection and crisis management</li><li>Research and development</li><li>Trading</li></ul>	<ul style="list-style-type: none"><li>DSO<sup>1</sup> electricity / gas</li><li>TSO<sup>2</sup> electricity / gas</li><li>Grid technology</li><li>Telecommunications</li><li>Gas value chain</li><li>Innovation management</li></ul>

1 Distribution system operator.

2 Transmission system operator.

Further information on the **Board of Management** of EnBW AG can be found on our website.

Online ↗

As of 31 December 2023, the Board of Management of EnBW AG consisted of five members. As of 9 March 2024, the Board of Management of EnBW AG consists of four members. In the reporting period, the Chairman of the Board of Management up to the end of 8 March 2024 was Andreas Schell. Dr. Georg Stamatelopoulos has been Chairman of the Board of Management and Thomas Kusterer Deputy Chairman since 9 March 2024. Dr. Georg Stamatelopoulos will still be responsible for the remit "Sustainable Generation Infrastructure" until his successor has been appointed. The Board of Management is jointly responsible for managing Group business. In addition to the role of CEO,

the tasks performed by the Board of Management are split into the remits of “Finance,” “Sales, Legal, Human Resources,” “Corporate Real Estate Management,” “Sustainable Generation Infrastructure” and “System Critical Infrastructure.”

## Supervisory Board

The Supervisory Board of EnBW AG consists of 20 members in accordance with article 8 (1) of the Articles of Association. In accordance with the German Co-determination Act (MitbestG), an equal number of members represent shareholders and employees. Three employee representatives are nominated by the ver.di trade union. The Supervisory Board appoints the members of the Board of Management and advises them on their management of the company. It discusses the business performance, planning and strategy of the company together with the Board of Management at regular intervals and ratifies the annual financial statements. The Supervisory Board is always involved in decisions of fundamental importance to the company. Legal transactions and measures subject to the approval of the Supervisory Board are defined in its rules of procedure. In order for the Supervisory Board to optimally perform its functions, it has formed the following standing committees: a personnel committee, a finance and investment committee, an audit committee, a nomination committee, a mediation committee in accordance with section 27 (3) MitbestG, a digitalization committee and an ad hoc committee.

The full version of the **Report of the Supervisory Board** is published here.

[Online ↗](#)

Further information on the Board of Management and Supervisory Board can be found on our website in the Report of the Supervisory Board, the Integrated Annual Report under the section on “Corporate bodies” ([p. 302 ff.](#)<sup>7</sup>) and the declaration of corporate management ([p. 161 ff.](#)<sup>7</sup>). The declaration of corporate management according to sections 289f and 315d HGB is part of the combined management report and is also published separately at [www.enbw.com/corporate-governance](http://www.enbw.com/corporate-governance).

## Annual General Meeting

The Annual General Meeting offers a platform for dialog with stakeholders and it is where shareholders exercise their rights with regard to company matters. The Annual General Meeting passes resolutions on the discharge of Board of Management and Supervisory Board members, the appropriation of earnings and the selection of the auditor. Resolutions of the Annual General Meeting only require a simple majority of votes in most cases. Each bearer share is equivalent to one vote.

You will find all of the information about our **Annual General Meeting** here.

[Online ↗](#)

Shares of EnBW AG are listed on the General Standard segment of the Frankfurt Stock Exchange. A stake of 46.75% of the share capital in EnBW AG is owned by each of both the Federal State of Baden-Württemberg – via its wholly owned subsidiary NECKARPRI GmbH and, in turn, via its wholly owned subsidiary NECKARPRI-Beteiligungsgesellschaft mbH – and by Zweckverband Oberschwäbische Elektrizitätswerke (Zweckverband OEW) via its wholly owned subsidiary OEW Energie-Beteiligungs GmbH.

Overall, the shareholder structure is unchanged as of 31 December 2023 when compared to the previous year.

### Shareholders of EnBW

#### Shares in %<sup>1</sup>

OEW Energie-Beteiligungs GmbH	46.75
NECKARPRI-Beteiligungsgesellschaft mbH	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

<sup>1</sup> The figures do not add up to 100% due to rounding differences.

The ordinary Annual General Meeting of EnBW AG was held as a virtual event on 3 May 2023. It approved the proposal by the Board of Management and the Supervisory Board to distribute a dividend of €1.10 per share for the 2022 financial year to shareholders. Based on the shares entitled to dividends, this corresponds to a dividend payout of €297.9 million, which was disbursed on 8 May 2023.

The next ordinary Annual General Meeting will be held on 7 May 2024 in virtual form in accordance with the “Act on the introduction of virtual general meetings of stock corporations and amending other provisions.”

## Compliance and data protection

### Compliance management systems

Compliance with the relevant legal regulations and internal company rules forms the basis for our business activities, is part of our corporate culture and is laid out in the code of conduct. Our compliance management systems (CMS) and functions are individually designed: They are based on company and sector-specific priorities and risks, the size of the company and other factors. They are designed to support each company – and thus the whole Group – in avoiding risks, liability claims and damage to reputation.

Depending on the type of corporate control over a company, the compliance-relevant companies with employees are either directly or indirectly integrated into the compliance management system of EnBW. The compliance management system focuses on the prevention, detection and sanctioning of corruption, the prevention of violations against competition and antitrust laws, and the prevention of money laundering in those companies directly integrated into the CMS. A total of 24 companies were directly integrated into the CMS of EnBW in the reporting year (previous year: 23). The CMS is regularly examined and updated both internally and externally.

The companies that are indirectly integrated into the CMS – Energiedienst (ED), Pražská energetika (PRE), Stadtwerke Düsseldorf (SWD), VNG and ZEAG as well as the ITOs (Independent Transmission Operators) terranets bw and TransnetBW – operate their own independent compliance systems. The preventative measures that these companies implement apply to all participating interests that are integrated into the respective compliance management system. We aim to safeguard our commercial success by combating compliance risks – especially money laundering, corruption and bribery. Preventative risk assessment methods, advisory services and training concepts have been implemented at EnBW, the compliance-relevant companies and the ITOs.

### Compliance activities in the reporting year

In 2023, we carried out the **leadership campaign** “Compliance & Privacy – Culture, Leadership, Dialog” to strengthen the compliance and data protection culture. The main themes of the kickoff event were the importance of an effective compliance and privacy culture for EnBW and the Board of Management’s expectations of managers with respect to compliance and data protection. Afterwards, we also held other events to highlight why a good whistleblower culture relies on how well it is trusted by employees, why data protection is not just a hygiene factor but also a trademark for the company, how managers can influence unwritten rules and decision-making situations, and why tolerance is an important aspect of a good compliance culture.

We also held training courses for other target groups working in sensitive compliance areas (+31.6% more participants in comparison to the previous year). Among other things, we once again provided special training courses for employees who are responsible for certain tasks, such as auditing business partners or imposing trade and financial sanctions. All of our employees and managers are obligated to complete an e-learning course on the prevention of corruption and bribery every two years. New employees must complete this training during their first year of employment. All of the indirectly integrated companies also held **compliance training courses** to increase awareness among employees.

The **code of conduct** and other information on the theme of **compliance** are published here.

Online <sup>7</sup>

Around  
**1,200**  
**participants** in events within the leadership campaign.

Number of participants in compliance training events<sup>1</sup>

	2023	2022	2021	2020	2019
Sensitive areas	1,877	1,275	716	839	904
New management personnel / employees	501	484	355	369	229
Management personnel	184	188	34	75	52
<b>Total</b>	<b>2,562</b>	<b>1,947</b>	<b>1,105</b>	<b>1,283</b>	<b>1,185</b>

1 At EnBW AG and directly integrated companies, excluding the participants in the leadership campaign.

The annual **compliance risk assessments** at EnBW investigate the corruption, antitrust, fraud and data protection risks and form the basis for all work relating to compliance. In 2023, they were carried out using a risk-based selection process at those companies directly integrated into the CMS. New legal developments such as the Act on Corporate Due Diligence Obligations in Supply Chains (Lieferkettensorgfaltspflichtengesetz, LkSG) (p. 53<sup>7</sup>) were taken into account in our compliance risk assessment tools. In the implementation of regulatory requirements, the compliance department assisted with measures taken in response to the LkSG such as the EnBW policy statement (p. 53<sup>7</sup>). This document defines, among other things, that the Human Rights Committee – comprising the heads of the sustainability and compliance departments – acts as the supervisory body for EnBW's risk management activities in relation to human rights and the environment.

The EnBW compliance department is available to provide advice on all **compliance issues** and can be reached via a hotline, e-mail or in person. This service is also available to all subsidiaries. In 2023, the hotline received around 1,100 inquiries relating to the key issues of sponsoring, donations and gifts. Advice was also provided on conflicts of interest and other compliance issues. Advisory services dealing with compliance themes at the indirectly integrated companies were also used to good effect.

In order to improve our compliance work, we have pushed forward our **digitalization initiatives**. For example, a piece of AI-based software for efficient auditing of business partners called "GePaRD" was developed and implemented in a Group-wide project. We also started the gradual rollout of our tool to optimize the documentation of and processes involved in business partner audits. In addition, we are continuing to improve our information and self-service options in order to make it easier for employees to independently work with compliance themes.

## Compliance whistleblower system and suspected breaches

A new tool was added at EnBW AG to the existing reporting channels in the 2023 financial year for whistleblowers to report suspected compliance breaches. The new EnBW whistleblower system provides people within the company and also external parties with a low-threshold opportunity to report compliance issues – in various different languages and anonymously if desired – either via an online reporting channel or using a telephone hotline (24 hours a day from Monday to Sunday). Our grievance process not only complies with LkSG requirements but also with the legal requirements for whistleblower systems in the Whistleblower Protection Act (Hinweisgeberschutzgesetz). At the same time, it can also be used to report discrimination or unequal treatment according to the General Act on Equal Treatment (Allgemeines Gleichbehandlungsgesetz). Alongside EnBW AG, the companies ED, PRE, SWD, VNG, ZEAG, terranets bw and TransnetBW have also established a whistleblower system and other reporting channels.

In the reporting year, a total of 65 suspected compliance breaches were reported to the central compliance department of EnBW AG. From the submitted reports, we identified 19 compliance breaches at directly integrated companies. None of these breaches were associated with bribery or corruption. There were no compliance breaches at indirectly integrated companies in the reporting year.

Our new **whistleblower system for reporting suspected compliance breaches** can be found here.

Online <sup>7</sup>

Detailed information on the EnBW whistleblower system and the reporting process can be found in the **rules of procedure relating to the EnBW Group's grievance process**.

Online <sup>7</sup>

At the beginning of the reporting year, the Federal Cartel Office, Federal Network Agency and State Bureau of Investigation carried out an investigation into the suspected abuse of a dominant position on one or more balancing energy markets and the suspicion of the criminal manipulation of the market. EnBW AG was named as one of the accessory parties and cooperated fully with the authorities. The accusations are being dealt with internally. At the time this report was published, however, there were no indications of any deliberate unlawful behavior by employees.

In the 2023 financial year, we faced neither antitrust law penalty procedures nor third-party antitrust lawsuits. Law enforcement agency investigations of individual employees and former members of corporate bodies relating to the so-called Russian business deals and the sales tax carousel in CO<sub>2</sub> allowance trading also continued throughout 2023 without any discernible activity by the law enforcement agencies. It is not possible to say at the present time when these proceedings will end.

## Data protection

In view of the increasing digitalization of our business activities, data protection plays an important role. Our efforts to bring more and more digitalization to the Group in order to both simplify internal processes and develop new business models are closely accompanied by the data protection department in an advisory capacity at an early stage. The interrelationship between data protection law and European regulations on data law are monitored and evaluated for EnBW above all in a cross-functional body so that the company can detect any need for action at an early stage. The directory of processing activities required by law is maintained in digital form. An automated process ensures that the documentation is regularly checked and updated. Data protection compliance risks are also specifically examined every year as part of a risk assessment. The data protection department works to guarantee that the rights of the data subject are respected through regular training to raise awareness, continuous improvement measures and audits. In the reporting year, an independent law firm reviewed the data protection management system. Regular reports are submitted to the Board of Management and supervisory bodies to ensure transparency and control. We meet the standards we have set for the processing of personal data by using internal data protection guidelines within the Group that define objectives, the principles for the processing of the data and the procedures themselves. We also have an established reporting system for reporting any data protection breaches. A network of decentralized data protection managers has been formed to support compliance with legal and internal Group regulations. This network regularly receives information, advice and training from the central data protection department. In sensitive areas of the company, digital learning activities and online seminars are used to raise employee awareness for this theme. We also offer special e-training courses and educational campaigns for areas of the company that work particularly closely with personal data.



# In dialog with our stakeholders

## Our stakeholders

The **Energy & Climate Protection Foundation** provides the ideal platform for dialog on the future of energy.

[Online ↗](#)

Continuous dialog with our internal and external stakeholders is an important element in the design and orientation of our business activities. The expectations of our stakeholders are taken into account in the strategic positioning of the company and when making business decisions. At the same time, we critically and constructively discuss the necessary conditions for the development of efficient, reliable and sustainable infrastructure with relevant stakeholders on the basis of transparent information. As part of this dialog, it is also important for us to listen to critical opinions such as those expressed at events held by our Energy & Climate Protection Foundation, in discussions within the “EnBW Climate Dialog” and at our annual event “EnBW Sustainability Dialog 2023.” It is our belief that mutual understanding, social acceptance and trust are increased further through this **open and respectful exchange** of insights and perspectives. In addition, it can also help us to identify central developments and key or risk topics at an early stage. The dialog with stakeholders thus contributes to the economic success of the company. Therefore, we will continue to intensify this dialog – with a special focus on the themes of the energy transition, mobility transition, climate protection and sustainability.

### Our stakeholder groups and selected opportunities for dialog



## Materiality analysis

We have continuously expanded our processes over the last few years for **identifying material themes** and linking them with the development of the company's strategy. Material aspects are determined based on our non-financial declaration and on the International Integrated Reporting Framework, as well as in accordance with standards for sustainability reporting issued by the Global Reporting Initiative (GRI). In addition, current developments flow into the determination of future key issues, such as the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) on climate-related risk reporting.

We consider themes to be material if they have a **significant influence on long-term value added** and thus the performance and future viability of our company. Contributions to the strategic orientation of the company as a sustainable and innovative infrastructure partner are of particular importance in this context. Furthermore, aspects reflecting any important economic, ecological and social impacts our company may have and that significantly influence the perception of stakeholders are also taken into account. Material themes are continuously implemented in the functional and business units, as well as in the individual companies of EnBW.

The **materiality analysis process** comprises three steps: the creation of an overview of the themes relevant to strategy and communication, the development of a list of themes relevant from the perspective of sustainability and the derivation of material themes from the reputation analysis. In parallel, these aspects are regularly compared with the main areas of focus for the Supervisory Board and Board of Management. Every step leads to a prioritization of themes and ultimately to a final list of the top themes. The material themes and events at EnBW in the 2023 financial year are allocated to the three segments in the overview of the segments (p. 22<sup>7</sup>). By focusing on our material themes, we aim to make a significant contribution to the Sustainable Development Goals (SDGs) and generate added value for our stakeholders.

## Sustainable Development Goals



The Sustainable Development Goals (SDGs) define the global framework for building a sustainable future. These **sustainability goals** were published by the United Nations in 2015 as part of the Agenda 2030. The 17 overarching goals and 169 targets focus on global challenges in an economic, ecological and social context. All sectors of society – including companies – have been called on to make their contribution to achieving the SDGs.

### EnBW's contribution to the SDGs

As a sustainable and innovative infrastructure partner, we want to contribute to the achievement of these goals through our activities while also creating value for our stakeholders. In particular, we make a contribution to **four key SDGs**. It is fundamentally important for us as a company to address the concerns and interests of society and we carry out various activities and campaigns to this end every year.

## Four key SDGs at EnBW – activities and performance indicators (examples)


**SDG 7:**  
**Affordable and clean energy**

- Expansion of renewable energies (RE)
- Climate-friendly products (e.g., green electricity)
- Key performance indicators: Installed output of RE, Customer Satisfaction Index


**SDG 9:**  
**Industry, innovation and infrastructure**

- Expansion and operation of electricity and gas grids
- Research, development and innovation
- (Key) performance indicators: SAIDI Electricity, SAIDI Gas


**SDG 11:**  
**Sustainable cities and communities**

- Expansion of quick-charging infrastructure for electromobility
- Expansion of broadband infrastructure
- Performance indicator: Number of EnBW quick-charging stations in Germany


**SDG 13:**  
**Climate action**

- Coal phaseout 2028 and climate neutrality 2035 (Scope 1 and 2)
- Biodiversity at EnBW sites
- (Key) performance indicators: CO<sub>2</sub> intensity (generation), CO<sub>2</sub> emissions

## Other important SDGs at EnBW



## Corporate citizenship and social activities

Our commitment to addressing the concerns and interests of society is concentrated on the **core areas** of popular sport, education, social issues, the environment, and art and culture. We place our main focus on overriding social issues with the aim of making a positive contribution to the target groups of end customers, business partners and local authorities. We also refer you to the “Report on opportunities and risks” for more information on our engagement in this area (p. 135<sup>7</sup>).

The Group guidelines on corporate sponsoring, memberships, donations and involvement with universities govern the goals, responsibilities, standards, principles and processes for EnBW AG and all of the domestic companies in which it holds a controlling interest. Companies based outside of Germany must comply with the EnBW guidelines for foreign companies. Donations are documented in a donation report that is presented annually to the Board of Management. In 2023, **donations made by the EnBW Group** came to €3.6 million, following €2.1 million in the previous year. Donations worth around €580,000 (previous year: €720,000) were attributable to EnBW AG. The main reasons for the rise in the total donations were an increase across the Group in aid provided in response to war and natural catastrophes and a growth in activities to mitigate the consequences of the energy crisis.

The EnBW Board of Management decided a number of years ago not to send Christmas gifts to business partners. Instead, we once again made donations to **social projects in Baden-Württemberg** in 2023 and supported eight charitable campaigns and campaigns initiated by readers of regional newspapers in Baden-Württemberg with total donations of €32,000. The main focus of our social engagement in 2023 were **relief campaigns** for people affected by war and natural catastrophes: As a response to the earthquake in the Turkish-Syrian border region at the beginning of 2023, we took action to provide support in the affected areas. This included €100,000 of emergency aid, of which €50,000 was donated directly to emergency aid measures in the region and €50,000 provided to our joint venture Borusan EnBW Enerji for local relief campaigns. We were able to raise almost €65,000 with our employee fundraising campaign for the victims of the earthquake via betterplace.org and a further €42,000 was raised during a Turkish themed week in the company canteens. In addition, employees were actively engaged in a variety of ways and supported the humanitarian aid in the affected region themselves to provide aid to the victims of the earthquake and help restore the heavily damaged infrastructure in the region. In 2023, we also offered further assistance to those people in Ukraine impacted by the war between Russia and Ukraine. The aid provided by EnBW was mainly in the form of in-kind donations. For example, we supplied technical

Since 2016, employees have regularly supported social and charitable projects with the **EnBW “Making it happen” bus**.

Online <sup>7</sup>

equipment such as emergency generators and power transformers for the repair and maintenance of the damaged energy infrastructure in Ukraine. With these efforts, EnBW and its subsidiaries are taking part in an initiative organized by the Federal Ministry for Economic Affairs and Climate Action (BMWK) that has called for energy companies across Europe to offer assistance.

The **EnBW “Making it happen” bus** went on tour again in 2023 and the team supported a total of four selected social projects, which were each also awarded up to €5,000 for any necessary materials.

Various subsidiaries in the EnBW Group also addressed the concerns and interests of society in 2023. Some examples can be found below:

**Stadtwerke Düsseldorf (SWD)** donated €400,000 to the hardship funds administered by the Bürger-Stiftung Düsseldorf to help support low-income households in Düsseldorf. SWD also made in-kind donations to humanitarian aid organizations in Ukraine and provided financial support to various organizations assisting earthquake victims in Turkey and Syria. **Pražská energetika (PRE)** continued to provide support to the Charta 77 Foundation – Barriers Account, as well as other non-profit organizations focusing on charity, health, social and education activities, and environmental protection. In addition, PRE developed programs to help people impacted by fuel poverty and raise awareness of how to use energy efficiently. Via its subsidiary ONTRAS Gastransport (ONTRAS), **VNG** supported the “Foundation for volunteering and civic involvement in Mecklenburg-West Pomerania” in 2023 and also made donations to five charitable associations in its grid area who help people in need. As part of its “Mail instead of letter” campaign, **Netze BW** once again gave its customers the opportunity to receive requests to read the electricity meter electronically in 2023. The savings on postage, paper and printing costs were then donated to numerous charitable organizations in the local communities. This campaign also helps to reduce CO<sub>2</sub> emissions. Instead of sending Christmas gifts to business partners, Netze BW supported five charitable organizations in its grid area with total donations of €10,000 in 2023.

Learn more about our engagement in **art and culture** here.

Online <sup>7</sup>

In the area of **art and culture**, we are presenting the Sahara Project as part of the “Mack in ZKM” exhibition in cooperation with the Center for Art and Media (ZKM) in Karlsruhe from November 2023 to April 2024. This exhibition in the foyer invites visitors to explore photographs, collages and objects created by Heinz Mack, one of the most important German artists of the post-war generation. We also provided a platform for the organization release Stuttgart e. V. via a series of exhibitions called “release and art.” Half of the proceeds raised by the artists was donated to the Stuttgart-based organization that provides advice and assistance to people with drug-related issues.

## Corporate guidelines for party donations and lobbying

The **EnBW Code of Conduct** is available on our website in PDF format via the following link.

Online <sup>7</sup>

You will find a selection of the associations of which EnBW and its Group companies are **members** here.

Online <sup>7</sup>

Ensuring transparency with respect to our lobbying activities forms part of our sustainability activities (p. 28 f.<sup>7</sup>). The **EnBW Code of Conduct** has been valid since 2009 for EnBW AG and all companies in which it holds a controlling interest. Our lobbying activities are coordinated in our offices in Brussels, Berlin and Stuttgart. As well as maintaining direct contact with political decision makers or their employees and participating in relevant events, we also engage in political dialog by publishing position papers and contributing to consultation processes either directly or via associations. At the same time, we hold our own specialized political events and conferences at our sites. Furthermore, we work together with sector associations and initiatives, research institutes, foundations and think tanks at a local, regional and European level. The EnBW Code of Conduct stipulates that no donations may be made to political parties, organizations affiliated with them, civil servants, elected representatives or candidates for public office.

## In dialog with citizens

Dialog with citizens is important to us as an energy company. A large number of both in-person and virtual events was held in 2023 to give out information and encourage the participation of citizens. These included:

The closing event for a one-year, multistage dialog forum was held at our **GeoHardt geothermal project** (p. 48<sup>7</sup>) in March 2023 in which the participants presented the report on their findings to the two project partners EnBW and MVV. GeoHardt also informed interested members of the public about the current status of the geothermal project at a digital information event in May. After confirming the investment decision for the **conversion and expansion of the pumped storage power plant in Forbach** in May 2023, we informed citizens and interested parties about planned construction work and answered their questions at an event held at the site in October. Also in October, we held the first large meeting with residents to mark the foundation of our **WärmeWerk Wörth** (p. 48<sup>7</sup>). In cooperation with our partners – the City of Wörth am Rhein and Daimler Truck – we informed residents about measures that have been planned for investigating whether the deep geothermal energy could be used to provide heating to the local area and gave the residents an opportunity to ask questions. Citizens also had the opportunity for further dialog via an information stand set up at a local retailer.

In the area of **nuclear energy**, the main topics for dialog with citizens were the three-and-a-half month extension to electricity production at our power plant block Neckarwestheim II at the beginning of 2023 and the political discussions about the continued operation of nuclear power plants in Germany. We provided information on our procedures and stance on the subjects at, for example, a digital press event held at the end of March 2023. Information on the extension and end of electricity production and the latest news on the dismantling work at our two nuclear power plant blocks Neckarwestheim I and II was also provided in May at two large press events held at the site in Neckarwestheim that were attended by numerous representatives from the media.

Link to the **citizen participation platform**.

Online <sup>7</sup>

We plan, construct and operate wind farms and photovoltaic power plants in direct partnership with or through the participation of local authorities and citizens. Local citizens are able to use the **EnBW citizen participation platform** to participate financially in regional renewable energy projects. Three projects funded through such citizen participation models were implemented in Steinheim, Allmendingen and Häusern in 2023.

# Research, development and innovation

## Research and development

### Goals

The goal of our research and development is to identify technological trends at an early stage, assess their economic potential and build up expertise in the business units. For this purpose, we carry out pilot and demonstration projects together with partners or customers directly at the site of their subsequent application. This ensures that successful research projects deliver innovations for our company. Research, development and innovation also lead to inventions and patents in many cases. The portfolio of patents fell by 6 patents in 2023 (previous year: +23); the EnBW Group thus held 242 patents (previous year: 248) at the end of the year. The patents held by EnBW focus mainly on the areas of renewable energies, gas and electromobility.



Further information on the **floating wind power plant Neuzzy<sup>2</sup>** can be found on our website.

[Online ↗](#)

Further information on the **Offshore Drone Challenge 2024** initiated by EnBW and the DLR can be found here.

[Online ↗](#)

Further details on **Condition Monitoring 4.0** for wind turbines can be found online.

[Online ↗](#)

### Selected activities

**Wind energy:** Offshore wind power plants with fixed foundations are limited to shallow waters with water depths of up to around 50 m. Floating platforms could be used to install wind turbines in deeper waters and are thus an important component of the offshore strategy at EnBW. We developed **Neuzzy<sup>2</sup>** in cooperation with the engineering company aerodyn from northern Germany. Following successful tests on a 1:10 scale, a 1:1 model was constructed in 2023 and is due to enter test operation in 2024. In parallel, we analyzed the feasibility and costs of using floating platforms for publicly tendered projects in deep waters in Europe, such as in the Mediterranean Sea off the coast of Southern France. Our subsidiary Valeco launched the **“Pieux à ailettes réutilisables pour éoliennes flottantes” (PAREF)** project in 2023 with funding from the French government to carry out environmental research into how the construction and operation of floating platforms can positively impact underwater flora and fauna.

There are high logistical costs associated with the **servicing and maintenance of offshore wind turbines**. Since April 2022, we have been researching how **transport drones** can reduce the number of helicopter and ship deployments in conjunction with the German Aerospace Center (DLR). This three-year project is being funded by the Federal Ministry for Economic Affairs and Climate Action (BMWK). During the first test flight for the DLR drone superARTIS, we tested the communication between the wind park system and the drone initially on land at the EnBW onshore wind farms Schwienau II and III in October 2023. The aim of the **Condition Monitoring 4.0** (AutoDiagCM) project, which is being carried out in cooperation with the Karlsruhe University of Applied Sciences, is to develop a diagnostic system for monitoring the condition of onshore and offshore wind turbines by September 2025. This project is also funded by the BMWK. As part of the project, we have collected data on the condition of our turbines and cross-referenced it with incidents where there has been damage in the past. In addition, a new type of detector was also developed in 2023 to identify damage using the data. This pattern recognition system will not only enable us to identify damage before it occurs but will also suggest preventative measures and help avoid unplanned downtimes.

**Photovoltaics:** Since December 2022, we have been supporting the two-year project **PV4Rail** led by the Fraunhofer Institute for Solar Energy Systems. The aim of the project is to tap into unused potential in the generation of PV electricity. A concept for a system and an inverter will be developed that will allow PV parks located near to train tracks to feed electricity directly into the railway's own electricity grid. A roundabout route via the public 50 hertz electricity grid has so far been the only available option as there is no suitable inverter compatible with the 16 2/3 hertz frequency of the railway's electricity grid. In this project funded by the BMWK, EnBW is developing the electrical concept and evaluating profitability.

Our subsidiary **EnPV** has developed a new photovoltaic cell design that promises higher cell efficiency at lower production costs when compared to the mass market cells currently available. Novel laser processes enable EnPV to employ a simple method to position all the contacts on the rear of the cell and in doing so largely remove the need for the material silver. In August 2023, EnPV signed a memorandum of understanding with a North American PV producer to manufacture the EnPV technology in a joint pilot plant.



Further information on the **Hardt geothermal project** can be found here.

Online ↗

**Geothermal energy:** In addition to the production of electricity, geothermal energy has the potential to reduce the use of fossil fuels in heating networks. We support our business partners, such as local authorities, in decarbonizing their heating networks using geothermal energy. We have held the geothermal license for the Mannheim-Heidelberg-Speyer region together with MVV since August 2020. This license grants us the right to examine how geothermal energy can be used to decarbonize the local district heating system within this region. The two companies founded the company **GeoHardt** for this purpose at the beginning of 2021 and in 2023 they carried out studies to identify the precise target areas for boreholes and the associated drilling sites.

A geothermal plant in **Bruchsal** that is operated jointly with the company Stadtwerke Bruchsal is already reliably supplying a nearby police station with geothermal heat today. We were able to increase the amount of heating energy in the 2022/2023 heating period to 2,600 MWh (previous year: 2,400 MWh) and fully cover the customer's demand. Now that it has been demonstrated that the geothermal plant is capable of stable operation, it will be integrated into the operational unit for generating district heating. Geological studies carried out as part of the research will be used to determine whether the heating production can be expanded so that other customers can be supplied with heat from geothermal power. In the meantime, the technology in the electricity generation plant has been upgraded so that it generated 2,200 MWh of electricity, which is more than twice as much as in the previous year.

EnBW also founded the **WärmeWerk Wörth** together with Daimler Truck and the City of Wörth am Rhein in 2023. It will examine the different possibilities for delivering a climate-neutral energy supply to both the Mercedes Benz factory in Wörth and also the City of Wörth am Rhein. If a suitable solution is found, the plan will be to construct and operate a geothermal power plant to provide heating. A major aim of the partners is to utilize geothermal heat in the existing local heating grids in the municipality.

Further details on the **large-scale heat pump in Stuttgart-Münster** are available online.

Online ↗

We are taking a further step towards achieving climate neutrality for our regional district heating supply at the site of our Stuttgart-Münster combined heat and power plant. A large-scale heat pump will utilize the waste heat from the cooling water draining from the site to generate 20 MW of district heating. The **large-scale heat pump in Stuttgart-Münster** will be one of the first plants in Germany on this scale, setting new standards in how waste heat is used to meet energy needs. The new plant will be placed into operation in the first half of 2024.

Find out more about the **hydrogen projects in Wyhlen** here.

Online ↗

**Hydrogen from renewable energies:** We also want to provide our customers with carbon-neutral gaseous energy sources in the long term. We are investigating how to generate affordable green hydrogen with funding from the German government at the H<sub>2</sub>-Wyhlen and H<sub>2</sub>Mare field labs. In **Wyhlen**, our subsidiary naturenergie hochrhein is expanding an electrolysis plant that was constructed with funding from the Federal State of Baden-Württemberg by 5 MW to 6 MW. It will supply industry and mobility customers with green hydrogen generated using green electricity. A total of 30 companies showed an interest in the public invitation to tender for the direct distribution of the green hydrogen. The construction of the plant at the Wyhlen hydroelectric power plant is due to begin in 2024. The work to expand the production capacities should be completed by the end of 2025. Together with a consortium of 35 industry and research partners, we are carrying out research in the **H<sub>2</sub>Mare** project into the production of green hydrogen directly at offshore wind power plants. The invitation to tender for the floating platform and various plant components will be issued by the end of the first quarter of 2024. The plant should be placed into operation in 2025 as the first plant in Germany for the generation of hydrogen and derived products at sea and will act as the basis for us to become the technological leader in the field of offshore hydrogen production.

Instead of using electrolysis, **climate-neutral hydrogen can also be produced from green ammonia**. In June 2023, EnBW, VNG and the Japanese energy company JERA signed a memorandum of understanding with the goal of examining the feasibility of constructing a demonstration plant. Ammonia is already available today in huge quantities and can be transported to its point of use more easily than hydrogen.

**Hydrogen in the gas grid:** Natural gas grids can be decarbonized using zero-emission energy sources like hydrogen – just like the electricity grid. At the field laboratory **"Energy Park Bad Lauchstädt"** in central Germany, we are investigating the entire value-added chain for green hydrogen on a large

In the 20th episode of the **"Podcast on the future of energy,"** the head of the Green Gases division at VNG speaks about, among other things, the opportunities for hydrogen in Germany.

Online ↗

The “**Energy Park Bad Lauchstädt**” demonstrates all stages of the value added-chain for hydrogen.

[Online ↗](#)

Further information on the “**Hydrogen Island Öhringen**” project can be found on our website.

[Online ↗](#)

industrial scale – from its production from wind power and transport through to the storage and use of green hydrogen in a refinery – in a project led by VNG. The project has been running since September 2021 and is being funded by the BMWK. Following the final investment decision by the consortium partners in early 2023, the first milestones in the construction of the site have already been achieved. This included installing the first of the eight wind turbines, fitting a pig trap in the future hydrogen line and placing the new transformer station into operation. A first supply contract for green hydrogen has been concluded with the TotalEnergies refinery in Leuna. The 30 MW high-pressure alkaline electrolysis plant is due to be installed in 2024.

Our subsidiary Netze BW started a pilot project called the “**Hydrogen Island Öhringen**” in 2020 in the City of Öhringen in the Hohenlohe district that is unique across Germany. A natural gas mix with a green hydrogen content of up to 30% will be produced in a separate island grid. The hydrogen will be produced from renewable energies using an electrolyzer on the premises of Netze BW that was placed into standard operation in November 2023. The mixed gas is now being used to supply heat to the company premises and 22 other buildings.

EnBW is currently working on the development of fuel cell systems for a variety of different applications. As part of a **pilot project at the Stuttgart-Feuerbach heating plant**, which is operated by EnBW Contracting, we are cooperating with Bosch to test five highly efficient fuel cells. The solid oxide fuel cells (SOFCs) with a total electrical output of around 50kW will be used to cover the plant’s own electricity needs and to preheat any additional water that may be required. The project is due to run for a period of three years and will deliver important information on the robustness, durability and efficiency of the fuel cells and the requirements and processes involved in their planning, installation and operation. As part of a research project at the site of the geothermal power plant **in Bruchsal, EnBW is also testing a fuel cell system** from Bloom Energy with a total output of 300kW. The system is due to be placed into operation in fall 2024. The fuel cell system can today already be used to produce a natural gas mix with a hydrogen content of up to 20%. It has the potential to be upgraded to operate with 100% hydrogen in the future. The electricity generated by the system will either be used to meet the geothermal plant’s own energy needs or sold.

**Inductive charging:** In multiple projects with passenger cars and commercial vehicles, EnBW is carrying out research into how to make electromobility with wireless charging even more environmentally friendly and expand the current limits on the range of the vehicles. An **electric bus that is inductively charged** has connected our site at the Port of Karlsruhe with the public transport system since 2021. In May 2023, another electric bus was placed into operation at the horticultural show in Balingen. It charges its batteries inductively while waiting at the two bus stops and during the journey along an approximately 400 m stretch of road. During the course of the year, we expanded the induction route so that the electric bus can now also be used on several bus routes in Balingen as part of the regular public transportation service.

We are also testing the **wireless charging process on passenger cars** and expanding our activities in this area. For example, two already existing projects with leading automotive companies and suppliers were combined into one research project in 2023 to standardize the prototypes produced by various manufacturers for wireless charging under consideration of statutory calibration guidelines. Tests were carried out in the car park at the EnBW City site in Stuttgart to investigate how well charging plates from one manufacturer that have been installed in the floor work with receivers from another manufacturer that have been installed on a car. Further tests of the inductive charging technology will be supported by the University of Stuttgart and are being funded by the German government. The aim is to bring the wireless charging of cars to market maturity and make it available to EnBW customers.

Further information on the **extraction of lithium** at the Bruchsal geothermal plant can be found here.

[Online ↗](#)

**Sustainable extraction of lithium:** In cooperation with the Karlsruhe Institute of Technology (KIT) and other parties, we investigated a process to sustainably extract lithium from thermal water as part of a research project in Oberrheintal. A **lithium recovery facility** with a reactor was initially constructed at the existing geothermal power plant in Bruchsal. The short- and long-term extraction experiments carried out at the site from February to August 2023 confirmed the results produced in the laboratory. After upgrading the process to work with three reactors, the team managed to complete the cycle in 2023 and also operate the facility with a lot less water and materials. The improved technology with three reactors was constructed in 2023. The experiments being carried out in the first half of 2024 will attempt to find the ideal carrier material and identify the economic potential of extracting lithium for electric car batteries here in Germany.

## Expenditure and personnel

In the 2023 financial year, we spent €38.8 million (previous year: €28.1 million) on research and development. This increase was due to project-specific one-off expenses for the funded large-scale heat pump research project in Stuttgart and hydrogen projects at VNG. We received government research grants of €8.9 million (previous year: €4.8 million). There was a total of 66 employees in areas dedicated to research and development at the Group (previous year: 49). In addition, 259 employees (previous year: 282) were involved in research and development projects as part of their operational work.

### Expenditure on research and development

in € million	2023	2022
Grids	10.9	12.3
Generation from renewables	15.7	8.0
Smart energy world, storage and electromobility	4.3	3.9
Hydrogen	7.1	3.5
Customer-related research projects	0.2	0.1
Other	0.5	0.4
<b>Total<sup>1</sup></b>	<b>38.8</b>	<b>28.1</b>

<sup>1</sup> The figures may not add up due to rounding differences.

## Innovation

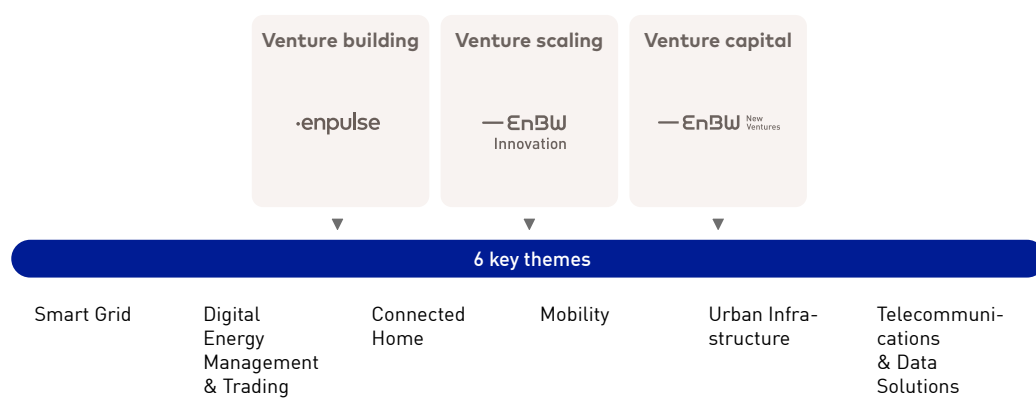
### Goals

One fundamental aim of our business activities is to develop innovations that push forward the energy transition. Our innovation strategy is designed to promote innovative ideas in a more targeted manner in cooperation with committed company founders, investors and employees. At the same time, we aim to tap into new business fields for EnBW. One important focus is strengthening the entrepreneurial independence of the team and spinning off business models as start-ups as early as possible. In addition, we also invest in start-ups outside of the EnBW Group, in order to push forward existing innovations and establish a strong network of partners.

### Innovation strategy

Our **innovation strategy** is based on **three central pillars**: venture building, venture scaling and venture capital. Overall, we are concentrating our activities on **six key themes**: Smart Grid, Digital Energy Management & Trading, Connected Home, Mobility, Urban Infrastructure and Telecommunications & Data Solutions.

#### Three pillars of the innovation strategy



Learn more about how **EnPulse** supports young start-ups.

[Online](#)

**Venture building: EnPulse** is responsible for all of the early-phase activities of EnBW Innovation and develops new business models within the six key themes. It has a broad range of tasks, from analyzing trends and developing and testing initial business ideas through to the foundation of start-ups. EnPulse also offers start-up grants to young people with entrepreneurial ambitions and

supports them in the further development of their business model for between six and twelve months. Two start-up grants were awarded in 2023 to **OXO Earth** and **Freeze Carbon**. OXO Earth enables forest owners to participate in the CO<sub>2</sub> markets and maximize the climate performance of regional forests. In contrast, Freeze Carbon operates a CO<sub>2</sub> marketplace that enables buyers and sellers to neutralize unavoidable emissions.

EnPulse has also invested in the company **metiundo**. This company provides property owners with access to live data on their energy and water usage in their real estate portfolio. It thus helps them produce legally compliant CO<sub>2</sub> reports and puts them in a position where they are able to take energy efficiency measures and utilize renewable energies. **Levl** was spun-off from EnPulse as an independent company in 2023. The start-up is building a large-scale virtual storage system for the energy transition and gives its customers the opportunity to monetize unused battery capacity. Furthermore, EnPulse sold its shares in **DigiPark**, a provider of digital parking solutions, to another current investor.

**Venture scaling: EnBW Innovation** supports young companies that have successfully entered the market so that they can continue to grow. It assists these companies with financing and also helps them to develop their growth strategy by acting as a strategic sparring partner, while its coaches use their experience to provide them with inspiration in their marketing, sales, operations and organizational development. The aim is to support start-ups as they scale up their business model and open up new segments, countries and fields of application.

Further information on **SMIGHT** can be found here.

Online ↗

One example of this is the start-up **SMIGHT**, which is a leading provider of IoT (Internet of Things) grid solutions and has around 90,000 measurement points installed in the low-voltage grid. SMIGHT uses its own retrofit sensor technology to collect real-time data from the local distribution grid and help ensure that the grid is operated efficiently. The start-up **ChargeHere**, which was founded as an independent company in 2022, offers charging solutions for the electrification of company fleets that take into account the current state of the grid when charging. ChargeHere is currently investigating the extent to which car batteries can be used to stabilize the electricity grids in the research and demonstration project Park4Flex led by the Institute of Power Transmission and High Voltage Technology (IEH) at the University of Stuttgart.

In 2023, EnBW Innovation received the **Digital Lab Award** in the category “Transport & Infrastructure” for its work which is awarded by Infront Consulting & Management in cooperation with the business magazine Capital. It thus achieved first place from among the best innovation units that focus on sustainability and digitalization.

Dr. Marc Ueber, Head of Investment Team at **ENV**, was selected as an **Emerging Leader 2023** by Global Corporate Venturing.

Online ↗

Crispin Leick, Managing Director of **ENV**, was named as one of the 100 leading **Corporate Venturing Experts** by Global Corporate Venturing.

Online ↗

Learn more about the ENV investment **volytica diagnostics** here.

Online ↗

**Venture capital: EnBW New Ventures (ENV)** invests in fast-growing young companies offering digital and sustainable solutions, giving EnBW access to new technologies and business models. In turn, ENV offers these entrepreneurs access to professional investor expertise and a network of customers and suppliers in the energy and infrastructure sectors. ENV has invested in 18 start-ups and two venture capital funds so far. In addition, EnBW realized four successful exits and a majority takeover. Its evergreen business model had an initial investment volume of €100 million and allows any proceeds from the sale of shares in start-ups to be reinvested in new companies.

ENV made two new investments in 2023. The British start-up **VivaCity** uses artificial intelligence to help reduce traffic accidents and lower emissions in cities. The software provider **volytica diagnostics** based in Dresden has developed the smart, cloud-based battery diagnostics platform “vdx engine” that can analyze the condition of batteries and carry out simulations of their performance without any need for additional hardware. In addition, ENV invested in the Series A funding rounds for the companies **vialytics** and **CYCLE** in its existing portfolio. The intelligent road management system from vialytics can be used to automatically evaluate the condition of roads and bike paths. CYCLE provides delivery companies with electric bikes via an all-inclusive carefree subscription service. Furthermore, ENV participated in the Series B funding round for the company **Holo-Light** that raised US\$12 million. Holo-Light’s augmented reality software makes it possible for engineers to collaboratively create and edit 3D models for the development of new products and services. Stable data visualization is supported by XR (extended reality) streaming.

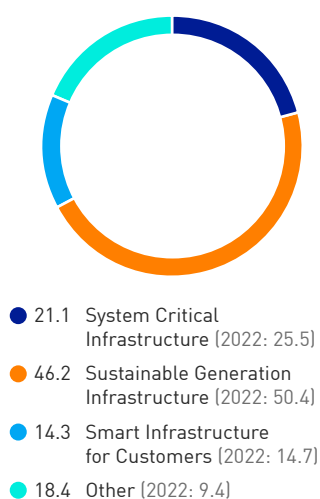
# Procurement

## Efficient and sustainable procurement processes

More information on the **sustainable supply chain** can be found on our website.

[Online ↗](#)

Procurement volumes of the EnBW Group by segment in %



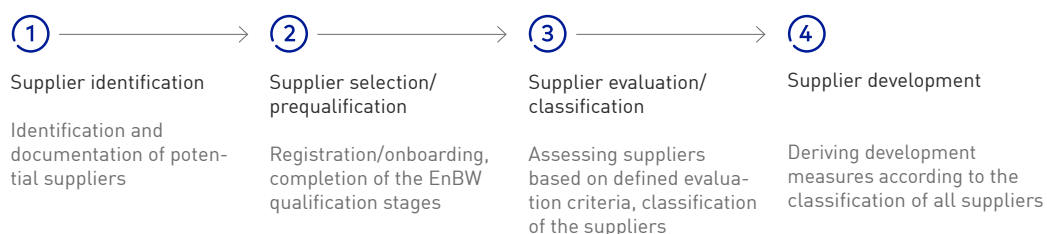
The purchasing department at EnBW views itself as a partner for the success of the company. It optimizes the cooperation between business, suppliers and the market from a commercial viewpoint while maintaining high quality standards. Digitalization is our path to developing efficient procurement processes that retain value. Central purchasing strives to achieve sustainable procurement and ensures compliance with applicable laws and EnBW guidelines. It is also contributing to the success of the energy transition by applying its expertise in the supplier market and making a commercial contribution to the profitability of projects. As a result, it makes an important contribution to the competitiveness of the company, helping to safeguard its future.

The **procurement volume** of the EnBW Group in 2023 (without ITOs) amounted to around €6.3 billion (previous year: around €6.5 billion). The still-high level is due to major investment in fuel switch projects (conventional power plants), the expansion of the grids (electricity distribution grids, broadband) and solar power storage systems, which were contractually agreed in the reporting year.

The **procurement markets** were significantly impacted in 2023 by the effects of the war between Russia and Ukraine, considerably higher demand on our markets due to the acceleration in the energy transition, geopolitical uncertainties and high inflation (p. 58<sup>7</sup>). Despite the tense situation on the markets overall, prices for important raw materials fell during the course of 2023 and were below the levels in the previous year. In order to minimize the negative impact on our business, we continuously refined our procurement processes and decision-making criteria also in 2023. We were able to counter the impact of geopolitical instability through a process of reorganization that shifted the focus more strongly to strategic purchasing. Furthermore, we significantly improved the quality of our forecasts for scarce goods with the Supply Chain Resilience project in 2023. Our forward-looking procurement management processes reduce the risk of price increases and supply disruptions.

Further diversifying our suppliers and service providers and improving cooperation with them plays an important role in our efforts to achieve a leading position on the energy market. **Supplier management** promotes successful cooperation with our suppliers because it makes their performance transparent and also makes continuous optimization in partnership possible. The careful selection of our suppliers is embedded in our risk management system and supports the observance of legal regulations and internally defined quality standards, as well as EnBW's aspiration for sustainable supply chains. Especially with regard to the selective internationalization of the business, central purchasing at EnBW AG is also developing an integrated **supply chain management** system in close cooperation with the business and functional units.

### Supplier management process



Sustainable procurement begins with the careful selection of suppliers. Central purchasing at EnBW AG uses a standardized **prequalification process** for this purpose. Suppliers are required to provide a self-assessment via a supplier portal on whether they have sustainable measures in place in the areas of environmental management, occupational health and safety, the respect for human

The **Supplier Code of Conduct** forms the basis for our cooperation with our suppliers. The PDF version is available to download here.

[Online ↗](#)

EnBW was **honored for its sustainable reorganization of purchasing** with the "Sustainable Operations Championship Award" in the category "Human Rights Due Diligence" at the Sustainability Congress 2023. Further information on the award can be found here.

[Online ↗](#)

The **EnBW policy statement** can be downloaded in PDF format here.

[Online ↗](#)

The **EnBW Code of Conduct** can be found on our website.

[Online ↗](#)

The **EnBW Declaration on Human Rights** is available to download in PDF format.

[Online ↗](#)

Our suppliers are provided with central access to information and self-service options in our **supplier portal**.

[Online ↗](#)

rights, the fight against corruption, data protection and quality management. Our **Supplier Code of Conduct (SCoC)** acts as a shared set of values and an important criterion for the selection and development of our suppliers. Some 97% of our suppliers (measured by procurement volume) had accepted the SCoC as the basis for our cooperation by the end of 2023. Suppliers who did not comply with the SCoC have been categorically blocked in our purchasing system since April 2023.

Respecting human rights and protecting the environment are key pillars of our corporate culture. In cooperation with our business partners, we are working to **make the supply chain more sustainable by improving transparency**. We will continue to align our procurement process even more strongly to social and ecological aspects in the next few years. This is reflected in our EnBW Sustainability Agenda (p. 28 f.<sup>7</sup>).

In 2023, we worked intensively to **implement the requirements of the Act on Corporate Due Diligence Obligations in Supply Chains (Lieferkettensorgfaltspflichtengesetz, LkSG)**. The LkSG has been in force since the beginning of 2023. It requires German companies to establish key elements of corporate due diligence in their own value-added chain and with respect to their suppliers. EnBW takes this responsibility seriously and has revised its human rights and environmental risk management system on the basis of the already existing structures and processes, so that it complies with the legal requirements. The entire Board of Management has collective responsibility for compliance with the LkSG risk management requirements at EnBW. One of the main tasks in 2023 was analyzing our processes to identify and prioritize risks in our own business areas and along our supply chains and **implementing targeted measures to ensure compliance with human rights due diligence**. We have, for example, integrated an automated risk evaluation process into our supplier management system that allows us to directly consider risks relating for human rights and the environment in the selection of suppliers and take appropriate preventative measures. Additional training courses are being used to raise the awareness of our employees in purchasing of human rights and environmental issues. To ensure that we can develop and implement targeted and effective measures, we have also established a Human Rights Steering Committee. In October 2023, we published a **policy statement** in accordance with the requirements in the LkSG. It describes how we will implement the LkSG in the future, which risks we have identified and prioritized and which measures we are taking to further minimize these risks. The EnBW policy statement is mainly based on the **EnBW Code of Conduct** and the **EnBW Declaration on Human Rights**. Our aim is to work even more closely together with our suppliers for this specific purpose and to keep the identified risks as low as possible from the outset, while continuing to improve the situation for people and the environment along our supply chain in the process.

Since the middle of 2022, our **CO<sub>2</sub> tracker for emissions in the supply chain** has enabled us to identify important emission generators and reduce our Scope 3 upstream CO<sub>2</sub> emissions in collaboration with our suppliers by carrying out more in-depth analyses. We have also been including CO<sub>2</sub> emissions and other sustainability criteria as measurable decision-making criteria in applicable invitations to tender since 2022 (p. 95 ff.<sup>7</sup>). In 2023, we issued invitations to tender for the first time in which **CO<sub>2</sub> emissions were a relevant award criterion**, and we contractually obliged our suppliers, for example, to formulate and document clearly defined CO<sub>2</sub> reduction targets that cover both direct and indirect emissions. We are using these measures to further reduce the CO<sub>2</sub> emissions in our supply chains.

Various **automation and digitalization initiatives** have been introduced in central purchasing at EnBW AG with the aim of simplifying our processes even further and, in particular, ensuring that any recurring procurement activities are carried out with the minimal amount of effort. This underlines our commitment to develop efficient and sustainable procurement processes in line with the LkSG.

Our subsidiaries that are not overseen by central purchasing at EnBW AG address non-financial aspects in purchasing using their own mechanisms. **Energiedienst (ED)** works together closely with central purchasing at EnBW AG to procure important product groups using joint invitations to tender and framework contracts, as well as in the associated prequalification processes. In addition, orders are placed largely with regional suppliers from Germany, Switzerland or neighboring EU countries. Purchasing at the companies of **Pražská energetika (PRE)** ensures that suppliers observe practices such as the payment of social security contributions, the settlement of tax liabilities, the prevention of money laundering and compliance with their own code of conduct that includes ethical standards



for cooperation. Potential suppliers must verify their compliance with these aspects by either submitting a sworn declaration or by presenting corresponding certificates when bidding for invitations to tender. At **Stadtwerke Düsseldorf (SWD)**, sustainability aspects are anchored in the compliance guidelines, environmental management system manuals and process descriptions. In the area of procurement, SWD pays particular attention to the use of environmentally friendly and sustainable products. It also uses clauses in its supplier contracts as one way to reinforce the fight against corruption and bribery and to ensure observance of labor and social laws. In addition, SWD uses a Supplier Code of Conduct (SCoC) that includes joint obligations with the suppliers to generate economic, ecological and social added value along the entire supply chain. Alongside economic criteria, SWD places great importance on business ethics, integrity, legally compliant trade, compliance with working standards and environmental protection when selecting, evaluating and monitoring new and existing business partners. The fundamental principles for procurement at **VNG** are regulated by a code of conduct, the management handbook and Group guidelines. Aspects such as the prevention of corruption – which is embedded in the compliance management system – and environmental protection are fixed components of procurement processes.

We also refer you to the details provided in the “Report on opportunities and risks” (p. 130 ff.<sup>7</sup>).



## Responsible raw materials procurement in the coal sector

### Origin of coal supplies

With a view to the CO<sub>2</sub> reduction targets set by the German government, we will gradually replace hard coal with more climate-friendly energy sources. The most important milestones here will be the realization of the fuel switch projects and the planned phaseout of coal by 2028 (p. 31<sup>7</sup>). Nevertheless, hard coal will still play a relevant role for EnBW as a source of energy over the next few years to ensure a reliable and economic supply of electricity. **Responsible raw materials procurement**, especially in the coal sector, is thus extremely important to us in order to strengthen our sustainable purchasing.

2023 was characterized by a **sharp decrease in the amount of electricity generated from hard coal** in Germany, which was also reflected in the total amounts of hard coal delivered to the EnBW power plants. Deliveries fell from 4.2 million t in 2022 to 2.2 million t in 2023. This was not only due to general developments on the market but also the shutdown of Block 7 of the Heilbronn power plant due to damage. Colombia was the most important source of supply for power plant coal in 2023. However, deliveries fell from 1.6 million t to 1.1 million t because of the fall in demand. The second most important source of supply was the USA with 0.8 million t in 2023 (previous year: 0.4 million t). The Russian coal that was supplied to our power plants (0.1 million t) was from stocks stored at the ports before sanctions were imposed. As a result of the decrease in total deliveries and lower prices for coal, the **procurement volume** fell considerably from €1,150 million in the previous year to €260 million in 2023.

The EnBW Group places great importance on knowing exactly **where the coal it uses is sourced** and being able to disclose this information. A total of 93.8% of our coal requirements were covered in 2023 by contracts where the respective producers are already known when the contract is concluded. The remainder is sourced from contracts concluded with trade intermediaries who usually define a quality standard and the countries from which the coal could be sourced, but not the source of the coal itself.

The Colombian coal delivered in 2023 was sourced from the producers Drummond and Cerrejón. The coal from the USA was sourced from various mining regions.

The opportunities and risks in relation to coal procurement can be found in the “Report on opportunities and risks” (p. 134 f.<sup>7</sup>).

#### Origin of coal supplies to EnBW power plants

in million t	2023	2022
Columbia	1.1	1.6
USA	0.8	0.4
South Africa	0.1	–
Russia	0.1	2.0
Other	–	0.1
<b>Total<sup>1</sup></b>	<b>2.2</b>	<b>4.2</b>

<sup>1</sup> The figures may not add up due to rounding differences.

Around

**48%**

**fewer coal deliveries** than in the previous year.

Further information on **coal procurement** can be found on our website.

Online <sup>7</sup>

The **EnBW rules of conduct** can be downloaded in PDF format here.

[Online ↗](#)

Further information on the international business initiative **RECOSI** can be found here.

[Online ↗](#)

## Positioning, overarching concepts and due diligence for the protection of human rights

In accordance with the Guiding Principles on Business and Human Rights of the United Nations, we strive to procure coal responsibly. The EnBW coal supplier portfolio acts as the basis for our activities and it is updated on an annual basis. The sustainability performance of current and potential coal suppliers to EnBW is continuously examined and evaluated on the basis of the **EnBW rules of conduct** governing the responsible procurement of hard coal and other raw materials. The business partner audit comprises an audit with respect to both compliance and sustainability. We determine any future action based on the supplier evaluations resulting from these audits, such as requesting further specific information from selected suppliers. In the process, we pay close attention to the latest studies from competitors and international initiatives, as well as relevant information and contributions from civil society organizations.

We have been a member of the **Responsible Commodities Sourcing Initiative** (RECOSI – formerly Bettercoal) since 2020. The independent audits carried out via RECOSI and the monitoring of the progress made by the individual producers with respect to fulfilling the RECOSI Continuous Improvement Plans flow into our process for auditing business partners. Currently, we are primarily active within RECOSI in the Colombian working group because this is where the majority of the coal deliveries are sourced. We have also been actively involved in the South African working group since 2023. In addition, we use RECOSI as a platform for exchanging information with our producers and, above all, with other stakeholders from civil society, with government representatives from the coal mining regions and with experts on individual countries and human rights.

Our rules of conduct form the foundation for our business activities. In the sustainability clause that is a fundamental component of all of our contracts with coal producers, we obligate our business partners to observe these rules of conduct. In addition to regular auditing of the sustainability performance of coal suppliers, a multistage auditing process is triggered in the event of suspected breaches of the rules. This can lead to temporary suspension or, as a last resort, the termination of the business relationship and thus exclusion from our procurement process. When new contracts are due to be concluded, the results of the analyses saved in the sustainability index are routinely presented to an internal **committee for the responsible procurement of hard coal and other raw materials (AVB)** with participation from all relevant specialist areas (especially credit risk trading, compliance, environment and sustainability). If any deviations from the minimum standards are identified for existing supply contracts, corrective measures are developed in cooperation with the producers and their implementation is monitored. In 2023, this committee held regular meetings to discuss possible additions to our portfolio of producers. This process was improved further in 2023 through the implementation of a digitalization project. Using an in-house tool called “Sus-Check,” we have made the process for all areas of the company participating in the AVB even more transparent and efficient.

## Current developments

### Colombia

Colombia was the most important country to EnBW for the procurement of coal in 2023. However, the amounts of coal sourced from Colombia have also fallen significantly due to the lower demand for coal in comparison to the previous year. As a member of the Colombian working group at RECOSI, we remain in close contact with both the producers and other European coal companies. This helps us to directly address relevant issues and stay informed about the latest developments with respect to the coal producers in Colombia above and beyond official sources.

### USA

The USA was for a long time only of limited importance to us as a procurement country. Producers from the USA have now been added to our portfolio following a thorough sustainability audit and clarification of some outstanding issues.

## Russia

We fully switched over to alternative sources of coal by August 2022, at which point we became completely independent from Russian coal. In 2023, our power plants only used residual stocks of Russian coal that were already being held in storage.

## Other procurement alternatives

We are currently examining additional procurement options in Australia, Africa and Asia in addition to those in Colombia and the USA in order to further diversify our procurement portfolio in the medium term. The coal market is generally characterized by an elastic supply and the coal is mainly transported by ship, which means that there is no need for any kind of special pipeline infrastructure. Our procurement initiatives make a comprehensive audit of all potential new business partners just as critical as the quality of the available coal and whether it is suitable for our power plants.



## Responsible raw materials procurement in the gas sector

### Natural gas as a transition technology

In order to achieve our target of climate neutrality by 2035, we are working intensively on switching over our power plants initially from coal to more climate-friendly natural gas (fuel switch) and then to climate-neutral gas such as biogas or (green) hydrogen in the long term (p. 31<sup>7</sup>). Natural gas plays an important role as a **transition technology** – either in the form of liquefied natural gas (LNG) or grid-based natural gas. Against this background, we have continued to shift the focus onto due diligence measures in the area of gas procurement. The key aspect will be a comprehensive business partner audit of each of the direct LNG and pipeline gas suppliers before they are approved as a business partner for EnBW.

### Origin and own consumption

In 2023, EnBW mainly sourced its natural gas via supply contracts with companies in Norway as well as via the European wholesale market. Following the expiry of our Russian gas contracts, we have been strengthening our efforts to diversify our **sources of gas** to a much greater extent. We concluded two long-term purchase agreements in 2022 for liquefied natural gas (LNG) with Venture Global LNG for a term of 20 years to diversify our sources of gas in the long term. The total volume of LNG will be around 2 million t per year, half of which will be sourced from the Plaquemines facility and half from the Calcasieu Pass 2 facility (both in the USA) of Venture Global LNG from 2026/2027 onwards. At the beginning of 2023, we increased our capacity bookings at the planned LNG terminal in Stade to 6 bcm/a to help ensure the continued security of supply in Germany.

In 2023, we acquired 7,203 GWh of natural gas for our **own consumption at EnBW** (previous year: 7,611 GWh). We use this gas for generating electricity and heat in our power plants, for heating our buildings and for operating our gas plants.

The opportunities and risks in relation to gas procurement can be found in the “Report on opportunities and risks” (p. 134 f.<sup>7</sup>).

### Exercising due diligence

We also take our responsibilities seriously in the procurement of gas and exercise human rights due diligence in our supply chain. The **business partner audit** comprises an audit with respect to both compliance and sustainability. The main focus is placed on the observance of international sustainability standards, a commitment to and compliance with guidelines on environmental protection and human rights, dialog with stakeholders and disclosure of extraction methods. Existing suppliers are reevaluated from a sustainability perspective every year as part of our recurring audits, insofar as there are no reasons to carry out an audit sooner. In order to better adapt our LNG procurement process to our sustainability requirements, we have initiated a **LNG pilot project** within the Responsible Commodity Sourcing Initiative (RECOSI). This project will check whether the continuous improvement process for the procurement of coal can also be transferred to the procurement of

Further information on the **Energy Sector Dialog** can be found here.

Online ↗

You can download the **publication from the Energy Sector Dialog** in PDF format here.

Online ↗

LNG. In 2023, we launched an **Energy Sector Dialog** in cooperation with other companies, associations, NGOs and unions, and headed by the Federal Ministry of Labour and Social Affairs. In the publication “Potential human rights risks along the supply and value chains. Selected sections of the German energy industry,” the gas sector has been closely examined using this multi-stakeholder approach. The findings will flow into our risk assessment process. As part of the sector dialog, we also held a discussion with an NGO working in the gas fields in Texas, USA, to ensure that the views of those impacted are taken into account in our assessments.

## Methane emissions

The European Commission, European Parliament and Council of the European Union agreed at their triologue meeting on 15 November 2023 to reduce methane emissions in the energy sector as part of the “Fit for 55” package in a Methane Emission Regulation that is due to come into force on 1 April 2024. Operators of gas infrastructure will be obligated to measure and report their emissions and regularly check their facilities for leaks and repair them without delay. The flaring and venting of methane will be largely prohibited. The final text has not yet been published and the EU has not definitively defined or communicated all of the requirements, especially those related to detecting and repairing leaks. Some renegotiation is expected and work is already being carried out to some extent on how to transcribe the requirements into technical rules at a national level. Further interventions and clarifications by the EU will be published as required in the form of Delegated Acts or Implementing Acts over the next few years.

As previously, our grid companies will continue to regularly check their gas infrastructure for methane emissions and repair any leaks they detect without delay. We currently base our activities in this area on the requirements issued by the Oil and Gas Methane Partnership (OGMP) and will implement the new requirements for measuring and reporting emissions and for the detection and repair of leaks in accordance with the newly adopted Methane Emission Regulation and associated technical rules.

## Business report

# General conditions

## Macroeconomic trends

### Economies

In 2023, continuing high inflation and the restrictive interest rate policies introduced by the central banks in response had a marked effect on the global economy. Although it was possible to curb inflation with increases in base interest rates, and further falls in the rate of inflation are expected in 2024, high consumer prices continue to pose a challenge. Despite indications of a slowdown in the economy, the job market remains robust in light of historically low unemployment rates in the advanced economies. However, growth has slowed in emerging and developing countries. The economic slowdown in China due to the ongoing crisis in the Chinese real estate sector is symbolic of this development.

In the meantime, the tension on the energy markets continued to ease in 2023. The risks are still high despite the positive effects of the currently lower consumer prices, which nevertheless remain high, and largely intact supply chains. According to the International Monetary Fund (IMF), global gross domestic product (GDP) grew by 3.1% in 2023 (previous year: 3.5%). The IMF also forecasts global growth of 3.1% for 2024. According to the IMF, while GDP in the eurozone grew by just 0.5% in 2023, the German economy contracted by 0.3%. The economic slowdown and restraint in consumption due to the still relatively high price of electricity were clearly evident according to the energy sector association, the BDEW. Electricity consumption fell in 2023 by 3.3% compared to the previous year. In its World Economic Outlook Update in January, the IMF anticipates an increase in economic output again in 2024 and forecasts growth of 0.9% in the eurozone and growth of 0.5% for Germany. The macroeconomic environment will probably also experience huge uncertainty and volatility in 2024, which makes it difficult to make specific statements about the impact on our company's business performance.

#### Development of gross domestic product (GDP)

in %	2024	2023 <sup>1</sup>	2022 <sup>1</sup>
World	3.1	3.1	3.5
Eurozone	0.9	0.5	3.4
Germany	0.5	-0.3	1.8
France	1.0	0.8	2.5
United Kingdom	0.6	0.5	4.3
Sweden	0.6	-0.7	2.8
Switzerland	1.8	0.9	2.7
Czech Republic	2.3	0.2	2.3
Turkey	3.1	4.0	5.5

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

### Development of interest rates

Expectations of a global economic slowdown led to an inverted yield curve for German government bonds in 2023. Following the huge increase in interest rates in the previous year, yields on ten-year German government bonds rose significantly and at times exceeded the 3% mark. Although inflation rates have fallen, they still remain at a high level. To return inflation rates back to the target levels set by the central banks, the European Central Bank (ECB) and the US Federal Reserve (Fed) initially continued to increase key interest rates over the course of the year. While the Fed refrained from increasing interest rates any further in September 2023, the ECB also decided to pause interest rate hikes in October 2023, bringing to an end a run of ten increases in a row. In the fourth quarter, the expectations of interest rate cuts in 2024 even began to grow.

Against this background, the long end of the yield curve has started to fall and actuarial interest rates, which are used to discount the pension provisions, were below the level in the previous year on the 2023 reporting date, which led to a slight rise in the present value of the provisions.

## Development of the sector and competitive situation

The energy sector is currently experiencing a period of great upheaval. There is particular pressure for change due to the energy transition. However, digitalization, sector coupling and the desire of local authorities to become self-sufficient are also having a strong influence on the sector.

A significant factor is that the energy sector is highly regulated, which means that political policies strongly influence developments. Traditional energy companies need to re-examine their competitiveness in individual business areas, exploit the potential offered by a changed market environment and realign their strategies for the future.

### Selection of international, national, regional and new competitors

#### Established competitors

##### National and international

ALPIQ, EDF, EDPR, Enel, Engie, E.ON, Equinor, EVN, Fortum, Iberdrola, Ørsted, RWE, Vattenfall, Verbund

##### Regional

Badenova, Entega, EWE, Mainova, MVV, NErgie, SWM, Thüga

#### New competitors

##### Commodity suppliers / solution suppliers / start-ups

1komma5°, enpal, Lichtblick, NEXT Kraftwerke, Octopus Energy, ostrom, Sonnen, Thermondo, Tibber

##### Renewable energies

BayWa r.e., bp, Encavis, ENERTRAG, PNE Wind, Shell, theolia, TotalEnergies, wpd

##### E-mobility, telecommunications and broadband

1&1, Allego, Aral pulse, Deutsche Glasfaser, Deutsche Telekom, Ecotel, Fastned, Google, Ionity, Shell, Tesla, VW

##### Financial investors

Private equity, infrastructure and pension funds, and insurance companies

#### EnBW position:

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

#### 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

## Cross-segment framework conditions

### Climate protection

The **German Climate Change Act** is being fundamentally reformed. In future, the entire German government will be responsible for the achievement of the unchanged climate protection targets for 2030 across all sectors. Responsibility will now no longer be split by sector after, in particular, the transport and building sectors were unable to reach the targets they had been set on multiple occasions. This will further increase the pressure on the energy sector to make greater efforts to compensate for shortfalls in other segments. The energy industry was able to achieve its emission targets in the past. As each individual sector will no longer be responsible for its own targets, they will not be obligated to produce an Immediate Climate Action Program if they miss a target. Instead, a Projection Report will be the central steering tool. This report will be created by a research consortium on behalf of the German Environment Agency and will forecast how emissions will develop in the period up to 2030. If projections in two successive years indicate that the climate protection targets for 2030 will be missed, the entire German government must present a multi-year program to guarantee the achievement of the targets. The Immediate Climate Action Program 2023 created using the old methodology and based on some optimistic assumptions predicts that the target will be missed by around 200 Mt CO<sub>2</sub>eq. Some tightening of the climate policy targets will be unavoidable in the next few years and must include the transport and building sectors. In this context, the amendments to the Fuel Emissions Trading Act, which stipulate the price per certificate rising to €45 in 2024 and €55 in 2025, are welcomed.

To support the continued decarbonization of the energy sector, the Federal Ministry for Economic Affairs and Energy published the first key points with respect to the auctions that will be held as part of the **power plant strategy** in August 2023. In February 2024, an agreement was reached between the ministries involved in the process at a federal level. The government will hold a total of four auctions for new power plant capacity of up to 2.5GW each in the form of H<sub>2</sub>-ready gas power plants,



which must be fully switched over to hydrogen between 2035 and 2040. The situation will now be subject to clarification with respect to state aid law at a European level. The government will then hold a public consultation phase with operators, manufacturers and associations. Once completed, formal authorization by the European Commission in accordance with state aid rules will still be pending. The new power plants will be integrated into a future capacity mechanism that should be introduced by 2028 at the latest. The government is aiming to reach agreement on the capacity mechanism by summer 2024. EnBW will be actively involved in this process.

The establishment of a national **hydrogen infrastructure** is another pillar of the strategy for decarbonizing the future electricity and heating supply. The framework conditions are currently being developed with the active involvement of EnBW in several draft laws that have not yet been finalized in some cases. EnBW will need hydrogen for the generation of electricity and heating from around 2030 onwards, in order to successfully implement its climate-neutrality strategy on time.

The legislative procedures for the **Solar Package** have been further delayed – the process was due to be concluded by the end of 2023 and will now probably take until at least the end of March 2024. This package should help to accelerate the expansion of photovoltaic (PV) power plants with the goal of almost tripling annual growth in PV capacity from 7.5 GW in 2022 to 22 GW in 2026. The package will also introduce measures to strengthen the European manufacturing industry in the form of so-called “resilience auctions” and rules for the expansion of onshore wind energy and the construction of power lines. The proposed legislation is being accompanied by the pact between the federal and state governments in Germany that aims to remove the bureaucratic hurdles in the areas of nature conservation, repowering and heavy haulage. It includes among other things a “Pact for Accelerating Planning, Approval and Implementation” that aims to streamline processes by updating the law, and reducing and standardizing the number of review steps in the approval procedures. The pact also envisages using digital solutions to speed up approval processes.

The German government has started a comprehensive modernization offensive with the reform of the **German Buildings Energy Act**. In combination with heat planning at a local authority level, the act should reduce the emission of greenhouse gases in the buildings sector. The Heat Planning Act came into force on 1 January 2024. The federal states must ensure that heating plans are created for large cities in their state by 30 June 2026 and for local authorities with less than 100,000 residents by 30 June 2028. The obligation to produce a heating plan is already part of the legal regulations at a state level in some states, including Baden-Württemberg. It is crucial over the next few months that the Buildings Energy Act is closely harmonized with the Heat Planning Act in order to ensure that the regulations contained in these acts can be implemented seamlessly together. EnBW welcomes the Heat Planning Act and the resulting decarbonization of the heating sector (p. 90f.<sup>7</sup>).

## European energy policy

At an EU level, almost all of the legislative proposals in the **first part of the “Green Deal – Fit for 55” package** have now been passed by the European Council and EU Parliament, including the most important aspect from an EnBW perspective: the dossier on the revision of the EU Emissions Trading System (ETS) that will introduce a separate emissions trading system for the building and transport sector. The EU has also passed revisions of the Renewable Energy Directive, Energy Efficiency Directive, the regulation defining CO<sub>2</sub> emission performance standards for passenger cars and light commercial vehicles, and the regulation on the deployment of alternative fuels infrastructure. The Energy Taxation Directive is the sole piece of legislation in the first package that has only been examined by the European Council. As things currently stand, the discussions on this piece of legislation in the European Council will most probably not be concluded.

The **second part of the “Fit for 55” package**, which aims to decarbonize the gas sector, is currently at the final triologue negotiation stage within the legislative institutions of the European Union regarding the prospective EU hydrogen regulation. Positive steps have been taken with respect to important regulation guidelines and unbundling requirements for a future hydrogen grid. These aspects are crucial for the rapid development of the grid and for connecting Baden-Württemberg to the European hydrogen infrastructure. For example, the negotiations for the EU regulation to reduce methane emissions in the energy sector were concluded in November 2023. In December 2023, the European legislators agreed on a revision of the Energy Performance of Buildings Directive. It is anticipated that this directive will still be formally adopted in the current legislative period.

High energy prices and the increasingly difficult situation surrounding the security of energy supply in Europe due to the war between Russia and Ukraine prompted the EU Commission to submit a proposal for the reform of the design of the EU electricity market to the European Council and European Parliament in March 2023. The proposed reform consists of a revision of the Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) and revisions of the regulation on the internal market for electricity and the directive on common rules for the internal market for electricity. The European Council and Parliament already reached agreement on REMIT in November 2023 and agreement on the other two pieces of legislation in December. EnBW is largely neutral about the results of these reforms but is generally critical of the trend for more market interventions in the electricity market, which could have a negative impact on the electricity market overall. Looking forward to winter 2023/2024, the obligatory regulations for the management of gas storage facilities that were defined in 2022 still apply at an EU level. As a result of easing prices on the energy markets and the high fill levels at the gas storage facilities, the EU Commission is not recommending any extension to the emergency measures for the windfall profit levy in the electricity generation sector. Instead, the European Council extended the period of validity for accelerated approval processes governed by the emergency regulations, the market correction mechanism to limit excessively high gas prices and the solidarity mechanism in the gas sector. EnBW views the market correction mechanism critically because if activated it could cause upheaval on the gas market.

In order to strengthen European competitiveness and support industrial policy especially with respect to China and the USA, the EU Commission has presented its proposals for both a Net Zero Industry Act (NZIA) and a Critical Raw Materials Act (CRMA). Both dossiers aim to ensure that the **EU does not lose its competitiveness** in key technologies for the green transition and to reduce Europe's one-sided dependence on individual states for raw materials. While a final agreement on the CRMA has already been reached, the trialogue discussions on the NZIA only started in December 2023. It is anticipated that the negotiations will take place during the first half of 2024 under the Belgium presidency of the European Council. Based on the Inflation Reduction Act (IRA) in the USA, the first EU auctions were held via the EU Hydrogen Bank in November 2023 to support companies with the operating costs in the production of renewable hydrogen. With the aim of ramping up the hydrogen economy, projects for the production of hydrogen in the EU will receive total funding of €800 million over ten years. As an accompanying measure to the NZIA, the EU Commission presented a European Wind Power Action Plan on 24 October 2023 including an ambitious expansion target of 111 GW from offshore wind power by 2030. Although the proposals are not legally binding, the EU Commission nevertheless focuses more deeply on the critical issues in the sector and analyses how the domestic production of wind turbines can be made more competitive again, taking into account aspects such as high raw material prices, rising interest rates and competition from abroad. In addition, the plan contains details on how to incentivize investment, speed up approval procedures and optimize the design of auctions. EnBW does not expect any direct impact from this plan because it is legally a non-binding communication.

## Smart Infrastructure for Customers segment

### Electricity and gas prices for retail and industrial customers

#### Average electricity price for a household<sup>1</sup>

in ct/kWh	2023	HY2 2022	HY1 2022
Grid fees <sup>2</sup>	9.52	8.08	8.08
EEG cost allocations <sup>3</sup>	0.00	0.00	3.72
Procurement, sales	23.83	20.64	14.40
VAT	7.30	6.40	5.92
Electricity tax	2.05	2.05	2.05
Concession fees	1.66	1.66	1.66
Other allocations	1.37	1.24	1.24
<b>Total</b>	<b>45.73</b>	<b>40.07</b>	<b>37.07</b>

<sup>1</sup> Annual consumption of 3,500 kWh.

<sup>2</sup> Including metering and metering station operation. Source: BDEW | As of December 2023.

<sup>3</sup> EEG cost allocations were reduced to zero on 01/07/2022.

# 14.1%

increase in **electricity costs** for a household with an annual consumption of 3,500 kWh in 2023 in comparison to the second half of 2022.

According to an analysis of electricity prices by the German Association of Energy and Water Industries (BDEW) published in December 2023, the average monthly electricity bill for a household with an annual consumption of 3,500 kWh came to €133.36 in 2023. As a result of the abolishment of the EEG cost allocations as of 1 July 2022, the BDEW published two figures for the average electricity price in 2022, one for each half of the year. The average monthly electricity bill in the first half of 2022 was €108.12, while it increased to €116.86 in the second half of 2022.

After reducing prices in 2021 and 2022 and passing on reductions as a result of the abolishment of the EEG cost allocations as of 1 July 2022, we were forced to increase **electricity prices for heating electricity** under the EnBW brand on 1 January 2023 for the first time in three years. These are special electricity tariffs for electric storage heaters and heat pumps. Basic supply tariffs increased on average by 63.4% due to the huge rises in procurement costs as a result of the war between Russia and Ukraine. In comparison to the prices before the abolishment of the EEG cost allocations on 1 July 2022, this corresponded to an increase of around 39.4% or 31.2% depending on the use of the heating electricity. Heating electricity tariffs outside of the basic supply increased by a similar amount as those within the basic supply. We were able to reduce our prices for heating electricity under the EnBW brand again with effect from 1 January 2024 and, above all, pass on the effects of lower procurement costs to our customers. Although procurement costs on the energy markets are still at a high level in comparison to prices before the start of the energy crisis in spring 2021, we have generally been able to cushion the enormous cost increases for our customers since then. Prices for the basic supply fell by 4.6% for heat pump applications and by 5.9% for electric storage heating with a separate meter. Prices for special contracts changed by similar amounts.

The **prices for household electricity** under the EnBW brand remained constant in 2023.

We will increase **electricity prices for the basic supply and reserve supplies** under the EnBW brand by 15.9% with effect from 1 April 2024. At the same time, **heating electricity prices** for electric storage heaters with a combined meter will rise by 4.5%. Tariffs outside of the basic supply and reserve supplies will also change by similar amounts. The political decisions taken in response to the Constitutional Court's ruling on the debt brake in November 2023 were the main reasons for these changes. These decisions led to a significant increase in network user charges for household electricity. At the same time, the levies, user charges and taxes that also make up part of the electricity price for households have also risen overall. Another cost factor affecting the price adjustments were extraordinarily high procurement costs, especially during the energy crisis in 2022. In order to guarantee a safe and reliable supply of energy, EnBW already purchases the volumes of energy required by its customers well in advance on the energy markets. Despite falling prices on the electricity markets, the average price is still much higher than before the energy crisis.

For **industrial customers** receiving a medium-voltage supply, the average electricity price including electricity taxes decreased significantly in 2023 to 24.86 ct/kWh according to calculations made by BDEW. Average electricity prices increased considerably in 2022 due to huge price rises on the energy markets. While the average electricity price still stood at 33.02 ct/kWh in the first half of 2022, it increased sharply in the second half of 2022 to 53.38 ct/kWh.

#### Average natural gas price for a household in a single-family house <sup>1</sup>

in ct/kWh	2023	Q4 2022	Q1–Q3 2022
Procurement, sales	9.87	15.88	10.06
Grid fees <sup>2</sup>	1.99	1.66	1.66
VAT <sup>3</sup>	0.92	1.31	2.44
Natural gas tax	0.55	0.55	0.55
CO <sub>2</sub> price <sup>4</sup>	0.54	0.55	0.55
Other duties and cost allocations	0.12	0.09	0.03
<b>Total</b>	<b>13.99</b>	<b>20.04</b>	<b>15.29</b>

<sup>1</sup> Natural gas central heating with hot water provision, each set at a special customer tariff including a reduced concession fee (0.03 ct/kWh), annual consumption of 20,000 kWh, base price included on a pro rata basis, not volume-weighted.

<sup>2</sup> Including metering and metering station operation.

<sup>3</sup> The "law for the temporary reduction of the value added tax rate for the supply of gas via the natural gas grid" reduced the VAT rate on gas deliveries from 01/10/2022 from 19% to 7%.

<sup>4</sup> The CO<sub>2</sub> price represents the cost for the acquisition of CO<sub>2</sub> emissions trading allowances according to the BEHG and is fixed at a price defined by law until the end of 2025. Source: BDEW | As of December 2023.

# -30.2%

decrease in **natural gas prices** for a household with an annual consumption of 20,000 kWh in 2023 in comparison to the fourth quarter of the previous year.

According to calculations by the German Federal Statistical Office, **natural gas prices** for industry fell in the first half of 2023 by 4.6% in comparison to the second half of 2022. In contrast, gas prices for private households increased significantly by 31.3% in the same comparative period. According to the gas price analysis published by the BDEW in December 2023, the average natural gas price for a household in a single-family house over the whole of 2023 was 13.99 ct/kWh.

The prices for gas under the EnBW brand remained constant in 2023. We were able to lower gas prices as of 1 January 2024. This was mainly due to falling procurement costs that we were able to pass on to our customers. The price for the basic supply of gas fell by around 4.5%, while corresponding prices for special contracts changed by similar amounts.

Although procurement costs for gas on the energy markets are still at a high level in comparison to prices before the start of the energy crisis in spring 2021, EnBW has generally been able to cushion the enormous cost increases for its customers since then. As a result, the prices for the basic supply of gas under the EnBW brand are still below average compared to the overall market.

## Structural changes

Following a strong year in 2022, the **home electricity storage market** continued to grow in 2023. Around 260,000 home storage systems were installed in the first half of 2023 alone (previous year: 105,000). Alongside the high level of demand overall, the removal of VAT, or its reduction to 0%, on new photovoltaic and home storage systems at the beginning of 2023 also had a positive impact. According to EUPD Research, around half a million home storage systems were newly installed by the end of 2023. We support end customers in this area with our household energy solutions (for example in the area of photovoltaics and storage systems) (p. 90<sup>7</sup>).

There also continues to be very dynamic growth in the registration of new **electric vehicles**. According to the Federal Motor Transport Authority, around 520,000 electric cars were registered in 2023, which was around 11% more battery-powered electric vehicles than in the previous year. This meant that the share of the total number of new registrations accounted for by purely electric vehicles reached 18.4%. In contrast, there was a sharp fall in the number of plug-in hybrid vehicles in 2023 – with around 176,000 newly registered vehicles – which was due to some extent to the reduction in state subsidies for this category of vehicles. In contrast, the increase in battery electric cars was the result of, among other things, the growing acceptance for these vehicles among customers and the wider choice of models available. EnBW mobility+ is ensuring there will be sufficient **charging infrastructure**. It already operates the largest quick-charging network in Germany, is investing in its further expansion and provides drivers with the opportunity to charge their vehicles throughout large areas of Europe using the EnBW mobility+ app (p. 89 f.<sup>7</sup>). There are plans to also significantly expand the infrastructure for cars, commercial vehicles and ships with alternative drive systems at a European level. In this context, a compromise on the Alternative Fuel Infrastructure Regulation (AFIR, previously Regulation 2014/94/EU) was reached on 27 March 2023. It will especially focus on the expansion of e-charging stations. The aim is to install a charging station every 60 km across the core trans-European transport network by the end of 2025. Member states must provide additional charging capacity of 1.3 kW per newly registered electric vehicle.

A comprehensive expansion of the **broadband infrastructure** remains economically unfeasible in many regions. For this reason, future funding will now focus on “gray areas,” and since 1 January 2023 has been provided for areas with a bandwidth ≤ 100 Mbit/s, thus effectively for all private customer connections that are not gigabit-ready. Total funding of €17 billion is available for the expansion of the fiber-optic infrastructure. In order to benefit from this transformation to a gigabit-ready infrastructure, Plusnet is active across Germany, while NetCom BW will focus on Baden-Württemberg (p. 91<sup>7</sup>).

## System Critical Infrastructure segment

In September 2023, the Federal Network Agency published its preliminary findings on the second draft of the **Network Development Plan Electricity 2037 with Outlook 2045**. The plan includes three scenarios describing the envisaged grid in 2037 and the “climate-neutral grid” for Germany in 2045. The plan not only factors in the phaseout of coal and nuclear energy but also the national hydrogen strategy, the highly ambitious policies for the expansion of renewable energies and an increasingly integrated internal energy market in Europe as the main drivers of the transformation of the energy system. The three scenarios reflect different degrees of hydrogen uptake and electrification. The anticipated installed generation capacities from renewable energies (above all photovoltaic and wind) in 2045 of almost 640 GW to over 700 GW would represent about a fivefold increase in comparison to 2023. This and – according to forecasts – a doubling in gross electricity consumption will require a huge increase in the rate at which the grids are currently being expanded. The expected investment in the transmission grid up to 2045 is around €156 billion in all scenarios with the expectation that the associated expansion measures will be almost completely finished by 2037. To enable the integration of offshore wind power plants, it is estimated that an additional €145 billion will have to be invested in the German offshore grid by 2045. The Federal Network Agency approved the NDP Electricity 2037 with Outlook 2045 on 1 March 2024.

TransnetBW is participating with other transmission grid operators in two major projects to push forward the development of high-voltage DC transmission lines (HVDC) for the future transport of wind energy from the north of Germany to the centers of consumption in the south. TransnetBW is responsible for the most southern section of the **ULTRANET** project that will connect North Rhine-Westphalia and Philippsburg. The Federal Network Agency (BNetzA) approved the plan for this 42 km section at the end of August 2023 and construction work on the transmission line has now begun. In the **SuedLink** project, two high-voltage DC transmission lines from Schleswig-Holstein to Bavaria and Baden-Württemberg are being realized in cooperation with TenneT. In May 2023, the BNetzA approved the plans for the first of a total of eight sections for which TransnetBW is responsible. The construction work for the SuedLink converter in Leingarten started at the end of July 2023. The other seven sections are still in the planning approval process.

The **grid companies in the EnBW Group are implementing numerous digitalization measures** which should reduce the huge need to expand the electricity grid in order to achieve the climate neutrality targets and also to optimize the processes involved in operating the grids. The Act to Relaunch the Digitalization of the Energy Transition (GNDEW) came into force at the end of May 2023 and aims to promote the flexible, legally compliant and comprehensive rollout of smart meters. Obligatory aspects include, for example, control of devices via smart meters and ensuring that several meters can be connected up to one smart meter gateway. The rollout is being significantly accelerated by current trends in photovoltaics, heat pumps and electromobility. Netze BW thus estimates that it will have more than one million smart meters in its grid area by 2030. In addition, Netze BW is currently actively engaged in innovation projects to expand the potential applications for smart meter gateways. In cooperation with E.ON, the meter manufacturer Landis+Gyr and other partners, Netze BW is, for example, pushing forward the integration of meters that record load profile measurements. It is also testing submetering for heating bills in the housing sector in cooperation with the Minol-ZENNER Group.

The rules governing the **reduction in electricity consumption at times of peak load** from the Federal Network Agency (section 14a Energy Industry Act [EnWG]) have made it possible for grid operators to reduce the power consumption of controllable consumers such as heat pumps, wall boxes and electricity storage systems from January 2024 for a maximum of two hours per day if there is an imminent threat that the electricity grid will become overloaded.

In December 2023, the **Network Development Plan (NDP) Gas 2022–2032** from the gas transmission system operators (TSO) was approved with one request for a change by the Federal Network Agency. It contains a binding expansion proposal that takes into account significant changes to the framework conditions in the gas industry. Three variants are considered for 2032 based on LNG deliveries and also allow for the complete loss of Russian gas volumes both for the supply to Germany and also for transmission through Germany. The approved grid expansion measures will require investment of around €4 billion, of which almost €2 billion will be on LNG facilities. The Federal Network Agency is currently engaged in the consultation process on the draft application from the TSO for the core

hydrogen network in Germany. According to the plans, the core hydrogen network will have a length of around 9,700 km and will by 2032 largely consist of redeployed natural gas lines that will no longer be required for their original purpose by this time. The Federal Network Agency is expected to approve the core hydrogen network in the middle of 2024.

The current NDP Gas runs until 2030 and envisages increasing gas transmission capacities in Baden-Württemberg, especially for the supply of new gas power plants, which will make a needs-based expansion of the gas transmission grid of terranets bw necessary. The **south German natural gas pipeline (SEL)** will form part of the required expansion. As the first major natural gas pipeline in Baden-Württemberg to be connected to the European gas transmission routes, it will be constructed as a hydrogen-ready pipeline. As a result, the SEL pipeline will satisfy the requirements for providing the business location Baden-Württemberg with a CO<sub>2</sub>-neutral energy supply.

## Sustainable Generation Infrastructure segment

### Installed net output for electricity generation from renewable energies in Germany<sup>1</sup>

in GW	2023	2022	2021	2020	2019
Solar	81.8	67.6	60.1	54.4	48.9
Onshore wind	61.0	58.0	55.9	54.3	53.2
Biomass	9.0	8.9	8.9	8.7	8.3
Offshore wind	8.5	8.2	7.9	7.9	7.6
Hydropower <sup>2</sup>	5.4	5.4	5.5	5.5	5.5
Gas	34.8	34.3	32.4	32.5	30.1
Hard coal	18.9	19.0	19.0	23.7	22.7
Brown coal	18.6	18.7	19.0	20.9	20.9
Nuclear power	–	4.1	4.1	8.1	9.5
Oil	4.7	4.7	4.7	4.9	4.4
<b>Total<sup>3</sup></b>	<b>242.7</b>	<b>228.7</b>	<b>217.3</b>	<b>220.8</b>	<b>211.0</b>

1 The figures for the previous year have been restated.

2 Adjustment to the installed output from hydropower by EnBW. Source: Fraunhofer ISE ([www.energy-charts.de](http://www.energy-charts.de)) | As of: 24/01/2024.

3 The figures may not add up due to rounding differences.

## Renewable Energies

### Germany

The proportion of total electricity generation accounted for by renewable energies was around 55% in 2023 and thus significantly higher than in the previous year (previous year restated as a result of more precise analyses: 46%). This increase was mainly attributable to higher wind yields and a lower total generation volume in Germany.

The German Renewable Energies Act came into force at the beginning of 2023. It defines a target for the share of the gross electricity consumption accounted for by renewable energies in 2030 of at least 80%. In order to achieve this target, significant increases in the annual auction capacities and expansion volumes for renewable energies were also defined. The target values for the installed output from onshore wind power plants in 2030 and 2040 were increased to 115 GW and 160 GW, respectively, while the targets for photovoltaics in 2030 and 2040 were increased to 215 GW and 400 GW, respectively. In the case of offshore wind power, the target values were increased to 30 GW in 2030, 40 GW in 2035 and 70 GW in 2045. We believe that these developments validate our strategy of making renewable energies an important pillar of our business.

### Onshore wind

In 2023, the installed onshore wind capacity in Germany increased by around 3 GW due to the commissioning of new wind farms. The targets set for reserved land areas for the federal states will have a positive impact on the expansion of onshore wind energy in the long term. The amendments on the protection of species in the Federal Nature Conservation Act will also have a positive effect.



### Offshore wind

One offshore wind farm (Arcadis Ost) with an output of 257 MW was placed into operation in Germany in 2023. The auctions for non-centrally pre-investigated sites for a total of 7 GW of output started on 1 June 2023. EnBW participated in the North Sea auction in a joint venture with Equinor. EnBW was not successful with any of its bids in the second round of bidding. A “dynamic bidding procedure” was used for the first time to select the successful bids. In this procedure, the successful bidders are the ones willing to pay the highest amount with no funding in the form of a market premium. Two of the three sites in the North Sea, each with a capacity of 2 GW, were won by bp, while the third site in the North Sea, also with a capacity of 2 GW, and a site in the Baltic Sea with a capacity of 1 GW were secured by TotalEnergies. The new wind farms are expected to be commissioned in 2030.

### Photovoltaics

The year 2023 recorded by far the highest expansion in solar PV capacities in history. The overall output of photovoltaic plants increased by around 14 GW due to the installation of new plants. In order to achieve the ambitious expansion targets by 2030, it will nevertheless be necessary to expand the number of useable areas considerably.

### France

We are active on the French market through our subsidiary Valeco – a project developer and operator in the renewable energies sector. We develop and realize wind energy and PV projects in France and expect continued dynamic growth in this country in both generation sectors. Around 22 GW of onshore wind capacity is currently installed in France. The government’s target is to expand this figure to between 33 GW and 35 GW by 2028. It also aims to expand the installed photovoltaic capacity from the current figure of 18 GW to between 35 GW and 44 GW. The French energy strategy includes ambitious expansion targets for offshore wind power. We are taking part in an auction for a floating wind farm off the coast of Brittany and are already prequalified for the next phase of auctions.

### Great Britain

The British government has defined a target for the expansion of offshore wind power of 50 GW by 2030. The results of the fifth round of auctions in the CfD scheme (Contracts for Difference Allocation Round 5) were published in September 2023. No bids for offshore wind projects were accepted in this auction.

### Sweden

The Swedish energy market offers favorable physical conditions and a still growing and competitive market environment for renewable energies. The further expansion of onshore wind plays an important role in the Swedish generation market. Photovoltaics are becoming an even more attractive proposition, especially in southern Sweden. It remains to be seen whether offshore wind power will also play an increasing role in the Swedish energy mix in future, both as an important source of electricity and in combination with the targets for integrating green hydrogen into the industrial and transport sectors.

### Turkey

Our joint venture in Turkey with our partner Borusan operates wind turbines with a total output of 665 MW and is one of the largest players on the Turkish wind energy market. In addition, the joint venture operates a hydropower plant with an output of 50 MW and two solar parks with a total output of 9 MW. Turkey slightly increased the feed-in tariffs for new plants as part of the funding mechanism for renewable energies as of 1 May 2023. Turkey continues to have great untapped potential with respect to renewable energies, primarily in the areas of onshore wind and photovoltaics. We believe that the Turkish market remains an attractive proposition for the future, although we are monitoring the political and economic developments in Turkey very closely.



## Conventional generation: market and fuel prices

### Development of prices for electricity (EPEX), base load product

in €/MWh	Average 2023	Average 2022
Spot	95.18	235.45
Rolling front year price	137.67	298.86

### Development of prices for natural gas on the TTF (Dutch wholesale market)

in €/MWh	Average 2023	Average 2022
Spot	40.55	122.98
Rolling front year price	52.01	114.21

### Electricity wholesale market

In 2023, the average spot market price of approximately €95.18/MWh was around €140/MWh lower than in the previous year. The average price on the forward market was also significantly lower than the average price in the previous year. The fall in prices was primarily attributable to lower market prices for gas and coal. In addition, the deployment periods for thermal power plants were reduced due to higher generation from renewable energies. Electricity generation from nuclear power in France was also significantly higher than in the previous year and this had an impact on neighboring electricity markets. The future development of electricity prices will depend on the development of fuel and CO<sub>2</sub> prices and trends in the electricity generation mix. Future developments in energy and climate policy will also have an important influence on the electricity market in the future.

### Gas market

In the first half of 2023, there was a significant fall in prices on the gas market. The reasons for this development were the mild winter in Europe, a drop in demand in Europe and more frequent arrivals of LNG ships in northwest Europe in comparison to the previous winter. Since June 2023, prices have risen again to some extent or experienced sideways movement. This was primarily due to extensive maintenance work in Norwegian gas production, which had to be significantly extended in some cases. In addition, there was a price-related fall in LNG deliveries to northwest Europe. Since December 2022, several LNG import terminals have been placed into operation in Germany, France and Italy and have improved the supply situation further. In the first half of 2023, LNG deliveries to northwest Europe reached new record levels. The remaining Russian gas deliveries via Ukraine and Bulgaria remained quite stable throughout the entire year. There were noticeable reductions in gas consumption in both the industrial and household sectors in comparison to the previous year, as demanded by the government in its calls to lower consumption. It is probable that the gloomy economic conditions had a negative impact on industrial demand. As a result of lower demand and a good level of supply, the gas storage facilities had relatively high fill levels at the end of the 2022/2023 winter and the feared gas shortages thus failed to materialize. The good level of supply during summer 2023 meant that the gas storage facilities in Europe were filled quickly. In addition, the mild start to the winter led to below-average demand. On 3 November 2023, the European gas storage facilities reached a fill level of 100% and were still more than 90% full on 1 January 2024. As gas use continued, storage levels fell to around 74% on 1 February 2024.

There is still some uncertainty with respect to the remaining Russian gas deliveries via Ukraine and Bulgaria. A halt to these supplies for political reasons is possible at any time. In addition, it is unclear what impact a Bulgarian transit tax on Russian gas may have. Large volumes of LNG will continue to be needed in northwest Europe to replace the previous volumes of Russian gas. This means that an increase in the demand for LNG in other parts of the world would now have a bigger impact on the European gas markets than in the past.

### Oil market

Brent oil prices (rolling front month) experienced volatile sideways movement during the course of 2023. For large parts of the year, the main drivers of this development were economic concerns and worries about the demand for oil, while the OPEC+ group tried several times to influence prices upwards with cuts to their oil production. Brent oil prices remained relatively stable until the end of June. Additional voluntary cuts in production by Saudi Arabia and Russia significantly reduced supplies on the global oil market from July onwards. These cuts in production were originally intended to last for just one month but were then gradually extended until the end of 2023. Hope among market participants of an end to rising interest rates also had an impact. On 27 September 2023, Brent oil hit its year-high price of US\$96.55/bbl. However, the euphoria among market participants weakened afterwards and prices began to fall again. The war in the Middle East led to a brief rise in oil prices again following the events on 7 October 2023. The negative price trend then continued as before.

The oil market will presumably continue to be influenced by macroeconomic developments and the balance between supply and demand. Geopolitical conflicts, such as the war between Russia and Ukraine and a possible conflict with Iran, continue to pose risks for the price of oil. Prices on the forward market reflect the expectation that prices will continue to fall slightly over time.

### Development of prices on the oil markets

in US\$/bbl	Average 2023	Average 2022
Crude oil (Brent) front month (daily quotes)	82.19	99.17
Crude oil (Brent), rolling front year price (daily quotes)	78.06	87.19

**Development of prices on the coal markets**

in US\$/t	Average 2023	Average 2022
Coal – API #2 rolling front year price	126.37	222.13
Coal – API #2 spot market price	128.52	292.08

**Coal market**

Coal prices were initially volatile and fell during the first half of 2023. This trend was mainly due to developments in European gas and German electricity prices. It triggered an extensive fuel switch from coal to gas in Europe, which meant that the actual physical consumption of coal fell considerably behind the expected consumption figures. Coal power plant operators suddenly had a significant oversupply of coal, while at the same time there was only limited capacity for these surplus stocks. Already agreed coal deliveries had to be delayed to a later point in time, diverted to other regions of the world or sold off on the falling market. As falling prices on the natural gas and LNG markets were a worldwide phenomenon, comparable developments were also seen in other regions with fuel switch potential. However, the global demand for coal was propped up by China, which imported record amounts of steam coal in 2023. This development was mainly driven by untypically low hydropower generation, safety inspections at coal mines in the country and a dynamic increase in the demand for electricity. Very high imports into China helped to halt falling prices on the global market from June 2023 onwards. Coal prices then generally experienced sideways movement, except for a short spike in prices in response to the war in the Middle East. Coal prices were then indirectly forced upwards by the higher prices for natural gas and LNG. These rises were seen in response to fears that Iran may block the Strait of Hormuz – which is important for, among other things, deliveries of LNG from Qatar – if the war were to spread.

During the heating period, the European coal market is still expected to be strongly influenced by developments in gas prices and this has led to huge uncertainty. The situation in China will also remain relevant. The forward market is anticipating that coal prices will remain at around the current level over the coming years.

**Development of prices for emission allowances/daily quotes**

in €/t CO <sub>2</sub>	Average 2023	Average 2022
EUA – rolling front year price	85.47	81.04

**CO<sub>2</sub> allowances**

In the first half of 2023, prices for CO<sub>2</sub> allowances experienced sideways movement between almost €80/t CO<sub>2</sub> and €100/t CO<sub>2</sub>. Prices for CO<sub>2</sub> allowances then fell slightly in the second half of the year. The main drivers of prices for EUA certificates in 2023 were lower emissions in the electricity sector due to a fall in fuel switch costs and lower fossil-fuel-based generation, as well as high energy prices and the flagging economy in the industrial sector. As a result of further reductions in supply imposed by the market stability reserve (MSR) and the tightening of the climate target for 2030, price increases are expected in the long term.

**Nuclear power**

Germany decided in 2011 to phase out the use of nuclear power. EnBW immediately responded to this decision by developing a comprehensive dismantling strategy. EnBW considers the dismantling of its five nuclear power plants to be part of the energy transition and is rigorously implementing its dismantling measures. Our subsidiary EnBW Kernkraft (EnKK) is the licensed operator of the nuclear power plants and is responsible for the dismantling work.

By taking this approach, EnBW has established itself as the forerunner in the dismantling of nuclear power plants in Germany. It is the first operator whose entire own nuclear power plant park is currently being dismantled: Obrigheim since 2008, Block I in Neckarwestheim and Block 1 in Philippsburg since 2017, Block 2 in Philippsburg since 2020 and Block II in Neckarwestheim since May 2023, after the latter was still in operation until April 2023 due to the amendment to the German Atomic Power Act. The entire dismantling program complies with the guidelines laid down by the Atomic Power Act and has been fully approved for all nuclear power plants by the authorities.

# The EnBW Group

## Finance and strategy goal dimensions

### Changes to the segment reporting

One of the Polish subsidiaries was restructured at the beginning of 2023 in order to comply with the Polish energy industry regulations. The grid business at this company was previously reported in the “Smart Infrastructure for Customers” segment but will be part of the “System Critical Infrastructure” segment from the 2023 financial year onwards. The figures for the previous year have been restated.

## Results of operations

### Electricity sales fall considerably, gas sales increase

#### Electricity sales volume (without System Critical Infrastructure)

in billion kWh	Smart Infrastructure for Customers		Sustainable Generation Infrastructure		Total (without System Critical Infrastructure)		Change in %
	2023	2022	2023	2022	2023	2022	
Retail and commercial customers (B2C)	13.4	14.1	0.0	0.0	13.4	14.1	-5.0
Business and industrial customers (B2B)	20.9	22.6	0.0	0.6	20.9	23.2	-9.9
Trade	0.2	0.1	46.7	68.5	46.9	68.6	-31.6
<b>Total</b>	<b>34.5</b>	<b>36.8</b>	<b>46.7</b>	<b>69.1</b>	<b>81.2</b>	<b>105.9</b>	<b>-23.3</b>

In the 2023 financial year, electricity sales were significantly lower than in the previous year, which was mainly due to a decrease in trading activities. Electricity sales to retail and commercial customers (B2C) were slightly lower than in the previous year due to lower average consumption by customers. Sales to business and industrial customers (B2B) decreased, primarily as a result of reduced sales activities at GVS. Sales in the trading sector fell considerably in comparison to the same period of the previous year due to a decrease in trading activities. However, their effect on the earnings potential of the company is limited.

#### Gas sales volume (without System Critical Infrastructure)

in billion kWh	Smart Infrastructure for Customers		Sustainable Generation Infrastructure		Total (without System Critical Infrastructure)		Change in %
	2023	2022	2023	2022	2023	2022	
Retail and commercial customers (B2C)	13.7	15.5	0.0	0.0	13.7	15.5	-11.6
Business and industrial customers (B2B)	100.8	147.5	0.0	0.0	100.8	147.5	-31.7
Trade	2.1	1.9	431.0	343.7	433.1	345.6	25.3
<b>Total</b>	<b>116.6</b>	<b>164.9</b>	<b>431.0</b>	<b>343.7</b>	<b>547.6</b>	<b>508.6</b>	<b>7.7</b>

Gas sales increased in the 2023 financial year compared to the previous year, mainly as a result of higher trading activities. Adjusted for the effects of changes in the consolidated companies, gas sales were 8.1% higher than the figure in the previous year. Gas sales to retail and commercial customers (B2C) fell due to weather conditions and lower average consumption by customers. Against the backdrop of the loss of Russian gas procurement agreements and reduced sales activities at GVS, there was a significant decrease in sales to business and industrial customers (B2B) in comparison to the previous year. In contrast, sales in the trading sector increased considerably due to expanded trading activities, including in the area of LNG.

## External revenue significantly lower than previous year

### External revenue by segment

in € million <sup>1,2</sup>	2023	2022	Change in %
Smart Infrastructure for Customers	17,249.2	18,754.5	-8.0
System Critical Infrastructure	6,327.9	6,697.4	-5.5
Sustainable Generation Infrastructure	20,832.4	30,543.2	-31.8
Other/Consolidation	21.2	7.5	-
<b>Total</b>	<b>44,430.7</b>	<b>56,002.6</b>	<b>-20.7</b>

1 The figures for the previous year have been restated.

2 After deduction of electricity and energy taxes.

Adjusted for the effects of the changes in the consolidated companies, external revenue was 20.5% lower than the level in the previous year. The fall in revenue was accompanied by a corresponding reduction in the cost of materials in all segments.

**Smart Infrastructure for Customers:** Revenue in the Smart Infrastructure for Customers segment decreased in the 2023 financial year in comparison to the previous year. Adjusted for the effects of the changes in the consolidated companies, revenue was 7.3% lower than in the previous year. The fall in revenue was mainly due to a significant decrease in sales to business and industrial customers (B2B) against the backdrop of the loss of Russian gas procurement agreements and reduced sales activities at GVS. This was offset to some extent by passing through increases in procurement prices and network user charges to customers.

**System Critical Infrastructure:** Revenue in the System Critical Infrastructure segment was slightly lower in 2023 than in the previous year. Adjusted for the effects of the changes in the consolidated companies, revenue was 5.6% lower than in the previous year. Income from the settlement of redispatch measures with other transmission system operators that has no impact on the result decreased. This was offset to some extent by higher income from the use of the grids, especially as a result of factoring in increased expenses for the grid reserve including the redispatch to maintain the security of supply into prices, but was not enough to fully compensate for the fall in revenue.

**Sustainable Generation Infrastructure:** Revenue in the Sustainable Generation Infrastructure segment fell significantly in 2023 in comparison to the previous year despite higher sales volumes for gas. This was primarily due to lower prices for trading activities. Please refer to the information on the development of electricity and gas prices on [p. 61 ff.](#)<sup>7</sup>.

### Material developments in the income statement

The decrease of €11,571.9 million in revenue in comparison to the previous year to €44,430.7 million was mainly attributable to lower sales prices in the gas sector. Against this background, the cost of materials also fell significantly in comparison to the figure in the previous year by €15,423.1 million. Personnel expenses increased by €303.4 million, primarily due to an increase in the number of employees and wage increases as part of the collective bargaining agreement. Other operating income fell by €2,840.6 million in comparison to the previous year. This was mostly a result of higher reversals of impairment losses in the previous year, especially on our conventional generation plants, lower income from derivatives and the reversal of provisions for onerous contracts in the previous year in relation to, among other things, the early termination of an electricity procurement agreement. Other operating expenses decreased by €578.0 million, which was also a result of the valuation of derivatives in comparison to the previous year. This was offset to some extent by negative effects related to the incidents at SENE. Amortization and depreciation increased slightly by €65.0 million compared to the value in the previous year, whereby impairment losses were around the same level as in the previous year.

The investment result in the reporting year stood at €-89.2 million, which was €366.0 million lower than the figure of €276.8 million in the previous year. The main reasons for this decrease were lower income from the dedicated financial assets and higher write-downs on entities accounted for using the equity method and on investments. The financial result deteriorated in the reporting period in comparison to the previous year by €388.7 million to €-411.3 million (previous year: €-22.6 million). This development was due mainly to interest rate effects on non-current provisions. This was offset to some extent by the result from the market valuation of securities.

Overall, earnings before tax (EBT) totaled €2,840.8 million in the 2023 financial year, compared with €2,395.4 million in the previous year.

### Earnings

The Group net profit/loss attributable to the shareholders of EnBW AG fell from €1,738.0 million in 2022 by €200.4 million to €1,537.6 million in the reporting period. Earnings per share amounted to €5.68 in the 2023 financial year, compared to €6.42 in the previous year.

### Adjusted earnings and non-operating result

The sum of the adjusted earnings figures and non-operating figures gives the figures on the income statement. The non-operating result includes effects that cannot be predicted or cannot be directly influenced by us and as such are not relevant to the ongoing management of the company. The effects are presented and explained further in the section "Non-operating EBITDA". The business activities relevant to the ongoing management of the company are of particular importance for internal management and for the external communication of the current and future earnings potential. We use the adjusted EBITDA – earnings before the investment and financial results, income taxes and amortization, adjusted for non-operating effects – as the key reporting indicator for disclosing this information.

### Adjusted EBITDA and the share of the adjusted EBITDA accounted for by the segments

#### TOP

#### Adjusted EBITDA by segment

in € million <sup>1</sup>	2023	2022	Change in %	Forecast 2023 <sup>2</sup>	Adjusted forecast 2023 <sup>3</sup>
Smart Infrastructure for Customers	239.5	498.4	-51.9	€0.4 to €0.5 billion	€0.35 to €0.45 billion
System Critical Infrastructure	1,772.0	1,057.8	67.5	€1.6 to €1.9 billion	€1.6 to €1.9 billion
Sustainable Generation Infrastructure	4,647.6	2,616.2	77.6	€2.9 to €3.2 billion	€4.3 to €4.6 billion
Other/Consolidation	-293.9	-205.3	-43.2	–	–
<b>Total</b>	<b>6,365.2</b>	<b>3,967.1</b>	<b>60.4</b>	<b>€4.7 to €5.2 billion</b>	<b>€5.9 to €6.5 billion</b>

1 The figures for the previous year have been restated.

2 Forecast as published in the report from 31/12/2022.

3 Adjusted forecast as published in the report on 30/09/2023.

#### TOP

#### Share of adjusted EBITDA accounted for by the segments

in % <sup>1</sup>	2023	2022	Forecast 2023 <sup>2</sup>	Adjusted forecast 2023 <sup>3</sup>
Smart Infrastructure for Customers	3.8	12.6	5 to 15	0 to 10
System Critical Infrastructure	27.8	26.7	30 to 45	20 to 35
Sustainable Generation Infrastructure	73.0	65.9	55 to 70	65 to 80
Other/Consolidation	-4.6	-5.2	–	–
<b>Total</b>	<b>100.0</b>	<b>100.0</b>		

1 The figures for the previous year have been restated.

2 Forecast as published in the report from 31/12/2022.

3 Adjusted forecast as published in the report on 30/09/2023.

The adjusted EBITDA for the EnBW Group increased substantially in the 2023 financial year by 60.4% in comparison to the previous year, and was thus within the adjusted forecasted range, exceeding the originally forecasted range. Adjusted for the effects of changes in the consolidated companies, the adjusted EBITDA for the EnBW Group increased by 58.4%. Please refer to the explanations in the section "Non-operating EBITDA" for further information on the restatement of the figures for the previous year.

**Smart Infrastructure for Customers:** The adjusted EBITDA in the Smart Infrastructure for Customers segment of €239.5 million was significantly lower than the level in the previous year and our original and adjusted forecasted ranges. Adjusted for the effects of changes in the consolidated companies, the adjusted EBITDA decreased by 56.2%. This fall in earnings and the underperformance of the adjusted forecasted range were due to negative effects in the low three-digit million euro range in the operating business at SENEK as an indirect consequence of incidents. In addition, there

were negative effects of €245.6 million related to the deconsolidation of bmp greengas and the associated impairments on receivables.

**System Critical Infrastructure:** The adjusted EBITDA in the System Critical Infrastructure segment increased in the 2023 financial year in comparison to the previous year by 67.5% and was thus within the unchanged forecasted range. Adjusted for the effects of changes in the consolidated companies, the adjusted EBITDA increased by 67.0%. This rise in earnings was due to a substantial increase in revenue from the use of the grids as part of the higher investment in the expansion of the grids and from factoring in higher expenses for the grid reserve into prices, including redispatch to maintain the security of supply.

**Sustainable Generation Infrastructure:** The adjusted EBITDA in the Sustainable Generation Infrastructure segment increased considerably in 2023 in comparison to the previous year to €4,647.6 million and was thus at the upper end of the adjusted forecasted range, exceeding the originally forecasted range.

#### Adjusted EBITDA Sustainable Generation Infrastructure

in € million <sup>1</sup>	2023	2022	Change in %
Renewable Energies	1,070.9	1,107.1	-3.3
Thermal Generation and Trading	3,576.7	1,509.1	137.0
<b>Sustainable Generation Infrastructure</b>	<b>4,647.6</b>	<b>2,616.2</b>	<b>77.6</b>

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

In the Renewable Energies area, the adjusted EBITDA of €1,070.9 million was at almost the same level as in the previous year. The earnings performance at the run-of-river power plants and the expansion in wind farms and photovoltaic power plants had a positive effect. This was offset to some extent by falling prices for direct distribution of generated wind and photovoltaic power. In the area of Thermal Generation and Trading, the adjusted EBITDA increased sharply in 2023 in comparison to the previous year. On the one hand, the generated volumes could be sold through the trade at significantly higher prices in comparison to the previous year, while on the other hand, the reductions and cessation in gas supplies due to the war between Russia and Ukraine in the same period of the previous year had a negative effect, which now no longer applies.

#### Fall in the non-operating EBITDA in comparison to the previous year

##### Non-operating EBITDA

in € million <sup>1</sup>	2023	2022	Change in %
Expenses/income relating to nuclear power	-675.6	-591.6	14.2
Income from the reversal of other provisions	57.2	14.8	-
Result from disposals	-0.3	3.8	-
Additions to/Reversals of the provisions for onerous contracts relating to electricity and gas procurement agreements	-176.2	393.8	-
Income from reversals of impairment losses	120.9	1,499.1	-91.9
Restructuring	-47.8	-28.7	66.6
Valuation effects	481.5	-908.1	-
Other non-operating result	-386.6	123.0	-
<b>Non-operating EBITDA</b>	<b>-626.9</b>	<b>506.1</b>	<b>-</b>

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

The fall in non-operating EBITDA was primarily due to lower income from reversals of impairment losses in comparison to the previous year when there were large reversals of impairment losses on conventional generation plants. This was the result of an improvement in the profitability of coal power plants in the liquid period.

Furthermore, additions to a provision for an onerous contract in the current reporting period – mainly due to poorer medium-term income forecasts as a result of the falling electricity prices – had a negative impact on earnings. In addition, there were not only increases to provisions but also reversals of provisions for onerous contracts in the same period of the previous year. Negative effects



in the mid three-digit million euro range due to the incidents at SENEK also impacted the other non-operating result.

Valuation effects arising from certain hedging transactions, which we use to hedge against price fluctuations for underlying assets such as our power plants, offset these negative effects to some extent. In contrast to the underlying assets, these hedging transactions have to be recognized at their fair value in accordance with IFRS 9. This results in temporary earnings effects that are reversed over the course of time. As the one-sided recognition of the market value of these hedging transactions does not properly reflect the economic reality, we now recognize these effects in the non-operating result starting from the first half of 2023. This had an effect of €+373.3 million in the reporting period. The figures for the previous year have been restated accordingly. The effect in the comparative period was €-681.5 million.

### Considerable increase in adjusted Group net profit

#### Group net profit

in € million<sup>1</sup>

	2023			2022		
	Total	Non-operating	Adjusted	Total	Non-operating	Adjusted
<b>EBITDA</b>	<b>5,738.3</b>	<b>-626.9</b>	<b>6,365.2</b>	<b>4,473.2</b>	<b>506.1</b>	<b>3,967.1</b>
Amortization and depreciation	-2,397.0	-710.7	-1,686.3	-2,332.0	-716.8	-1,615.2
<b>EBIT</b>	<b>3,341.3</b>	<b>-1,337.6</b>	<b>4,678.9</b>	<b>2,141.2</b>	<b>-210.7</b>	<b>2,351.9</b>
Investment result	-89.2	-277.8	188.6	276.8	-35.8	312.6
Financial result	-411.3	94.7	-506.0	-22.6	449.6	-472.2
<b>EBT</b>	<b>2,840.8</b>	<b>-1,520.7</b>	<b>4,361.5</b>	<b>2,395.4</b>	<b>203.1</b>	<b>2,192.3</b>
Income tax	-1,008.2	201.8	-1,210.0	-551.5	-63.3	-488.2
<b>Group net profit/loss</b>	<b>1,832.6</b>	<b>-1,318.9</b>	<b>3,151.5</b>	<b>1,843.9</b>	<b>139.8</b>	<b>1,704.1</b>
of which profit/loss shares attributable to non-controlling interests	(295.0)	(-77.0)	(372.0)	(105.9)	(-185.1)	(291.0)
of which profit/loss shares attributable to the shareholders of EnBW AG	(1,537.6)	(-1,241.9)	(2,779.5)	(1,738.0)	(324.9)	(1,413.1)

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

Group net profit fell slightly in comparison to the previous year. This was due to the effects within non-operating EBITDA (please refer to the section “Non-operating EBITDA” on p. 72 f.<sup>7</sup> for the reasons), the investment and financial results and income taxes that had a negative impact on the earnings performance, primarily as a result of the significantly higher adjusted EBITDA (please refer to the section “Adjusted EBITDA” on p. 71 f.<sup>7</sup> for the reasons).

The main reasons for the decrease in the investment result were lower income from the dedicated financial assets and higher write-downs on entities accounted for using the equity method and on investments.

Furthermore, the decrease in the financial result had a negative effect on the earnings performance. This development was due mainly to interest rate effects on non-current provisions. This was offset to some extent by the result from the market valuation of securities.

Adjusted income taxes change in line with the development of adjusted EBT.

We use the amended adjusted investment result to calculate the value spread. This is calculated on the basis of the adjusted investment result less the adjusted result from investments held as financial assets of €94.0 million (previous year: €226.2 million).

## Financial position

### Financial management

#### Basis and objectives

The purpose of our financial management system is to ensure that EnBW is able to meet its payment obligations at all times without restriction. In order to minimize risk, optimize costs and increase transparency, financial transactions are managed within the Group finance department as far as possible.

The liquidity management system at EnBW is based on an efficient in-house bank approach in which liquidity is combined in an EnBW cash pool. Liquidity needs are determined using a forecasting tool and compared with corresponding liquidity sources. By applying a utilization rate for liquidity, we can derive the financing needs and then implement them. We have identified almost 100 relevant liquidity drivers for the forecast. The tool combines a deterministic approach with a risk-based approach to liquidity management. Daily operational management of liquidity is secured using a one-day, seven-day, one-month and three-month assessment. We also examine the situation over a period of twelve months in our strategic financial analysis.

In the operating business, derivatives are deployed for hedging purposes only: for example, for forward contracts for electricity and primary energy source trading. This also applies for foreign exchange and interest rate derivatives. All trading activities take place within a consistent framework using risk capital on the one hand and derived limits on the other. The value at risk (VaR) is of central importance when measuring the level of risk in proprietary trading. In the reporting year, the average value at risk was €17 million.

Details on the **risk management system** can be found in the notes to the consolidated financial statements in note [26] "Accounting for financial instruments."

Interest rate risk management involves the management and monitoring of interest-sensitive assets and liabilities. All relevant interest positions at the Group are analyzed here and used to derive an interest risk strategy. The purpose is to limit the impact of fluctuations in interest rates and interest rate risks on the results of operations and net assets. Appropriate recommendations for action for managing the interest position are resolved by an interest committee. The interest committee meets regularly and can also be convened on an ad hoc basis depending on the market situation.

Currency positions resulting from operations are closed by appropriate forward exchange contracts. Currency fluctuations from operating activities do not have any major effect on our operating result. Foreign exchange risks are monitored on a case-by-case basis within the framework of the currency management system.

As part of the EnBW-wide digital transformation, the treasury IT landscape including the payment transaction system and in-house bank has been replaced. As a result, we have achieved greater automation and more stable processes, and have also implemented new and amended governance rules.

We will continue to strive to maintain a balanced financing structure, solid financial profile and thus solid investment-grade ratings. We aim to secure our long-term access to the capital markets under competitive conditions by reaching a broader base of investors using sustainable financial instruments. Furthermore, we are digitalizing the underlying information and decision-making processes by creating a centralized data structure that can be managed and viewed using new media.

EnBW manages its financial profile using the key performance indicator debt repayment potential as the most important indicator of the company's creditworthiness. The debt repayment potential describes the retained cash flow in relation to the net debt and measures the ability of EnBW to repay its debts from its current earnings potential. This target level is reviewed on a regular basis to guarantee a solid investment-grade rating. A target value of at least 12% was valid up to now. As the result of a regular review and realignment with the latest requirements issued by the rating agencies, we are increasing this target value to at least 15%.

Further explanations of our financial terms can be found in the chapter "Strategy, goals and performance management system" on [p. 32 ff.](#)<sup>7</sup>.

## Financing strategy

We manage the financing needs of our operating activities separately from the Group's pension and nuclear obligations. As part of our financing strategy, we constantly assess capital market trends with regard to the current interest rate environment and to any potentially favorable refinancing opportunities. On this basis, we decide on further financing steps.

Alongside the internal financing capability and our own funds, we have the following financing instruments at our disposal to cover the financing needs of the operating business (as of 31 December 2023):

- Debt Issuance Program (DIP), via which bonds are issued: €~8.3 billion of €10.0 billion drawn
- Subordinated bonds: €~2.5 billion
- US private placement: equivalent value of US\$~850 million (translation on the pricing day)
- Promissory notes: €0.5 billion
- Bonds in Swiss francs: CHF 410 million (€443 million as of 31 December 2023)
- Commercial paper (CP) program: €~2.0 billion undrawn
- Sustainability-linked syndicated credit facility: €1.5 billion undrawn, with a term until the end of June 2027 after utilizing the second extension option for an additional year
- Committed credit lines: €~0.6 billion of €~3.9 billion drawn
- Uncommitted credit lines, which can be utilized in agreement with our banks: €~0.1 billion of €~1.7 billion drawn
- Bank loans: Two loan agreements were concluded to finance the EnBW He Dreiht offshore wind farm. The bank loan of €600 million signed with the European Investment Bank in December 2022 was drawn in March 2023. In May 2023, a bank loan of €500 million was signed with a consortium of banks and a partial amount of €250 million was drawn. The loan is being guaranteed by the Danish export credit agency EIFO.
- In addition, subsidiaries have other financing activities in the form of bank loans and promissory notes.

## Credit ratings

We aim to hold solid investment-grade ratings in order to:

- ensure unrestricted access to capital markets
- offer reliable opportunities for financing partners
- be regarded as a dependable business partner in our trading activities
- achieve the lowest-possible capital costs
- implement an appropriate number of investment projects and thereby maintain the future viability of the company

### Development of credit ratings – rating/outlook

	2023	2022	2021	2020	2019
Moody's	<b>Baa1/stable</b>	Baa1/stable	Baa1/stable	A3/negative	A3/negative
Standard & Poor's (S&P)	<b>A-/stable</b>	A-/negative	A-/stable	A-/stable	A-/stable

As of 31 December 2023, the creditworthiness of EnBW was rated by the rating agencies Moody's and Standard & Poor's with "Baa1" and "A-," respectively. The rating outlook is stable in both cases.

In spring 2023, S&P raised the outlook to stable and gave recognition, in particular, to how EnBW had managed the financial impact of the war between Russia and Ukraine on its subsidiary VNG.

The EnBW credit rating from Moody's has been unchanged at Baa1/stable since 2021. The rating agency also recently published a detailed credit update for EnBW on 10 January 2024.

In general, both rating agencies have praised the company's solid financial basis and its balanced, integrated portfolio with a high proportion of regulated income. EnBW continues to have one of the strongest credit ratings among energy supply companies in Europe.

## Assessment by the rating agencies

### Moody's (10/01/2024)

- Leadership position as vertically integrated utility within Baden-Württemberg
- High share of regulated earnings under a reliable regulatory framework
- Growing share of renewable assets increases resource risk, but mostly backed by subsidies or power purchase agreements
- Track record of measures to defend credit quality and supportive stance of shareholders
- Large capital spending programme, which will constrain credit metrics and entails some execution risks
- Dynamic evolution of decarbonisation policies, which increases strain on conventional generation
- Coal phase-out target brought forward to 2028

### Standard & Poor's (15/11/2023)

- Diversified and integrated position throughout the energy supply chain, 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 carries low execution risk and provides a long-term earnings base
- Financial policy, including shareholder support, geared toward protecting the "A-" rating
- Heavier carbon footprint in the short term than planned because of supply security issues, which nevertheless is profitable
- Increasing share of minority stakes as EnBW divests stakes in certain projects and subsidiaries carrying proportionally less debt, which increases cash flow leakage

## Sustainability ratings

We maintain close contact with leading sustainability rating agencies and take their analyses and evaluations of the corporate strategy, company situation and business prospects into account in our decision-making process. In the selection of agencies, the main focus is placed on, among other things, transparent and plausible evaluations and efficient working processes between the rating agencies, companies, investors and sustainability analysts. We strive to continuously improve our ratings from recognized agencies in the area of sustainability. We thus aim to strengthen our position as a responsible and sustainable company and also want to address those financial investors whose investment decisions are based wholly or partially on sustainability criteria.

Further information on **sustainability ratings** can be found on our website.

[Online ↗](#)

### Latest sustainability ratings

	CDP Climate Change	ISS ESG	MSCI	Sustainalytics
Result	A-/Leadership (2023)	B/Prime Status (2023)	A/Average (2023)	30.2/High Risk (2023)
Scale	A to D-	A+ to D-	AAA to CCC	0 to 40+
Relative position	"Thermal power generation" sector: EnBW achieved an above-average result.	"Multi utilities" sector: EnBW rated in the top 10%.	"Utilities" sector: EnBW has an average rating.	"Utilities" sector worldwide: EnBW achieved an average result.
Rating focus	Climate protection	Environmental, social and governance aspects	Environmental, social and governance aspects	Environmental, social and governance aspects

In 2023, we received good scores in important sustainability ratings within the energy sector. In the CDP Climate Change rating, we were able to improve our score in 2023 from B (Management) to A- (Leadership) and thus achieve an above-average result in comparison to the rest of the sector (scale: A/A- Leadership, B/B- Management, C/C- Awareness, D/D- Disclosure). In the Sustainalytics rating, our score was downgraded to 30.2 in December 2023. This meant that we have just fallen into the "High Risk" category (scale: 0–10 Negligible, 10–20 Low, 20–30 Medium, 30–40 High, 40+ Severe). The scores from the other sustainability ratings were at the same level as in the previous year.

Further information on the non-financial key performance indicators can be found on [p. 87 ff.](#)

### Capital market activities

We have sufficient and flexible access to the capital market at all times. The EnBW bonds continue to have a well-balanced maturity profile. As part of our financing strategy, we constantly assess capital market trends with regard to the current interest rate environment and to any potentially favorable refinancing opportunities.

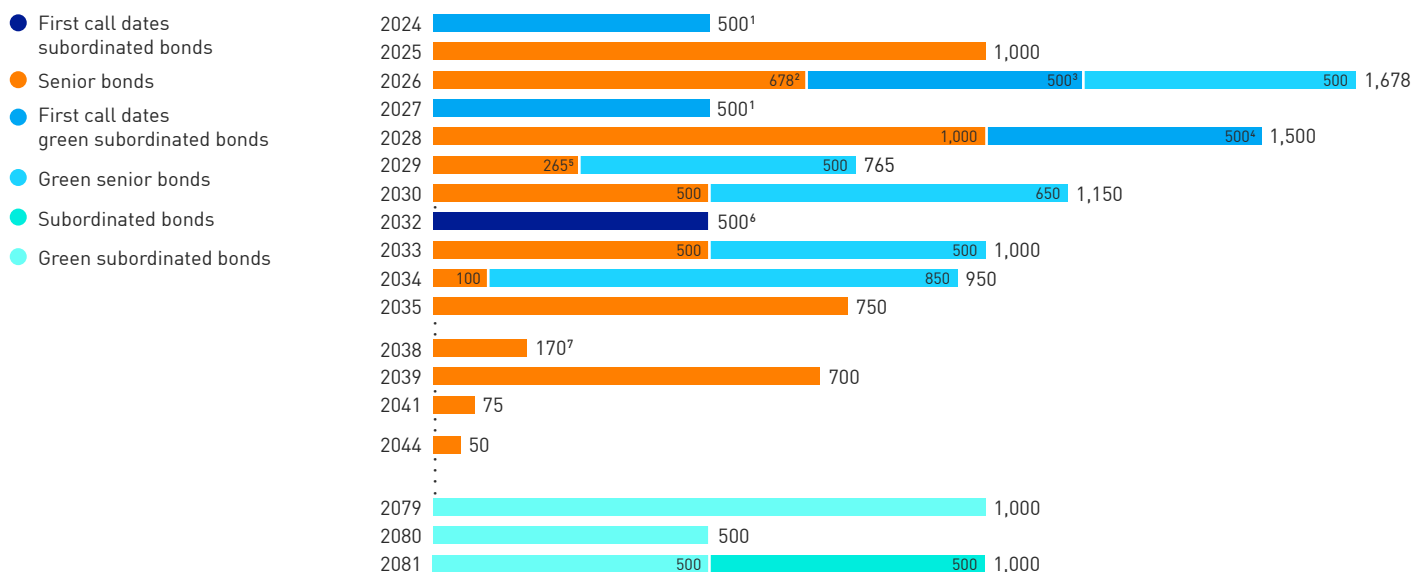
To implement our sustainable corporate strategy, we use green bonds as a sustainable financing instrument. As of 31 December 2023, we have issued green bonds with a total volume of €5 billion since 2018. We issued a green subordinated bond with a volume of €500 million on 23 January 2024. All of the green bonds are exclusively used to finance climate-friendly projects and fulfill the criteria for certification by the Climate Bonds Standard Board on behalf of the Climate Bonds Initiative.

On 17 January 2023, EnBW successfully issued two bonds with a total volume of €1.25 billion. The proceeds from the bonds will be used for implementing aspects of the company's strategy that focus on sustainability.

On 24 May 2023, EnBW issued two bonds with a total volume of 410 million Swiss francs. These bonds were issued to refinance a bond in Swiss francs from 2013 and also serve to finance and hedge EnBW's activities in Switzerland.

On 16 November 2023, EnBW issued two green corporate bonds with a total volume of €1.5 billion. These were already issued to prefinance investment in the 2024 financial year. The funds will be exclusively used to finance or refinance climate-friendly projects.

#### Maturity profile of EnBW bonds (as of 31 December 2023) in € million



<sup>1</sup> First call date: green subordinated bond maturing in 2079.

<sup>2</sup> Includes CHF 165 million, converted into € as of 31/12/2023.

<sup>3</sup> First call date: green subordinated bond maturing in 2080.

<sup>4</sup> First call date: green subordinated bond maturing in 2081.

<sup>5</sup> CHF 245 million, converted into € as of 31/12/2023.

<sup>6</sup> First call date: subordinated bond maturing in 2081.

<sup>7</sup> JPY 20 billion (swap in €), coupon before swap 5.460%.

### Asset liability management model

We ensure the timely coverage of the pension and nuclear obligations using our asset liability management model.

The aim is to cover the Group's pension and nuclear provisions within an economically feasible period of time by means of appropriate financial assets. We ensure this using our cash flow-based asset liability management model. For this purpose, we determine the effects on the cash flow statement, income statement and balance sheet over the next 30 years. Alongside the anticipated return on financial assets, actuarial reports on pension provisions and sector-specific appraisals by external experts on costs for nuclear decommissioning and disposal are taken into account. The impact the utilization of the pension and nuclear obligations may have on the operating business is limited by taking funds from the financial assets. In the 2023 financial year, the impact on the cash flow from operating activities was around €375 million. As soon as the provisions are fully covered by the financial assets, no further funds will be taken from the cash flow from operating activities as part of the model. This model also allows simulations of various alternative scenarios.

As of 31 December 2023, the dedicated financial assets for pension and nuclear provisions totaled around €6.2 billion (previous year: €6.0 billion). Alongside the dedicated financial assets, there are plan assets to cover certain pension obligations with a market value (excluding the surplus cover from benefit entitlements) of €700.3 million as of 31 December 2023 (previous year: €714.2 million).

We strive to reach the defined investment targets with minimum risk. We also further optimized the risk/return profile of the financial assets in 2023. The main part of the dedicated financial assets is distributed as investments across nine asset classes. The financial assets are bundled in two master funds with the following investment targets:

- Risk-optimized investments, with a performance in line with market trends
- Consideration of the effects on the balance sheet and income statement
- Broad diversification of the asset classes
- Reduction of costs and simplification of administrative processes
- Consideration of sustainability aspects

The asset management department at EnBW is responsible for the sustainable alignment of medium- to long-term capital investments. It already began to rethink and sustainably realign the investment philosophy a number of years ago. This is why we take ESG criteria into account in our investment decisions. Our considerations in this regard thus focus on improving climate protection and good corporate management with respect to themes such as reputation, fraud and corruption.

As an institutional investor, we can already demonstrate today that a significant proportion of our investment is impact investment. The requirements for classification were included in the investment guidelines in accordance with article 8 of the EU Disclosure Regulation 2019/2088 for the majority of the capital investments. The solutions implemented as part of our digitalization strategy are also supporting us on this path. We have already been able, for example, to verifiably reduce CO<sub>2</sub> emissions and improve other ESG performance indicators in our portfolio. In the future, we plan to make our medium- to long-term capital investments CO<sub>2</sub> neutral – just like EnBW itself.

### Net debt

As of 31 December 2023, net debt had risen by €856.1 million compared to the figure posted at the end of 2022. The increase in net financial debt in comparison to that reporting date was mainly due to the increase in collateral. The increase in net debt relating to pension and nuclear obligations resulted primarily from the decrease in the interest rate for the pension provisions.

## Net debt

in € million <sup>1</sup>	31/12/2023	31/12/2022	Change in %
Cash and cash equivalents available to the operating business	-5,632.4	-4,626.1	21.8
Current financial assets available to the operating business	-2,941.7	-600.4	–
Long-term securities available to the operating business	-4.8	-2.4	100.0
Bonds	12,035.3	9,683.8	24.3
Liabilities to banks	3,157.4	1,969.4	60.3
Other financial liabilities	1,275.1	1,238.0	3.0
Lease liabilities	986.4	912.6	8.1
Valuation effects from interest-induced hedging transactions	-25.0	-51.0	-51.0
Restatement of 50% of the nominal amount of the subordinated bonds <sup>2</sup>	-1,250.0	-1,250.0	0.0
Other	-42.1	-59.7	-29.5
<b>Net financial debt</b>	<b>7,558.2</b>	<b>7,214.2</b>	<b>4.8</b>
Provisions for pensions and similar obligations <sup>3</sup>	6,030.6	5,426.0	11.1
Provisions relating to nuclear power	4,768.4	4,614.4	3.3
Receivables relating to nuclear obligations	-414.4	-372.9	11.1
<b>Net pension and nuclear obligations</b>	<b>10,384.6</b>	<b>9,667.5</b>	<b>7.4</b>
Long-term securities and loans to cover the pension and nuclear obligations <sup>4</sup>	-5,829.5	-5,642.1	3.3
Cash and cash equivalents to cover the pension and nuclear obligations	-171.7	-185.0	-7.2
Current financial assets to cover the pension and nuclear obligations	-90.2	-75.7	19.2
Surplus cover from benefit entitlements	-113.9	-106.0	7.5
Other	-34.4	-25.9	32.8
<b>Dedicated financial assets</b>	<b>-6,239.7</b>	<b>-6,034.7</b>	<b>3.4</b>
<b>Net debt relating to pension and nuclear obligations</b>	<b>4,144.9</b>	<b>3,632.8</b>	<b>14.1</b>
<b>Net debt</b>	<b>11,703.1</b>	<b>10,847.0</b>	<b>7.9</b>

<sup>1</sup> The restricted liquid assets in the EEG account and Heat and Power Co-Generation Act (KWKG) account, which are only held in custody by the transmission grid operator, cannot be used for the operating business and are thus not allocated to net debt but rather to capital employed.

<sup>2</sup> The structural characteristics of our subordinated bonds meet the criteria for half of each bond to be classified as equity, and half as debt, by the rating agencies Moody's and Standard & Poor's.

<sup>3</sup> Less the market value of the plan assets (excluding the surplus cover from benefit entitlements) of €700.3 million (31/12/2022: €714.2 million).

<sup>4</sup> Includes equity investments held as financial assets.



## Investment analysis

### Net cash investment

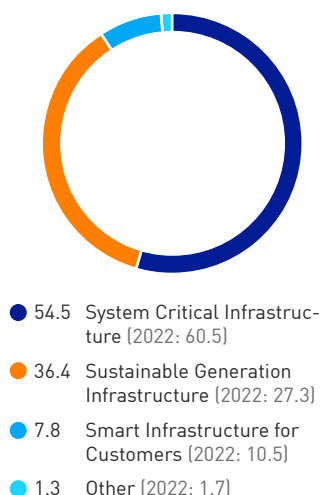
in € million <sup>1</sup>	2023	2022	Change in %
Investments in growth projects <sup>2</sup>	3,917.2	2,355.6	66.3
Investments in existing projects	985.4	797.8	23.5
<b>Total investments</b>	<b>4,902.6</b>	<b>3,153.5</b>	<b>55.5</b>
Divestitures	-13.3	-68.3	-80.5
Participation models <sup>3</sup>	-1,976.3	-152.6	-
Disposals of long-term loans	-18.0	-0.6	-
Other disposals and subsidies	-155.2	-164.3	-5.5
<b>Total divestitures</b>	<b>-2,162.8</b>	<b>-385.8</b>	<b>-</b>
<b>Net cash investment</b>	<b>2,739.8</b>	<b>2,767.7</b>	<b>-1.0</b>

1 Excluding investments held as financial assets.

2 Does not include cash and cash equivalents acquired with the acquisition of fully consolidated companies. These amounted to €28.5 million in the reporting period (previous year: €0.0 million).

3 This includes capital reductions in non-controlling interests with short-term receivables to foreign companies. The latter was due to advance payments made in the previous year as a result of contractual regulations.

### Investment by segment in %<sup>1</sup>



1 The figures for the previous year have been restated.

**Gross investment** by the EnBW Group of €4,902.6 million in 2023 was around 56% higher than the level in the previous year (€3,153.5 million). 79.9% of overall gross investment was attributable to growth projects; the proportion of investment in existing facilities stood at 20.1%.

Gross investment in the **Smart Infrastructure for Customers** segment stood at €383.0 million and exceeded the level in the previous year (previous year restated: €331.4 million). As in the previous year, the investment in this segment was largely in the area of electromobility.

Gross investment in the **System Critical Infrastructure** segment of €2,671.9 million was significantly higher than the level in the previous year of €1,908.1 million (figure for previous year restated). This increase was primarily the result of higher investment by our subsidiary TransnetBW as part of the Network Development Plan Electricity and higher investment by our grid companies in the expansion of capacities and the renewal of the distribution grid.

There was gross investment of €1,783.5 million in the **Sustainable Generation Infrastructure** segment, which was a considerable increase in comparison to the previous year (€859.6 million).

### Investments in Sustainable Generation Infrastructure

in %	2023	2022
Renewable Energies	24.0	20.0
Thermal Generation and Trading	12.4	7.3
<b>Sustainable Generation Infrastructure</b>	<b>36.4</b>	<b>27.3</b>

A total of €1,174.2 million of this investment was in the Renewable Energies area, compared to €631.7 million in the previous year. This significant increase was mostly attributable to the offshore wind sector due to the investment in our EnBW He Dreiht wind farm in the German North Sea. Investment in the Thermal Generation and Trading area stood at €609.3 million and was thus considerably higher than the level in the previous year of €227.9 million. This was largely due to our investment in fuel switch projects for converting three of our thermal power plants in Baden-Württemberg from coal to gas (also making them hydrogen-ready in the process).

**Other gross investment** increased slightly from €54.4 million in the previous year to €64.2 million and mainly involved capital contributions at other investments and investment in the central IT system.

Total **divestitures** were significantly higher overall than in the previous year. The item “divestitures” was lower than the level in the previous year when it included the impact of our exit from the offshore wind power business in the USA. Under participation models, divestitures mainly comprised the sale of our minority shareholdings in our subsidiary TransnetBW and our EnBW He Dreiht offshore wind farm. In the previous year, they mainly comprised the sale of minority shares in our solar portfolio. Other disposals were slightly below the level in the previous year.

We also take climate goals into account in our investment decisions. Significant investment projects undergo additional steps to evaluate their sustainability. This additional information flows into the approval processes carried out by the investment committee and Board of Management (p. 36<sup>7</sup>).

## Liquidity analysis

### Condensed cash flow statement

in € million	2023	2022	Change in %
Cash flow from operating activities	899.7	1,804.8	-50.1
Cash flow from investing activities	-5,797.0	-2,734.9	112.0
Cash flow from financing activities	4,419.3	734.6	-
<b>Net change in cash and cash equivalents</b>	<b>-478.0</b>	<b>-195.5</b>	<b>144.5</b>
Change in cash and cash equivalents due to changes in the consolidated companies	6.4	0.3	-
Net foreign exchange difference and other changes in cash and cash equivalents <sup>1</sup>	-8.9	17.7	-
<b>Change in cash and cash equivalents</b>	<b>-480.5</b>	<b>-177.5</b>	<b>-</b>

<sup>1</sup> The figures for the previous year have been restated due to the aggregation of line items.

Despite a substantial increase in cash-relevant EBITDA in comparison to the previous year, cash flow from operating activities was significantly lower than in the previous year. This development was mainly due to an outflow of cash in the net current assets for reasons related to the reporting date. This was primarily attributable to a sharp decrease in trade payables in comparison to the same period of the previous year when there was a significant increase in trade payables. In contrast, lower cash outflows in inventories in comparison to the previous year had a positive impact on the net current assets. Higher income tax paid in comparison to the previous year also had a negative impact on the cash flow from operating activities in the reporting period.

Cash flow from investing activities returned a significantly higher outflow of cash in the reporting period compared to the previous year. The main reason for this development was higher capital expenditure on property, plant and equipment, especially in the System Critical Infrastructure and Sustainable Generation Infrastructure segments. Cash flow from investing activities was also impacted by higher net investment as part of the portfolio management of securities and financial investments.

Cash flow from financing activities returned a considerably higher cash inflow than in the previous year. This was primarily due to the higher net increase in financial liabilities as part of liquidity management, mainly as a result of issuing bonds, and an increase in cash received for changes in ownership interest without loss of control. In the reporting year, this was attributable to investments by partners in the EnBW He Dreiht offshore wind farm and the transmission grid operator TransnetBW. In the previous year, the company sold shares in a solar portfolio. An increase in cash inflow for alterations of capital in non-controlling interests also had an impact.

The solvency of the EnBW Group was ensured as of the reporting date thanks to the company's internal financing capability and the external sources available for financing. The company's future solvency is secured by its solid financial position and results of operations.

**Retained cash flow**

in € million <sup>1</sup>	2023	2022	Change in %
<b>EBITDA</b>	<b>5,738.3</b>	<b>4,473.2</b>	<b>28.3</b>
Change in provisions excluding obligations from emission allowances	203.9	36.2	–
Non-operating valuation effects from derivatives <sup>2</sup>	-481.5	908.1	–
Other non-cash-relevant expenses/income <sup>2</sup>	735.2	-1,478.3	–
Income tax paid	-906.7	-227.9	–
Interest and dividends received	529.8	427.0	24.1
Interest paid for financing activities	-421.2	-318.8	32.1
Dedicated financial assets contribution	104.9	-92.2	–
<b>Funds from operations (FFO)</b>	<b>5,502.7</b>	<b>3,727.3</b>	<b>47.6</b>
Declared dividends	-671.3	-510.8	31.4
<b>Retained cash flow</b>	<b>4,831.5</b>	<b>3,216.5</b>	<b>50.2</b>

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

<sup>2</sup> The non-operating valuation effects from derivatives contain effects on the cash flow statement of €-108.2 million (previous year: €226.6 million) in the item "Other non-cash-relevant expenses/income". Other non-cash-relevant expenses/income included in the calculation of the retained cash flow were adjusted by the corresponding amount.

Valuation effects due to temporary fluctuations in the value of certain derivatives are recognized in non-operating EBITDA and are included in the item EBITDA in the cash flow statement. These effects cannot be taken into account when calculating the operational earnings power of EnBW. Funds from operations (FFO) and retained cash flow have thus been adjusted for the described effects since the reporting for the first half of 2023. These effects totaled €-373.3 million in the reporting period. The figures for the previous year have been restated accordingly. The effect in the comparative period was €681.5 million.

Funds from operations (FFO) were higher than in the previous year, mainly as a result of higher EBITDA. There was also a higher balance of non-cash-relevant expenses and income. This was primarily caused by valuation effects on inventories and their associated derivatives in the reporting year and higher reversals of impairment losses on property, plant and equipment in the previous year. In the reporting year, these developments were offset above all by the non-operating valuation effects from derivatives and higher income tax paid.

Higher declared dividends in comparison to the previous year reduced the retained cash flow. Nevertheless, the retained cash flow was still considerably higher than in the previous year because of the positive contribution of the FFO. It is an expression of the internal financing capability of EnBW and reflects the funds that are available to the company for investment – after all stakeholder claims have been settled – without the need to raise additional debt.

**Adjusted working capital**

in € million <sup>1</sup>	2023	2022	Change in %
<b>Change in assets and liabilities from operating activities</b>	<b>-4,762.8</b>	<b>-1,224.9</b>	<b>–</b>
Change in liquid assets in the EEG and the KWKG account	2,098.5	-724.2	–
Non-operating valuation effects from derivatives	373.3	-681.5	–
<b>Adjusted change in operating assets and liabilities</b>	<b>-2,291.0</b>	<b>-2,630.6</b>	<b>-12.9</b>
Net balance of inventories and obligations from emission allowances	(-398.9)	(-2,624.8)	(-84.8)
Net balance of trade receivables and payables, services not yet invoiced and payments on account that have been made and received	(-1,053.7)	(1,868.0)	–
<b>Net balance of other assets and liabilities</b>	<b>(-838.4)</b>	<b>(-1,873.8)</b>	<b>(-55.3)</b>

<sup>1</sup> The table shows the reconciliation of the cash-relevant change in adjusted working capital.

Alongside the retained cash flow and net investment, the change in working capital has a major influence on net debt. As the liquid assets in the EEG account and Heat and Power Co-Generation Act (KWKG) account are only held in custody by the transmission grid operators, they are not included in the calculation of net debt. Therefore, the adjusted working capital is corrected for any changes in the liquid assets in the EEG account and KWKG account.

The change in liquid assets for received and deposited collateral relating to non-operating valuation effects which arise due to temporary fluctuations in the value of derivatives is not a component of the retained cash flow but nevertheless has an influence on net debt. The adjusted working capital is corrected to properly take the change in liquid assets into account.

## TOP

## Debt repayment potential

in € million <sup>1</sup>	2023	2022	Change in %
Retained cash flow	4,831.5	3,216.5	50.2
Net debt	11,703.1	10,847.0	7.9
<b>Debt repayment potential in %</b>	<b>41.3</b>	<b>29.7</b>	<b>-</b>

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

An adjustment to the comparative figure for retained cash flow in the previous year of €681.5 million to take account of corrections for valuation effects on certain derivatives led to an adjustment in the debt repayment potential as of 31 December 2022. As a result, this performance indicator increased for the previous year by 6.3 percentage points.

In the reporting year, the retained cash flow was higher than the forecasted range of €2.5 billion to €3.0 billion, mainly due to the increase in cash-relevant EBITDA. As a result of the increase in retained cash flow, the debt repayment potential was substantially higher than the target value of between 18.0% and 21.0% in the 2023 reporting year.

## Net assets

## Condensed balance sheet

in € million	31/12/2023	31/12/2022	Change in %
Non-current assets	39,512.0	36,984.0	6.8
Current assets	25,206.9	32,511.9	-22.5
Assets held for sale	0.0	7.8	-100.0
<b>Assets</b>	<b>64,718.9</b>	<b>69,503.7</b>	<b>-6.9</b>
Equity	15,853.0	12,769.3	24.1
Non-current liabilities	30,712.7	28,064.5	9.4
Current liabilities	18,153.2	28,669.9	-36.7
<b>Equity and liabilities</b>	<b>64,718.9</b>	<b>69,503.7</b>	<b>-6.9</b>

As of 31 December 2023, total assets were €4,784.8 million lower than the figure at the end of the previous year. Non-current assets increased by €2,528.0 million between the two reporting dates, which was mainly due to higher capital expenditure on property, plant and equipment. This was offset to some extent by the decrease in other non-current assets caused by a fall in derivatives. Current assets decreased by €7,305.0 million. This was also primarily due to the decrease in derivatives as a result of the slight fall in prices on the energy trading markets. There was also a decrease in inventories. In contrast, there was an increase in financial assets.

As of 31 December 2023, equity increased by €3,083.7 million as a result of the high Group net profit. This was offset to some extent by the fall in other comprehensive income, which was mainly due to the reduction in the cash flow hedge reserve. The equity ratio increased from 18.4% to 24.5% between the two reporting dates. Non-current liabilities rose by €2,648.2 million. This was primarily attributable to the issuing of bonds. Non-current provisions also increased, largely caused by the fall in the discount rate for the pension provisions from 3.7% at the end of 2022 to 3.15% as of the reporting date in 2023. This was offset to some extent by the decrease in derivatives. Current liabilities fell by €10,516.7 million. This was mainly due to a significant decrease in derivatives and collateral received. In addition, there was a substantial decrease in trade payables in comparison to the previous year.

## TOP

**Value spread**

Value spread is calculated by deducting the weighted average cost of capital before tax (WACC) from ROCE. The cost of capital before tax represents the minimum return on average capital employed (calculated on the basis of the respective quarterly figures for the reporting year and the year-end figure for the previous year). A positive value spread is achieved when the return on capital employed (ROCE) exceeds the cost of capital. The cost of capital is determined based on the weighted average cost of equity and debt together. The value of equity is based here on a market valuation and thus deviates from the value recognized in the balance sheet. The cost of equity is based on the return of a risk-free investment and a company-specific risk premium. The latter is calculated as the difference between a risk-free investment and the return for the overall market, weighted with a company-specific business field risk. The terms according to which the EnBW Group can raise long-term debt are used to determine the cost of debt.

**Value spread by segment 2023**

	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Genera- tion Infrastructure	Other/ Consolidation	Total
Adjusted EBIT including the adjusted investment result <sup>1</sup> in € million	76.0	1,148.0	3,950.3	-360.8	4,813.5
Average capital employed in € million	1,802.6	13,336.7	11,571.0	599.7	27,310.0
ROCE in %	4.2	8.6	34.1	-	17.6
Weighted average cost of capital before tax in %	10.0	6.3	8.3	-	7.4
Value spread in %	-5.8	2.3	25.8	-	10.2

1 Amended adjusted investment result of €94.6 million, adjusted for taxes (investment result/0.703 - investment result; with 0.703 = 1 - tax rate 29.7%).

**Value spread by segment 2022<sup>1</sup>**

	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Genera- tion Infrastructure	Other/ Consolidation	Total
Adjusted EBIT including the adjusted investment result <sup>2</sup> in € million	345.0	432.4	1,960.8	-263.4	2,474.8
Average capital employed in € million	1,514.3	12,410.9	8,178.4	586.9	22,690.5
ROCE in %	22.8	3.5	24.0	-	10.9
Weighted average cost of capital before tax in %	9.2	6.2	7.3	-	6.8
Value spread in %	13.6	-2.7	16.7	-	4.1

1 The figures for the previous year have been restated.

2 Amended adjusted investment result of €86.4 million, adjusted for taxes (investment result/0.703 - investment result; with 0.703 = 1 - tax rate 29.7%).

There are various factors that influence value spread. ROCE and value spread depend not only on the development of the operating result but above all on the capital employed. Large-scale investments tend to significantly increase the capital employed in the early years, while the effect on income that boosts value, however, only filters through over a lengthier period of time, often long after the investments were initially made. This is especially true of capital expenditure on property, plant and equipment relating to the construction of new power plants, which do not have any positive effect on the operating result of the Group until after they are commissioned. Capital expenditure on power plants, on the other hand, is already taken into account in the capital employed during the construction phase. In a comparison of individual years, the development of ROCE and value spread is, to a certain extent, cyclical in nature, depending on the investment volume.

In the 2023 financial year, the value spread rose in comparison to the previous year to 10.2% and thus exceeded our expectations for the 2023 financial year (forecast for 2023: 2.5% to 3.5%). The reason for this development was the increase in ROCE. The considerable increase in adjusted EBIT including the adjusted investment result in comparison to the previous year more than compensated for the increase in capital employed, whereby ROCE increased by 6.7 percentage points to 17.6%. The risk-adjusted weighted average cost of capital rose in comparison to the previous year to 7.4%.

**Smart Infrastructure for Customers:** The value spread in the Smart Infrastructure for Customers segment decreased by 19.4 percentage points in 2023 compared to 2022. This was due to the significant decrease in adjusted EBIT including the adjusted investment result. At the same time, the average capital employed was higher than the level in the previous year, which was mainly attributable to investment in the charging infrastructure.

**System Critical Infrastructure:** The value spread in the System Critical Infrastructure segment increased by 5.0 percentage points in comparison to 2022. The adjusted EBIT including the adjusted investment result was €715.6 million higher than the figure in the previous year. This compensated for the effects of the increase in capital employed due to investment above all in the transmission and distribution grids and the slight increase in risk-adjusted weighted average cost of capital to 6.3% in comparison to the previous year.

**Sustainable Generation Infrastructure:** The value spread in the Sustainable Generation Infrastructure segment was 25.8%, which was 9.1 percentage points higher than the value in the previous year. Adjusted EBIT including the adjusted investment result increased to €4.0 billion. The increase in capital employed was mainly due to the decrease in liabilities from stock market securities.

The **remuneration report** is available as a separate report on our website.

[Online ↗](#)

## Performance indicators relevant to remuneration

The performance indicators relevant to remuneration are derived as follows:

### EBT relevant to remuneration

in € million <sup>1</sup>	2023	2022
<b>EBT</b>	<b>2,840.8</b>	<b>2,395.4</b>
Less outstanding items for derivatives allocated under trading within EBITDA	-481.5	908.1
Less the measurement of financial assets and outstanding items for derivatives allocated under trading within the financial result	-16.1	199.5
Less changes to the inflation rate and discount rate for nuclear provisions	-202.9	-418.0
<b>EBT relevant to remuneration</b>	<b>2,140.3</b>	<b>3,085.0</b>

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

### Funds from operations (FFO) relevant to remuneration

in € million <sup>1</sup>	2023	2022
<b>Funds from operations (FFO)</b>	<b>5,502.7</b>	<b>3,727.3</b>
Less income tax paid	906.7	227.9
<b>Funds from operations (FFO) relevant to remuneration</b>	<b>6,409.4</b>	<b>3,955.2</b>

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

### Intangible assets and property, plant and equipment (net) relevant to remuneration

in € million	2023	2022
Intangible assets	3,166.2	3,218.2
Property, plant and equipment	25,429.8	22,705.3
Investment properties	38.3	40.1
Investment cost subsidies	-9.5	-8.8
Construction cost subsidies	-1,020.0	-991.8
<b>Intangible assets and property, plant and equipment (net)</b>	<b>27,604.8</b>	<b>24,963.0</b>
<b>Average intangible assets and property, plant and equipment (net)<sup>1</sup></b>	<b>25,876.6</b>	<b>23,520.3</b>

<sup>1</sup> Average calculation based on the relevant quarterly values for the reporting year and the year-end value for the previous year.

### ROA (return on assets) relevant to remuneration

in € million <sup>1</sup>	2023	2022
<b>EBIT</b>	<b>3,341.3</b>	<b>2,141.2</b>
Less outstanding items for derivatives allocated under trading within EBITDA	-481.5	908.1
Less changes to the inflation rate and discount rate for nuclear provisions	-64.1	169.9
<b>EBIT relevant to remuneration</b>	<b>2,795.7</b>	<b>3,219.2</b>
Average intangible assets and property, plant and equipment (net)	25,876.6	23,520.3
<b>ROA (return on assets) relevant to remuneration in %</b>	<b>10.8</b>	<b>13.7</b>

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

### Other performance indicators relevant to remuneration

	2023	2022
Expansion of renewable energies (electrical output in MW)	283.8	344.6
LTIF for companies controlled by the Group	2.4	2.6

The **LTIF** is explained in the LTIF section and the **expansion of renewable energies** is explained in the section on the environmental goal dimension in this chapter.

The remuneration of the members of the Board of Management is described in full in the **remuneration report**, which is available as a separate report at [www.enbw.com/corporate-governance](http://www.enbw.com/corporate-governance).



## Customers and society goal dimension

### Reputation

A strong reputation is an important factor for the sustainable success of a company. The good social reputation of a company reflects the trust placed by the general public and relevant stakeholders in the competent and responsible actions of that company.

We assume our responsibilities for the economy and society and aspire to be a driver of the energy transition. In the process, we want to gain social acceptance and improve our reputation. A good reputation signals the willingness of society and its different stakeholder groups to cooperate with and invest in the company.

We aim to continuously improve our reputation. A stakeholder team comprising representatives from all important areas of the company communicates and maintains regular dialog with relevant stakeholder groups both directly and indirectly (p. 42 ff.<sup>7</sup>).

### Reputation Index

Reputation is measured using the key performance indicator Reputation Index using a standardized survey that is carried out by an external market research institute. It is measured in accordance with the requirements of the EnBW Group standard for market research and surveys (p. 33 f.<sup>7</sup>).

TOP

Key performance indicator

	2023	2022	Change in %	Forecast 2023
Reputation Index	55	58	-5.2	57 – 60

The Reputation Index fell in 2023 by three index points in comparison to the previous year. It is thus once again at the same level as in 2021, although below our forecasted range for 2023 of between 57 and 60 points. The reason for this was that values decreased in the decision-maker target groups. There was also a slight adjustment to the composition of one of the decision-maker target groups: The level of awareness for EnBW in this group is lower. We assume that the index was negatively influenced by the effects experienced throughout the industry, whereby there was an increase in reputation indices across the sector in 2022, possibly due to the war between Russia and Ukraine. This effect fell away in the reporting year.

More details on reputational risks can be found in the “Report on opportunities and risks” on p. 135<sup>7</sup>.

### Customer proximity

In 2023, **digitalization** became even more important for our end-customer business both with respect to electricity and gas sales and also e-mobility. The main focus shifted here from customer acquisition via digital channels to digital customer communication and increasingly covers the provision of digital services for existing customers. 50% of EnBW customers and 78% of Yello customers are now happy to receive their contractual documents and invoices in paperless form. This figure thus increased by around 6% for EnBW customers in comparison to the previous year (previous year: 47%). Also, 88% of EnBW customers (excluding the basic supply of energy and reserve supplies) and 97% of Yello customers who concluded a new contract via digital and digitally supported channels have selected paperless customer interaction. Our advances in the area of digitalization are also being demonstrated by the increase in use of our “zuhause+” app. It helps our customers to monitor their energy consumption and keep an eye on the resulting costs. More than 220,000 customers have now installed the app on their mobile devices. Yello customers have been able to use the new Yello app since May 2023. It has replaced the previous kWhapp and has now been installed on more than 390,000 customer devices.

You can find our  
company website here.

Online ↗



Our aim is to rigorously anchor **sustainability** in our sales processes (e.g., with respect to our products and services). In doing so, we hope to generate economic, ecological and social value and strengthen our market position even further. Our initial focus has been placed above all on the area of climate protection. We were able to implement further initiatives in 2023 and we present the most important ones in the section “Selected activities” (p. 89 ff.).

Customer Satisfaction Index

Our customers lie at the heart of our philosophy and actions. We aim to build long-term relationships with our customers by offering an intelligent combination of products and services, developing new product worlds, communicating transparently and delivering the highest-quality service possible. Maintaining a high level of customer satisfaction is key. The Customer Satisfaction Indices for EnBW and Yello are compiled from customer surveys carried out by an external provider (p. 33 f.).

TOP

Key performance indicator

	2023	2022	Change in %	Forecast 2023
Customer Satisfaction Index for EnBW/Yello	130/161	139/166	-6.5/-3.0	127 – 139/ 150 – 161

The Customer Satisfaction Index for EnBW fell by 6.5% to a value of 130 in 2023. The satisfaction of EnBW retail customers was thus at a good level and within our forecasted range. A good level is reached when 50% of those surveyed indicate that overall they are particularly satisfied with EnBW. This is the case from 114 points upwards. The fall in the Customer Satisfaction Index in 2023 was due to an especially challenging market environment. A tense economic climate with persistently high inflation has caused retail customers to also have an increasingly negative view of energy suppliers and their pricing policies. We initiated various different measures to improve customer satisfaction. These included developing a sustainable range of products and pushing forward the expansion of our digital and analog range of services. We offer special services, such as the EnBW zuhause+ app, to help our customers properly understand and reduce their energy costs. We believe that constant investment in our national marketing campaign with a focus on our Germany-wide e-mobility services is having an additional positive effect on the image of the company with respect to innovation and sustainability.

The satisfaction of Yello customers fell slightly in 2023 to an index value of 161 but still remains at an outstanding level despite the difficult market conditions. An outstanding level is reached when 70% of those surveyed indicate that overall they are particularly satisfied with Yello. This is the case from 159 points upwards. To improve customer satisfaction, Yello implemented a series of measures in 2023 to improve the quality of its digital and analog service processes.

The **customer test panel “Powerhelden”** gives us feedback on our products, services and performance.

Online

Another tool for evaluating and improving customer satisfaction is the **customer test panel “Powerhelden”** (power heroes). It is currently made up of a group of around 1,500 people of all ages and social and educational backgrounds who source their energy from the EnBW Group or third-party providers. We use questionnaires, user tests and interviews to gain insights that can flow into the optimization, creation and monitoring of products and processes across the Group.

Further details are available in the “Report on opportunities and risks” on p. 135.

## Selected activities

2023 was mainly characterized by the **implementation of regulatory requirements** resulting from the energy crisis. The German government passed numerous laws and ordinances in this area, such as the December emergency relief payment, the electricity and gas price brake, the amendment to the energy price brake ("Repair Act"), the reduction in value added tax for gas and district heating and various allocations (p. 59<sup>7</sup>). There were also comprehensive changes to the Act on Metering Point Operation (Messstellenbetriebsgesetz, MsbG) that also necessitated adjustments to our processes and systems. Thanks to our high degree of digitalization and agile working practices, we were able to implement all of the legal requirements on time. This helped to reduce the financial burden on our customers by around €100 million in 2023.

We provide **information on how to save energy** on our website.

Online ↗

Information on developments with respect to **sustainability at Yello** can be found here.

Online ↗

In response to the **challenges faced on the energy market** due to the war between Russia and Ukraine, EnBW and Yello supported their customers by offering a **gas saving bonus** for the 2022/2023 heating period. Customers who reduced their gas consumption by 10% between October 2022 and April 2023 were rewarded with a bonus of €100 in the second quarter of 2023. This bonus helped customers cushion increasing costs and gave them an extra incentive to save energy.

**Green electricity** has become the standard in the product portfolio of EnBW and Yello. The proportion of the electricity supplied to new customers by EnBW and Yello that is accounted for by green energy now stands at 100% (EnBW excluding the basic supply of energy). 63% of the total customer base are now supplied with green electricity by both brands. Taking offsetting measures into account, Yello and EnBW were able to save a total of around 1,380,000 t of CO<sub>2</sub> emissions in 2023.

To help people in Germany make the **switch over to sustainable heating technology**, EnBW has been working together with Vaillant, one of the leading suppliers of heat pumps, since May 2023. We can thus offer potential customers individual advice and also a range of heat pumps from Vaillant specialist partners, together with an appropriate heat pump tariff from EnBW. EnBW is using this partnership to expand its range of products and services for customers in the rapidly growing market for sustainable heating technology.

Further information on **electro-mobility** is available online.

Online ↗

More information on the **EnBW Wallbox** for charging e-cars at home can be found under the following link.

Online ↗

EnBW is the market leader among both charging infrastructure operators and electromobility providers in Germany via its subsidiary EnBW mobility+. It operates the biggest quick-charging network in the country and is continuing to expand it at a rapid pace. In 2023, EnBW mobility+ became the first company to reach the milestone of 1,000 quick-charging stations nationwide. In order to **expand the charging infrastructure** for electromobility, we are not only investing in our own stations but also in stations that we are jointly developing with our partners. We once again concluded more long-term, nationwide cooperation agreements with renowned companies in 2023 and were able to place more than one new quick-charging station per working day into operation.

Alongside smaller charging stations, we are also installing **large quick-charging parks** with eight or more high-capacity charging points and quick-charging parks with solar roofs. EnBW mobility+ completed the construction of more than one large charging park per month on average in 2023 and opened 15 new roofed charging parks across Germany, including what is now our second-largest quick-charging park to date with 32 high-capacity charging points in Großburgwedel, north of Hannover. For the first time, we have also equipped this charging park with other services for vehicles, such as vacuum cleaners. At the quick-charging park in Chemnitz, we were able to install the first charging points with an output of 400 kW in the second half of 2023. By the end of 2023, there were more than 4,000 quick-charging points installed that can be used simultaneously. EnBW mobility+ significantly increased its annual investment in e-mobility in the 2023 financial year from more than €100 million to around €200 million.



In September 2023, EnBW presented its mobility and charging services on the Open Space at IAA MOBILITY in Munich. Among other things, it presented the **"NextLevel charging park" concept** and revealed how the sustainable charging parks of the future will look. This concept not only focuses on environmental goals but also on, for example, improving inclusion by offering low-barrier charging points.

EnBW mobility+ **won the German Sustainability Award** for the "Traffic infrastructure" sector.

[Online ↗](#)

In our role as an **electromobility provider**, we are able to offer our customers access to more than 500,000 charging points in 17 European countries via the EnBW HyperNetwork and the EnBW mobility+ range of products and services (as of 31 December 2023). The EnBW mobility+ app had been downloaded more than 2.3 million times in total by the end of 2023.

In fall 2023, we launched the **"Charging power for everyone" digital campaign** with the aim of attracting young women to the EnBW brand. We want to demonstrate in our campaign – which includes a song performed by the well-known female singer Elif and other artists – that women are not only engaged in the supposedly male-dominated realm of electromobility but are also a real force for pushing forward sustainability.



Our subsidiary **SENEC**, based in Leipzig, is a specialist in equipping customers so that they are able to meet their own energy needs with solar electricity. EnBW and SENEK have been offering a complete integrated home energy management system called "Cloud pro" since June 2023 that allows homeowners to directly sell their surplus electricity at the green electricity tariffs offered by EnBW. In November 2023, SENEK made the decision to replace a large number of existing storage systems with a new battery technology based on lithium iron phosphate (LFP). This decision was taken in response to a total of six incidents with SENEK storage systems based on lithium ion batteries in 2022 and 2023. SENEK is due to begin replacing the affected modules free of charge in summer 2024.

Information on our **contracting services** and reference projects is available on this website, which was newly designed in 2023.

[Online ↗](#)

In the area of **contracting**, we provide industry, the real estate sector and public clients with sustainable and efficient energy infrastructure implemented directly at the customer's site. We create customized energy concepts for the provision of energy with either no CO<sub>2</sub> emissions or only low emissions – a service that is now in ever greater demand. In 2023, we concluded a 15-year contracting agreement with an international corporation. We will build a new and highly efficient energy and media supply at the customer's site in Lower Saxony that is projected to reduce CO<sub>2</sub> emissions by 80%. The energy concept involves an extensive plan to convert the heat supply from natural gas combustion to heat pumps and biomass, marking an important step toward decarbonization and a climate-neutral supply of useful energy in the future. We also modernized the **heating supply** for a care home with neighboring apartments for senior citizens and for a nursery for a local authority customer in Baden-Württemberg. At least 50% of the annual heating requirements of around 2,000 MWh will be covered by a local heating system powered by renewable energy sources. The new plant comprises a wood pellet boiler system and two combined heat and power plants. These measures will be enhanced by a smart energy and billing management system. The modernization work should reduce CO<sub>2</sub> emissions by around 520 t per year. An important component of our long-term contracting agreements is the ongoing monitoring and optimization of plant operation. We enhance applications and business processes as part of our digitalization approach that automatically collect, link and evaluate data from the plant. To support the heating transition, we are working together with the municipal sales department to prepare bids for contracting projects to realize heating concepts and local heating networks.

Information on the **Local Authority Energy Day 2023** can be found in the special edition of our KommPlus magazine.

[Online ↗](#)

Our company views itself as an experienced and capable **partner for local authorities and public utilities**. We have invested in many local authority companies across the whole of Baden-Württemberg and play an active role in networks with our participating interests and other public utilities. Local authorities are also able to invest in Netze BW using our **"EnBW connects"** participation model. A total of 214 local authorities have currently indirectly invested in Netze BW by acquiring shares in the local authority holding company Netze BW GmbH & Co. KG. Almost 14% of the shares in Netze BW are now held by local authorities. The German Buildings Energy Act that obligates cities and local authorities to develop a heating plan came into force on 1 January 2024. Against this background, we already started to expand our range of consultancy services in 2023 to include **local authority heating planning** to specifically identify areas of potential and develop customized heating concepts that can actually exploit this potential. In this context, we have been offering a quick check service to local authorities since February 2024 to determine their need for heating grids. We also intend to develop an efficient solution for the simplified heating planning process that is required by law for municipalities with less than 10,000 residents. In addition, Netze BW is gradually offering additional digital services for local energy management to its partners via its established local authority platform. Since 2023 this includes, for example, a digital carbon footprint tool that local

authorities can use to create a transparent presentation of their greenhouse gas emissions. As a result, we can provide comprehensive support to local authorities during all of their decision-making processes dealing with the theme of heating and push forward the implementation of the energy transition at a local level [p. 60<sup>7</sup>].



A newly designed website that forms part of a brand relaunch provides an overview of the portfolio of telecommunication and Internet services offered by **NetCom BW**.

[Online ↗](#)

**Plusnet** has a new brand identity. Further information on its products and services can be found here.

[Online ↗](#)

The main telecommunications activities at EnBW AG are bundled together in **EnBW Telekommunikation** with its subsidiaries NetCom BW and Plusnet. Expanding the fiber-optic network continues to be a main focus of the corporate strategy of **NetCom BW**. Aside from carrying out any necessary expansion of the broadband network together with cities, local authorities and municipal associations, NetCom BW is working more intensely on the implementation of self-financed projects – it concluded many new cooperation agreements with local authorities in 2023. While the pre-marketing process is still being carried out in some cities and municipalities, NetCom BW has now been able to successfully conclude this process with 28 local authorities. The construction work for these expansion projects is now being gradually completed. Work is also continuing on the integration of the network operations and end-customer business of the company Telekommunikation Lindau that started in 2022. In the Lindau region, the company recently created the necessary conditions for offering NetCom BW products on the network. In addition, the FTTC product portfolio has been expanded to include broadband with up to 150 Mbit/s, making the product range even more attractive. In October 2023, the customer sales department started work on migrating customers from Telekommunikation Lindau to the NetCom BW network. Furthermore, NetCom BW also launched its new brand identity in October 2023 with the goal of positioning itself even more strongly as an independent telecommunications network operator within the EnBW Group.

**Plusnet** continued to push forward the expansion of the fiber-optic network in selected undersupplied industrial areas in 2023 and is financing this expansion itself. The company, based in Cologne, has now grown its sales area for the expansion of the fiber-optic network to around 40 local authorities in North Rhine-Westphalia, Hesse, Rhineland-Palatinate and Bavaria. By 1 August 2023, Plusnet had expanded its fiber-optic product range in the respective expansion areas to include Internet and telephony products for retail customers. Furthermore, Plusnet continued its transformation towards becoming a fiber-optic-based business and continued the development of its own Netbridge network platform. This platform enables Plusnet to integrate fiber-optic networks from various providers across Germany into one virtual network and open them up to all market participants (open access). In view of the fragmented fiber-optic landscape in Germany, this is an important lever for facilitating sustainable business practices as it allows the network load to be managed efficiently. As part of its realignment towards fiber-optic networks, Plusnet also launched a new brand identity in October 2023 and is positioning itself as a provider of modern communication solutions for large customers and local authorities.



We present our **services in the area of sustainable districts and our latest projects** [here](#).

[Online ↗](#)

We are supporting the **International Building Exhibition IBA'27** in Stuttgart.

[Online ↗](#)

In the area of **sustainable districts**, we develop sustainable, holistic and, at the same time, cost-effective concepts for district infrastructure for cities, municipalities and project developers. This business area takes on responsibility for the general planning and for the supply and future operation of the technical infrastructure, including the integration of, e.g., mobility concepts, digital parking space management and smart services. In 2023, we were able to generate 20 new contracts covering around 2,300 residential units and commercial districts with total commercial space of around 119 hectares. Three projects are in the commissioning phase, another three are being implemented and in the first quarter of 2024 we finished the preparations for starting construction on a further three projects. As a member of "IBA'27 Friends," we are supporting the International Building Exhibition 2027 in Stuttgart. Our concepts will provide important answers to the key question being posed at the exhibition: "What will the future of construction look like?" We are developing and planning sustainable and cross-sector supply concepts within four IBA projects that will provide space for over 5,000 people to live and work, including the "Backnang West" district covering an area of 17 ha, which itself will be home to around 650 residential units and approx. 1,500 workplaces.



## Supply reliability

As an energy company and in cooperation with our distribution grid companies, we are tasked with guaranteeing a secure and reliable supply of electricity and gas to our customers. We face additional challenges now, and will do in the future, due to the increasing amount of decentralized generation, with volatile feed-ins as a result of changing weather conditions, and the electrification of road traffic. Our grid companies are preparing their distribution grids so that they can handle this decentralized energy world. To this end, they are expanding the existing conventional infrastructure to integrate smart grid technologies so that they can better monitor and manage the generation, distribution and storage of energy. This work includes, for example, the further expansion of local transformer stations with remote monitoring and control systems to reduce the time it takes to find faults, as well as the introduction of an app-based malfunction alert system. In addition, the launch and implementation of an AI-based modernization strategy will enable the targeted replacement and repair of the various plants. This system uses artificial intelligence to improve the detection of material damage and avoidable breakdowns before they even occur. As a result, the grid companies will be able to reduce unscheduled downtimes and thus improve supply reliability.

Further information on the  
**expansion of the grids at Netze BW.**

Online <sup>7</sup>

Our grid companies are responsible for the secure and reliable operation of the distribution grids. The processes are managed by the respective grid control center, which is also responsible for coordinating any work to rectify faults in the grid in its region. As part of the investment and maintenance programs, our grid companies are upgrading their grids and expanding them according to demand. Netze BW continued its comprehensive expansion and renewal program for its distribution grids that started in 2022. These measures will help to improve supply reliability. The overall annual budget for the realization of all investment and maintenance measures is approved by the Board of Management of the EnBW Group. The measures are carried out over one or multiple years and are realized independently by our grid companies. Some of the investment budget is used for the gradual expansion of smart grids. The growing use of smart grid technology allows us, on the one hand, to optimize our investment processes and, on the other hand, to improve the security of supply in our grids and with it the satisfaction of our customers and our reputation. Besides the reliability and security of supply, the efficiency of the measures is also taken into account when making investment decisions.

### SAIDI

We record all unscheduled interruptions to supply at our distribution grid operators for electricity and gas. This data flows into the "System Average Interruption Duration Index" (SAIDI) for each grid. It states the average duration of supply interruptions per end consumer per year (p. 33f.<sup>7</sup>).

TOP

#### Key performance indicator

	2023	2022	Change in %	Forecast 2023
SAIDI electricity in min./year <sup>1</sup>	19.3	16.6	16.3	15 – 20

<sup>1</sup> SAIDI electricity includes all unscheduled interruptions to supply that last more than three minutes for the end consumer.

We managed to keep the figure for the supply reliability of the electricity distribution grid within the forecasted range in the 2023 financial year despite a significant event of the category "force majeure." The increase of 2.7 minutes was mainly due to an exceptional storm in Baden-Württemberg on 11 July 2023. The massive damage it left behind caused disruptions in more than 100 local authorities in our supply area. In contrast, the increasing digitalization and gradual modernization of our distribution grids has had a positive impact on supply reliability.

At our gas distribution grid operators, the average duration of unplanned supply interruptions per end consumer (SAIDI Gas) was below 2 min./a in the 2023 financial year. There was a change to the segment allocation for the calculation of SAIDI Gas in 2023. The adjusted figure for 2022 was below 6 min./a.

You will find a detailed presentation of the **EnBW Sustainability Agenda** and our **climate-neutrality strategy** here.

Online

You can download the **Environmental Declaration of Netze BW** here.

Online

## Environment goal dimension

Our Group environmental targets – which are integrated into the Group strategy – relate to the expansion of renewable energies and to making our contribution to climate protection. These targets are measured using the key performance indicators “installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE” and CO<sub>2</sub> intensity. Our Group environmental goals are supplemented by activities and targets for the implementation of environmental themes in the EnBW Sustainability Agenda (p. 28 f.). Alongside EnBW AG, the main subsidiaries dealing with environmental issues include Energiedienst (ED), Stadtwerke Düsseldorf (SWD), Pražská energetika (PRE) and Netze BW. These and other subsidiaries have an environmental management system certified according to DIN EN ISO 14001 or validated according to EMAS, as does EnBW AG. We have thus created the prerequisites for ensuring that environmental requirements are systematically and continuously taken into account. The system is used to manage guidelines and regulations, define and monitor environmental targets and establish the necessary testing processes. The consistent implementation and further development of the environmental management system ensures that any material negative impacts on the environment can be avoided as well as possible. Risks generally exist in the area of environmental protection due to the operation of power and heat generation plants and infrastructure facilities and the possible consequences this could have for the air, water, soil and nature. We counter these risks using organizational and procedural measures to reduce their impact, as well as through emergency planning and hazard prevention measures.



### Expansion of renewable energies Installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE

TOP

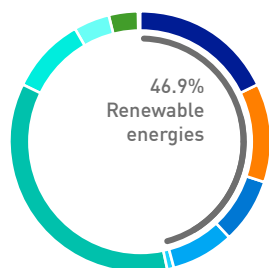
Key performance indicator

	2023	2022	Change in %	Forecast 2023
Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %	5.7/46.9	5.4/41.7	5.6/12.5	5.8 – 6.0/ 47.0 – 48.0

In 2023, the installed output of renewable energies increased by 300 MW to 5.7 GW. The share of the generation capacity accounted for by RE increased to 46.9%. This meant that these key performance indicators were almost within their forecasted ranges. We placed several new solar parks and especially wind farms into operation in Germany. We also added new output in the areas of photovoltaics and onshore wind farms in France. We have thus continued to push forward the expansion of electricity generation from renewable energy sources in accordance with our strategy. Expanding renewable energies to between 6.5 GW and 7.5 GW by 2025 is one of the key measures in the EnBW Sustainability Agenda (p. 28 f.). Our thermal output decreased as planned due to the final decommissioning of our Neckarwestheim II nuclear power plant in April 2023.



### Installed output in %



17.9	Wind (2022: 15.4)
12.4	Pumped storage (with natural flow of water) (2022: 11.6)
8.0	Run-of-river (2022: 7.7)
7.8	Photovoltaics (2022: 6.4)
0.7	Other renewable energies (2022: 0.6)
35.5	Brown and hard coal (2022: 33.2)
9.5	Gas (2022: 8.9)
4.5	Pumped storage (2022: 4.2)
3.7	Other thermal power plants (2022: 12.0)

### Generation capacity<sup>1</sup> (as of 31/12)

#### Net electrical output<sup>2</sup> in MW

	2023	2022
<b>Renewable Energies</b>	<b>5,728</b>	<b>5,444</b>
Run-of-river power plants	982	1,008
Storage/pumped storage power plants using the natural flow of water <sup>2</sup>	1,517	1,513
Onshore wind	1,212	1,031
Offshore wind	976	976
Photovoltaics	956	832
Other renewable energies	85	84
<b>Thermal power plants<sup>3</sup></b>	<b>6,498</b>	<b>7,622</b>
Brown coal	875	875
Hard coal	3,467	3,467
Gas	1,161	1,166
Other thermal power plants <sup>4</sup>	450	1,569
Pumped storage power plants that do not use the natural flow of water <sup>2</sup>	545	545
<b>Installed output<sup>5</sup></b>	<b>12,226</b>	<b>13,066</b>
of which renewable in %	46.9	41.7
of which low CO <sub>2</sub> in % <sup>6</sup>	14.0	13.1

1 Generation capacity includes long-term procurement agreements and 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.

4 Following the final decommissioning of Neckarwestheim II on 15/04/2023, the nuclear power plants are reported under "other thermal power plants" from the Integrated Annual Report 2023 onwards and the figures for the previous year have been restated in accordance with the current presentation. The output reported for Neckarwestheim II under "other thermal power plants" in 2023 is 0 MW. The output reported for nuclear power in the previous year is 1,223 MW.

5 In addition, power plants with an installed output of 1,706 MW were registered for decommissioning. However, they were classified as system-relevant by the Federal Network Agency and TransnetBW and are thus used by TransnetBW as reserve grid capacity.

6 Excluding renewable energies; only gas power plants and storage power plants that do not use the natural flow of water.

### Own generation<sup>1,2</sup> by primary energy source

#### in GWh

	2023	2022
<b>Renewable Energies</b>	<b>12,680</b>	<b>11,744</b>
Run-of-river power plants	5,211	4,676
Storage/pumped storage power plants using the natural flow of water	676	687
Onshore wind	2,425	1,927
Offshore wind	3,218	3,331
Photovoltaics	869	825
Other renewable energies	281	298
<b>Thermal power plants<sup>3</sup></b>	<b>13,872</b>	<b>30,340</b>
Brown coal	3,501	6,348
Hard coal	4,584	10,606
Gas	2,767	2,764
Other thermal power plants <sup>4</sup>	2,126	9,541
Pumped storage power plants that do not use the natural flow of water	894	1,081
<b>Own generation</b>	<b>26,552</b>	<b>42,084</b>
of which renewable in %	47.8	27.9
of which low CO <sub>2</sub> in % <sup>5</sup>	13.8	9.1

1 Own electricity generation includes long-term procurement agreements and partly owned power plants.

2 Generation volumes are reported without the volumes for positive redispatch that cannot be controlled by EnBW. Own generation including positive redispatch in 2023 was 29,013 GWh.

3 Including pumped storage power plants that do not use the natural flow of water.

4 Following the final decommissioning of Neckarwestheim II on 15/04/2023, the nuclear power plants are reported under "other thermal power plants" from the Integrated Annual Report 2023 onwards and the figures for the previous year have been restated in accordance with the current presentation. The generated volume of electricity from nuclear power reported under "other thermal power plants" in 2023 is 1,975 GWh (previous year: 9,390 GWh).

5 Excluding renewable energies; only gas power plants and storage power plants that do not use the natural flow of water.

In 2023, own generation of electricity was considerably below the previous year's level at 26.6 TWh. This development was primarily attributable to the significantly lower deployment of our thermal generation plants as a consequence of prices on the market and the final decommissioning of our Neckarwestheim II nuclear power plant in April 2023. Renewable energy generation increased in comparison to the previous year. This was due to the addition of new power plants and better wind conditions, as well as higher generation at the hydropower plants in comparison to the previous year, which was a year characterized by low water levels. The proportion of own generation from renewable energy sources thus increased substantially in comparison to the previous year to 47.8%.



## CO<sub>2</sub> intensity/climate protection

### CO<sub>2</sub> intensity

TOP

#### Key performance indicator

	2023	2022	Change in %	Forecast 2023
CO <sub>2</sub> intensity in g/kWh <sup>1</sup>	347	491	-29.3	368 – 442 [-25% to -10%]

<sup>1</sup> The calculation for this performance indicator does not include nuclear generation and the share of positive redispatch that cannot be controlled by EnBW. In the reporting year, this performance indicator includes generation volumes of 24,576 GWh (previous year: 32,693 GWh). The amount of CO<sub>2</sub> emissions from controllable electricity generation included in the performance indicator is 8,536 thousand t (previous year: 16,038 thousand t). If the share of positive redispatch that cannot be controlled by EnBW is taken into account, CO<sub>2</sub> intensity would be 393 g/kWh for the reporting year (previous year: 508 g/kWh). The CO<sub>2</sub> intensity including nuclear generation for the reporting year was 366 g/kWh (previous year: 401 g/kWh). We publish a five-year comparison of the performance indicators in our "Multi-year overview" on p. 310.

The CO<sub>2</sub> intensity of our own electricity generation fell in comparison to the previous year by 29.3% to 347 g/kWh and thus slightly exceeded the forecast revised in the third quarter for a decrease of between 10% and 25%. In comparison to 2022, generation from renewable energy sources increased due to favorable wind conditions and higher generation from hydropower. In addition, our coal power plants were deployed to a much lower extent due to prices on the market. Another factor was the shutdown of our Heilbronn hard coal power plant 7 due to damage. The CO<sub>2</sub> intensity was 36.6% lower in 2023 in comparison to the reference year of 2018 (548 g/kWh). We were thus still within our target corridor in 2023 for a reduction in CO<sub>2</sub> intensity of between 380 and 440 g/kWh by 2025.

We also refer you to the details provided in the "Report on opportunities and risks" (p. 135f.<sup>7</sup>).

### Carbon footprint of EnBW

EnBW calculates and reports on its carbon footprint in accordance with the international Greenhouse Gas Protocol standard and takes into account Scope 1, Scope 2 and Scope 3 emissions.

The Scope 1 emissions from burning fossil fuels are calculated based on the guidelines issued within the European Emission Trading System (EU ETS). These guidelines are mainly based on the EU regulation on the monitoring and reporting of greenhouse gas emissions (in short: Monitoring Regulation, MRR) (EU Regulation 2018/2066). The emission factors are taken from the current "Guidance for preparing monitoring plans and emission reports for stationary installations" from the German Emissions Trading Authority (DEHSt) and publications issued by the German Environment Agency (UBA). The CO<sub>2</sub> equivalents of the greenhouse gases are calculated based on their global warming potential GWP100 according to the Sixth Assessment Report (AR6) from the IPCC.

We measure market-based Scope 2 emissions using specific emission factors according to the designation of the electricity and heating supplies to our plants and buildings. In order to determine location-based Scope 2 emissions, we apply the energy designations used in the respective country, such as the Bundesmix (federal mix) of the general electricity supply according to section 42 German Energy Industry Act.

We are currently working with a general emissions factor of 29 g CO<sub>2</sub>eq/kWh for the upstream Scope 3 emissions of our gas sales and the gas consumption at our gas power plants based on information from the German Environment Agency and the DBI Gas and Environmental Technology Institute. We calculate the upstream CO<sub>2</sub> emissions for procured fuel used for the generation of power and heating in our power plants using GEMIS factors. The Scope 3 emissions for our flights and train trips are based on data we receive from the booking agents and the German rail company Deutsche Bahn. For the gas combustion of our customers, we use an emissions factor of 201 g CO<sub>2</sub>/kWh natural gas in accordance with Annex 2 of the Emissions Reporting Ordinance 2030.

EnBW also provides information on the performance indicator “CO<sub>2</sub> emissions avoided” when reporting its carbon footprint. A key goal of the energy transition is to protect the climate by reducing greenhouse gas emissions and using energy efficiently. “CO<sub>2</sub> emissions avoided” give another measure of EnBW’s contribution to the achievement of this target. The activities carried out by EnBW in this area – both internally and also with our customers – support the implementation of the energy transition.

Direct CO<sub>2</sub> emissions are determined mainly by the deployment of our power plants. The volume of electricity generated by our thermal generation plants fell in comparison to the previous year and led to a corresponding decrease in direct CO<sub>2</sub> emissions from 17.5 million t CO<sub>2</sub>eq in 2022 to 10.9 million t CO<sub>2</sub>eq in 2023. Lower indirect CO<sub>2</sub> emissions from grid losses were the main reason for the decrease in Scope 2 CO<sub>2</sub> emissions from 0.5 million t CO<sub>2</sub>eq to 0.4 million t CO<sub>2</sub>eq. Scope 3 CO<sub>2</sub> emissions are mainly influenced by the gas consumption of our customers and thus by gas sales in the B2C and B2B sectors. As a result of lower gas sales [p. 69<sup>7</sup>], Scope 3 emissions fell significantly in the 2023 financial year from 37.7 million t CO<sub>2</sub>eq in the previous year to 26.6 million t CO<sub>2</sub>eq. The increase in CO<sub>2</sub> emissions avoided due to the rise in electricity generation from renewable energies was almost completely compensated for by the fall in biogas activities so that CO<sub>2</sub> emissions avoided of 9.9 million t CO<sub>2</sub>eq in 2023 were almost at the same level as in the previous year.

### Carbon footprint<sup>1</sup>

in thousand t CO<sub>2</sub>eq/in %

	2023	2022
<b>Direct CO<sub>2</sub> emissions (Scope 1)</b>	<b>10,910/100.0</b>	<b>17,545/100.0</b>
Electricity generation – not controllable <sup>2</sup>	2,545/23.3	2,906/16.6
Electricity generation – controllable <sup>3</sup>	7,431/68.1	13,465/76.7
Heat generation	676/6.2	773/4.4
Operation of gas pipelines/plants <sup>4,5</sup>	188/1.7	328/1.9
Operation of electricity grid	31/0.3	32/0.2
Buildings	9/<0.1	11/<0.1
Vehicles	28/0.3	28/0.2
Other <sup>6</sup>	1/<0.1	2/<0.1
<b>Indirect CO<sub>2</sub> emissions (Scope 2)<sup>7</sup></b>	<b>421/100.0</b>	<b>516/100.0</b>
Grid losses	364/86.2	449/87.0
Operation of plants, electricity grid	11/2.6	7/1.3
Operation of plants, gas grid <sup>5</sup>	25/6.0	40/7.7
Buildings	10/2.4	11/2.1
Operation of plants, data and telecommunications network	7/1.6	6/1.2
Other <sup>8</sup>	5/1.2	4/0.8
<b>Indirect CO<sub>2</sub> emissions (Scope 3)</b>	<b>26,576/100.0</b>	<b>37,675/100.0</b>
<b>Upstream indirect CO<sub>2</sub> emissions (Scope 3)</b>	<b>3,973/14.9</b>	<b>5,894/15.6</b>
Upstream gas sales	3,320/12.5	4,729/12.6
Procurement of fuel for power and heat generation plants	643/2.4	1,151/3.1
Upstream gas consumption, gas plants	6/<0.1	11/<0.1
Business trips	3/<0.1	3/<0.1
<b>Downstream indirect CO<sub>2</sub> emissions (Scope 3)</b>	<b>22,603/85.1</b>	<b>31,781/84.4</b>
Gas consumption by customers	22,603/85.1	31,781/84.4
<b>CO<sub>2</sub> emissions avoided</b>	<b>9,874</b>	<b>9,984</b>
<b>CO<sub>2</sub> intensity of business journeys and in traveling CO<sub>2</sub>/km</b>	<b>155</b>	<b>163</b>

<sup>1</sup> The figures may not add up due to rounding differences.

<sup>2</sup> Includes the CO<sub>2</sub> emissions for electricity generation from redispatch and reserve power plant deployment.

<sup>3</sup> CO<sub>2</sub> emissions from electricity generation excluding redispatch and reserve power plant deployment.

<sup>4</sup> The figures for the previous year have been restated.





<sup>5</sup> The methane emissions from the gas grids included here were calculated using the method developed by the Oil and Gas Methane Partnership (OGMP).

<sup>6</sup> Includes non-automotive fuel consumption (e.g., emergency generators).

<sup>7</sup> Market-based method. According to the location-based method, the Scope 2 emissions were 921 thousand t CO<sub>2</sub>eq in 2022 and 872 thousand t CO<sub>2</sub>eq in 2023.

<sup>8</sup> Contains Scope 2 emissions from electricity consumption at water plants and own/operational consumption at charging infrastructure for e-mobility.

## Emissions (Scope 1, 2 and 3)

4.0 million t CO <sub>2</sub> eq	10.9 million t CO <sub>2</sub> eq	0.4 million t CO <sub>2</sub> eq	22.6 million t CO <sub>2</sub> eq
Greenhouse gas emissions (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O and SF <sub>6</sub> )			
 <b>Scope 3 upstream</b> Other indirect greenhouse gas emissions <ul style="list-style-type: none"> <li>Upstream gas sales (gas procurement)</li> <li>Procurement of fuel</li> <li>Business trips</li> </ul>	 <b>Scope 1</b> Direct greenhouse gas emissions from sources belonging to or directly controlled by the company <ul style="list-style-type: none"> <li>Electricity generation</li> <li>Heat generation</li> <li>Operation of gas pipe-lines and gas plants</li> <li>Operation of electricity grid</li> <li>Buildings</li> <li>Vehicles</li> </ul>	 <b>Scope 2</b> Indirect greenhouse gas emissions originating during the production of purchased electricity, steam, district heating and cooling that the company consumes; grid losses <ul style="list-style-type: none"> <li>Grid losses</li> <li>Operation of plants, electricity grid</li> <li>Operation of plants, gas grid</li> <li>Operation of plants, water supply</li> <li>Buildings</li> </ul>	 <b>Scope 3 downstream</b> Other indirect greenhouse gas emissions <ul style="list-style-type: none"> <li>Gas consumption by customers (B2B and B2C gas sales)</li> </ul>
Upstream emissions by third parties	Direct and indirect emissions at EnBW		Downstream emissions by third parties

SO<sub>2</sub> intensity, NO<sub>x</sub> intensity and waste water intensity

Alongside the two key performance indicators “installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE” and CO<sub>2</sub> intensity, we have also defined further environmental targets for reducing harmful emissions and minimizing the volumes of cooling water and waste water. Our target is to reduce the SO<sub>2</sub> intensity and NO<sub>x</sub> intensity of our own electricity generation by 2025 by between 15% and 25% and by between 10% and 20%, respectively, in comparison to the reference year 2018. In terms of our waste water intensity, we have set ourselves a reduction target of between 20% and 30% by 2025 in comparison to the reference year 2018. The calculation of the three key performance indicators SO<sub>2</sub> intensity, NO<sub>x</sub> intensity and waste water intensity is carried out using emissions of SO<sub>2</sub> and NO<sub>x</sub> and the volumes of cooling water and waste water discharged from our own electricity generation at the EnBW Group together with the volume of electricity generated across the Group without the contribution made by the nuclear power plants. The performance indicators are calculated as the ratio between the emissions or volumes of waste water and the generated volume of electricity. They thus describe the specific amount of SO<sub>2</sub> or NO<sub>x</sub> released or the cooling water and waste water discharged per kilowatt hour.

SO<sub>2</sub> intensity, NO<sub>x</sub> intensity and waste water intensity

	2023	2022	Change in %	Target for 2025 <sup>4</sup>
SO <sub>2</sub> intensity in mg/kWh <sup>1</sup>	204	259	-21.2	-15% to -25%
NO <sub>x</sub> intensity in mg/kWh <sup>1</sup>	224	286	-21.7	-10% to -20%
Waste water intensity in l/kWh <sup>1, 2, 3</sup>	28.0	30.2	-7.3	-20% to -30%

<sup>1</sup> The calculation for this performance indicator does not include nuclear generation and the share of positive redispatch that cannot be controlled by EnBW.

<sup>2</sup> Waste water is the total of the amounts of cooling and waste water that are discharged into surface water.

<sup>3</sup> Procurement contracts are not included in the calculation of the performance indicator.

<sup>4</sup> Based on the reference year 2018.

The SO<sub>2</sub> intensity and NO<sub>x</sub> intensity of our own electricity generation decreased in comparison to the previous year by 21.2% to 204 mg/kWh and by 21.7% to 224 mg/kWh, respectively. The waste water intensity of our own electricity generation fell in comparison to 2022 by 7.3% to 28.0 l/kWh. The reduction in these three performance indicators in comparison to the previous year is also due to the increase in generation from renewable energy sources and the lower deployment of our coal power plants as described previously. SO<sub>2</sub> intensity, NO<sub>x</sub> intensity and waste water intensity in 2023 were 30.9%, 33.7% and 9.0% lower in comparison to the reference year 2018, respectively (295 mg/kWh, 337mg/kWh and 30.8 l/kWh, respectively). In 2023, we were thus within our target corridors for the reductions in SO<sub>2</sub> intensity, NO<sub>x</sub> intensity and waste water intensity by 2025 in comparison to 2018.

## Energy consumption

### Energy consumption

	2023	2022
Total final energy consumption in GWh <sup>1</sup>	1,146	1,072
Proportion of renewable energies in final energy consumption in % <sup>2</sup>	20.6	20.2
Energy consumption of buildings per employee in kWh per employee <sup>3,4</sup>	5,795	7,308

1 Includes final energy consumption of production excluding electricity and heat generation losses and including pump energy, energy consumption of grid facilities (electricity, gas and water) excluding grid losses, energy consumption of buildings and vehicles.

2 For electricity consumption for which the proportion of renewable energies is unknown, the Bundesmix (federal mix) label for electricity in the respective reporting year is assumed. For fuels, a proportion of 5% bioethanol is generally assumed.

3 The figure for the previous year has been restated.

4 Calculations based on assumptions and estimates. Only those companies with relevant consumption data have been taken into account.

Total final energy consumption includes the consumption of final energy for our business activities. The uptake of energy from renewable sources increased so that the proportion of renewable energies in final energy consumption rose from 20.2% to 20.6% in comparison to the previous year.

The energy consumption of our buildings covers the energy required for heating rooms and providing hot water and electricity. The temporary reduction in room temperature to 19 °C in accordance with the “German Ordinance on Securing the Energy Supply through Rapid Impact Measures” (EnSikuMaV), which was compulsory until the end of the heating period in spring 2023, and other measures to save energy in the short term led to a decrease in the energy consumption of buildings per employee from 7,308 kWh in 2022 to 5,795 kWh in 2023.

You can find numerous other **environmental performance indicators** on our website.

[Online ↗](#)



### Selected activities

**Energy-efficient real estate management:** We aim to reduce **CO<sub>2</sub> emissions** and improve energy efficiency in our real estate portfolio. The portfolio managed by EnBW Real Estate GmbH comprises about 130 properties with approximately 300 buildings and a net floor space of around 690,000 m<sup>2</sup>. EnBW Real Estate, the subsidiary responsible for most of the real estate activities of EnBW AG, has been set the target of reducing the specific energy consumption of existing buildings by 10% by 2025 and by 20% by 2030, based on the reference year of 2018. We had achieved a reduction of around 24% at the benchmark sites by the end of 2023 and thus exceeded the target. The temporary reduction in room temperature to 19 °C in accordance with the “German Ordinance on Securing the Energy Supply through Rapid Impact Measures” (EnSikuMaV) and other measures to save energy in the short term meant we were able to exceed the target in 2023. Following the expiry of the measures in the EnSikuMaV, the room temperature was reset to the normal level and we are thus continuing to pursue our existing target unchanged.

A program of measures to achieve a “climate-neutral real estate portfolio” was launched in 2023. The program covers around 250 buildings and the following measures: approximately 30 energy-focused building refurbishments, including a switch to heat pumps in some cases, the expansion of more than 90 PV plants, a comprehensive switch to LED lighting, digital metering systems and the implementation of a building automation platform. Reducing CO<sub>2</sub> emissions and energy consumption are also a priority in the renovation of our sites. The preliminary planning stage for the energy-focused refurbishment of the buildings in Mühlacker and Altbach has been concluded and we are now focusing on the in-depth architectural and energy-efficiency plans. Based on the preliminary plans for the Mühlacker site, we will achieve an EG 40 EE standard (energy-efficient building level 40 with renewable energies) and reduce CO<sub>2</sub> emissions by around 90%. Our two new construction projects in Oberndorf and Osterburken will also comply with the EG 40 EE standard and in combination with a PV plant will generate more energy than they consume themselves, thus making an important contribution to improving energy efficiency in our real estate portfolio. The installation of the first PV plants in Esslingen, Biberach and Veringenstadt with an output of around 900 kWp has already been completed and they will be connected to the grid in 2024. Work to replace lighting and meters is also underway.

To ensure that we achieve our strategic target of a climate-neutral real estate portfolio, we are implementing and installing **monitoring and control systems** by the end of 2024 that will provide us with transparent and relevant information that can be used in the form of performance indicators to give us flexible control of these sites and processes.



**Climate-friendly internal mobility:** In order to make a contribution to climate-friendly mobility, we are planning to replace all of the conventional-drive fleet vehicles used for work purposes by employees at EnBW AG with **fully electric vehicles** by 2025. There were still 134 conventional-drive vehicles at the end of 2022 but this figure had fallen to 65 by the end of 2023. At the end of 2023, we thus already had 154 fully electric vehicles in the EnBW AG fleet. Our subsidiary PRE has also introduced a program to switch its fleet over to electric vehicles to help it achieve its goal of climate neutrality. It plans to increase the proportion of electric vehicles in its fleet of passenger vehicles to 37% by 2025, 50% by 2030 and 100% by 2035. In 2023, PRE replaced ten combustion motor cars in the fleet with ten newly purchased electric cars. This means that 28.4% of the vehicle fleet at PRE is currently fully electric. ED Netze is also working on the full electrification of all vehicles that are technically suitable by 2030.

Further information on how we use our **solar parks** to **protect species** can be found here.

Online <sup>7</sup>

**Biodiversity:** To promote biodiversity and help preserve species, we carried out a number of activities in 2023. We started the **close-to-nature design** of the EnBW site in Biberach and completed the first phase by the end of the year. The close-to-nature design of the entire company premises will be realized in 2024. As part of the “UnternehmensNatur” (CompanyNature) project funded by the Federal State of Baden-Württemberg, we discussed and exchanged ideas on this transformation with NABU and the Baden-Württemberg Land Agency. Our main focus was to assess how we can use biodiversity measures to create valuable habitats for various endangered species of flora and fauna on our site. EnBW will use the redesign of the Biberach site as a template for further close-to-nature design projects across the entire Group.



The holistic measures developed to improve biodiversity and climate resilience at the site in Biberach were used as the basis for the development of so-called **biodiversity modules** in 2023. These modules comprise independent packages of measures for promoting a particular aspect of biodiversity and will make it quicker and easier to implement biodiversity measures at other EnBW sites in the future. Lessons learned from the development of these modules were also taken into account in 2023 in the planning processes for various new constructions. This included, for example, green facades, green roofs, water retention systems, and nesting and breeding sites. The aim is to turn these new sites into close-to-nature working environments for employees from the outset and create the best possible conditions for animals and plants.

As part of the **blooming transformer station** project, our subsidiary Netze BW has been using the free spaces around transformer stations to promote biodiversity and help to preserve species since 2019. The aim is to create natural flower meadows at every transformer station that will become home to a large number of different species usually found in the natural environment at the respective sites. A further ten transformer stations were transformed into “buzzing transformer stations” using seeds typical to the region in 2023 and are now providing a rich habitat for more than 3,000 species of butterflies, 500 species of wild bees and thousands of other species of insects native to Germany. These habitats boast up to 60 different plant species per 10 m<sup>2</sup>, providing food, protection and a place of retreat for native insects. Netze BW has already created flower meadows at 49 sites covering a total area of almost 122,000 m<sup>2</sup> and is thus actively contributing to the conservation and proliferation of flower pollinating insects.

Another project to promote biodiversity was carried out by ODR in the second half of 2023 in cooperation with the Ostalb-Heidenheim Farmers’ Association. Colorful flower borders covering a distance of over 5 km have been planted along the edge of fields. These **biotopes** will provide food and shelter to beetles, butterflies and bees and thus support the pollination of our wild plants and arable crops.

Find out more about our measures to conserve **biological diversity** and protect **nature and species** on our website.

Online ↗

**-81%**

**reduction in paper usage** in 2023 compared to the reference year of 2019.

Further environmental data, including on the **Global Reporting Initiative**, is available on the Internet.

Online ↗

As part of the “**Insect-friendly green areas**” project, SWD developed measures in 2023 to allow for the insect-friendly greening of spaces. These included the obligatory inspection of all outdoor spaces to determine whether they could be greened for the benefit of insects, as well as the opportunity for employees to use one hour of their working week to voluntarily care for and maintain green areas.

The EnBW funding program “**Stimuli for Diversity**” has been successfully supporting social engagement in Baden-Württemberg for the protection of amphibians since 2011 and the protection of reptiles since 2016. This funding program was jointly launched by the Baden-Württemberg State Institute for the Environment, Measurements and Nature Conservation (LUBW) and EnBW. It is part of the project “The economy and business for nature,” which is a component of the initiative “Active for biological diversity” that has been developed by the state government of Baden-Württemberg. It still remains the only conservation program from a company nationwide that not only funds the protection of one single species but two whole groups of species across the state. We funded nine project applications in 2023 and have thus successfully realized 149 projects in total over the past 13 years. The measures have helped to improve the habitats of native amphibians and reptiles so that their populations can start to grow again in the medium to long term.

**Reduction in paper consumption:** We have set ourselves the goal of significantly reducing paper consumption and want to reduce the volume of paper procured centrally at EnBW AG by up to 90% by 2025, based on the reference year of 2019. Mainly as a result of our digitalization initiatives, we were able to reduce our internal paper consumption by around 71 t and customer-driven paper consumption by around 540 t in 2023, which represents a reduction in paper consumption of 81% since 2019. Alongside the higher number of employees working from home, the further digitalization of our business processes at EnBW has also contributed to the reduction in paper consumption. We have launched a program to provide tailored consulting services for different areas of the company so that we can further reduce paper consumption in those processes with specific requirements. We also provide workshops in which digital alternatives can be identified or used for training purposes where necessary to make further savings in paper consumption.

Alongside the key performance indicators in the environment goal dimension, other environmental targets are defined in the EnBW Sustainability Agenda (p. 28f.<sup>7</sup>). We utilize a broad range of additional environmental performance indicators for measuring, managing and reporting on the other results of our environmentally relevant activities. Selected activities and performance indicators are described in this section. Other **environmental performance indicators** can be found in our “Multi-year overview” (p. 312<sup>7</sup>) and on our website.



## Employees goal dimension

Using our HR strategy 2025 “People as the main focus,” which is based on the EnBW 2025 corporate strategy [p. 26 ff.<sup>7</sup>], we want to create the conditions that give the people at EnBW and our company itself the opportunity for growth, development, a future and thus success. The key tasks of HR are recruiting employees for the company, managing their development and accompanying them through the transformation, encouraging loyalty to the company among employees and maintaining and fostering their motivation, satisfaction and employability.

## Employee engagement

### People Engagement Index (PEI)

We use an employee survey (EnMAB) to measure the People Engagement Index (PEI) as a key performance indicator. The PEI allows us to draw conclusions not only on the satisfaction of employees, but also on how motivated and engaged they are in their work [p. 34<sup>7</sup>].

TOP

#### Key performance indicator

	2023	2022	Change in %	Forecast 2023
People Engagement Index (PEI) <sup>1</sup>	82	81	1.2	> 78

1 Variations in the group of consolidated companies (all companies with more than 100 employees are considered [except ITOs]).

The employee survey EnMAB was held from 9 October to 27 October 2023. The survey achieved its highest coverage to date, being answered by around 23,400 employees, including trainees and students. On the basis of this survey, the PEI reached 82 points in 2023 on a scale of 0 to 100. It stood at 81 points in the previous year. According to an assessment by the service provider, an international benchmark index compiled using similar questions at numerous companies from various different sectors stood at 74 points in 2023. Our figures remained very high in comparison with other companies in 2023 in the “Engagement” and “Well-being and respect” categories.

We also refer you to the details provided in the “Report on opportunities and risks” [p. 136<sup>7</sup>].



### Selected activities

Our **HR strategy 2025** “People as the main focus” supports the implementation of the EnBW 2025 corporate strategy. Digitalization requires a willingness to change, technological expertise and modern working practices. Our managers should not just place expectations on their employees but also support them and lead their teams with conviction into a more complex world. Our HR policy will support employees in this process of change, for example by developing new forms for cooperation and for further training and education. In addition, we value the potential offered by the diversity of our employees. Our sustainable HR strategy is also part of the strategic theme “Culture of sustainability” in the EnBW Sustainability Agenda.

The HR strategy focuses here on six strategic themes: People-centered transformation, Employer brand & recruiting, Leadership & skills, Qualification@EnBW, Diversity, Equity & Inclusion as well as HR processes, services & digitalization. We have allocated the following activities to these six themes:

**People-centered transformation:** In the “**BestWork**” initiative, we are reshaping our working world and making it fit for the future. Our aim here is to improve both the quality of our work and the satisfaction of employees in equal measure. A special focus is being placed on rules for mobile working that take account of the best interests of employees and designing modern working worlds in the office that fulfill the requirements of a more flexible and hybrid way of working. In the second stage of “BestWork” under the motto “CooperationSpaces,” we are optimizing workspaces and technical equipment for the form of cooperation selected by each team and for hybrid collaboration. Employees are due to move into their newly designed workspaces by the end of the first half of 2024. In 2023, we already introduced new digital services to support location-independent cooperation in teams. Another component of this initiative was added in 2023 with “**BestWork Health.**” It follows

a holistic approach to health with the aim of promoting the physical and psychological health of employees within the redesign of working processes and environments and thus helping to create the best possible quality of work and life for employees. In this context, we will collate existing health measures and develop further health-related measures. The first event held within “BestWork Health” was Mental Health Day in October 2023, which provided information on preventative measures in the area of mental health.

Our corporate video for the **employer campaign “A job transition for the energy transition”** can be found here.

Online ↗

Further information on the new **employer campaign** can also be viewed online.

Online ↗

**Employer brand & recruiting:** EnBW is on track for growth. This will require us to secure new talent as we need enough specialists to cover the energy transition and the associated expansion of corresponding business fields. Against this background, EnBW launched a new employer campaign under the motto “A job transition for the energy transition” in 2023. The aim is to maintain awareness for and improve the attractiveness of EnBW as an employer nationwide and mobilize specialists for the energy transition. We posted advertising images and a corporate video on social and online media across Germany for this purpose. A matching website also helped to support the visibility and reach of the campaign. We are continuously improving and updating our recruitment processes. For example, we have optimized our competence-based selection process for specialists and managers and made our processes for the recruitment of apprentices and students more efficient by introducing online tests.

**Leadership & skills:** The growth of our company is closely linked to the personal development of every individual person. Our digital learning and development platform “**LernWerk**” enables employees to organize their own personal development independently. Themes such as sustainability, grid technology training, health management, data analytics and artificial intelligence can be found in so-called knowledge hubs. “LernWerk” not only includes content to be consumed digitally but also promotes active application of content via, among other things, physical exchange formats. For example, managers can register for the “Leadership Development Journey” (LDJ) program for which new modules are constantly being developed. Since the beginning of the LDJ, 70% of all managers at EnBW AG have already participated in at least one LDJ module. One of the new modules added in 2023 was “New to leadership.” It is aimed at all managers and designed to help them strengthen their understanding of their leadership role to give them the mindset and skill set that they need to carry it out.

**Qualification@EnBW:** On 31 December 2023, there was a total of 1,212 trainees and students working in the EnBW Group. Our 20-month EnBW Corporate Trainee Program started in April 2023 and will also help to tackle the skills shortage. In addition, 152 apprentices and 73 dual students joined EnBW and Netze BW in September 2023. Our young talent also includes the participants on the career integration program, who have started their technical apprenticeships after successfully completing their entry qualifications. EnBW has been increasingly utilizing virtual reality (VR) and augmented reality (AR) for **training** and is cooperating with the start-up Holo-Light (p. 51<sup>7</sup>) in this area. Trainees are able to use smart glasses and VR software to prepare themselves to deal with, for example, hazardous situations, without actually being exposed to any real danger when they are in the virtual world. EnBW is also utilizing gamification approaches in its training, such as in the “E-Quiziert” learning app.

Further information on the **Dual Vocational Training Preparation Program** can be found here.

Online ↗

We have been offering a multistage **career integration program** to refugees and migrants since 2016, in which 38 people are currently serving a technical apprenticeship. 46 participants have now completed their training as either an industrial mechanic, electronics technician, plant mechanic or mechatronics engineer and 43 of them have been awarded a permanent contract. As part of this program, Netze BW participated for the first time in the Dual Vocational Training Preparation Program (AVdual) initiated by the Baden-Württemberg Training Alliance in 2023. AVdual aims to provide more young people with the opportunity to start their apprenticeship immediately after leaving school. Two of the eight participants in the AVdual program have been accepted on the career integration program so far. As part of our social engagement activities, we will continue the career integration program over the next few years and also continue to use it as an additional tool for recruiting young talent.

**Diversity, Equity & Inclusion (DE&I):** Diversity is a fixed component of our corporate culture and a key element of the HR strategy. Against the background of demographic change and the associated shortage of qualified workers, we not only need new recruitment strategies but also diverse and resilient teams. In this context, we took the first steps in the implementation of our new Strategy for Diversity, Equity & Inclusion, in short the **DE&I strategy**, in 2023. In particular, this strategy will help make us more attractive as an employer, increase the innovative strength of EnBW and further promote the themes of sustainability and competitiveness.

#### Proportion of female managers at EnBW AG

in %	2023	2022
First level below the Board of Management	15.4	11.1
Second level below the Board of Management	24.7	23.1

The Board of Management has set the goal of further increasing the **proportion of women** at both management levels below the Board of Management in the period from 1 January 2021 to 31 December 2025. At both the first level (top management) and second level (upper management), the proportion of women should increase to at least 20%. This target was not yet achieved in the 2023 financial year in top management. Nevertheless, it was possible to increase the proportion of women from 11.1% in the previous year to 15.4% in 2023. In upper management, the proportion of women increased from 23.1% in the previous year to 24.7% in 2023, which meant that the set target was achieved at the second level. We will continue to develop measures based on the HR strategy to achieve and stabilize the set targets.

**HR processes, services & digitalization:** We launched the “EnABLE HR” project with the aim of establishing a future-oriented process and IT-system environment for human resources work. We will use **intelligent system solutions** to relieve employees in the HR department of the burden of administrative, manual and repetitive tasks, for example, by offering a comprehensive range of self-service solutions. In 2023, the focus was placed on preparing and implementing the new IT systems, which was carried out step by step in the individual project units. In addition, workshops were held for various specialist departments to generate feedback and ideas based on the practical use of the systems. These will be used to help shape the newly designed IT solutions.

**Selected activities at our key subsidiaries:** In order to strengthen its attractiveness as an employer in a difficult job market, **Energiedienst (ED)** continued its initiatives in 2023. It established a new learning platform with the aid of the new software Workday and expanded its range of training courses for employees. The comprehensive transformation program “HR transformED,” which has now been largely concluded, was another focus for the company. The main emphasis of the HR work at **Pražská energetika (PRE)** was the expansion and digitalization of HR processes. In addition, a trainee program has been launched to recruit specialists – above all students from the fields of electrical engineering and information technology – for the company. In 2023, **Stadtwerke Düsseldorf (SWD)** focused on securing the specialist workers to meet its needs. In this context, SWD launched an employer branding initiative to attract qualified specialists from technical and IT fields. It also increased the number of technical apprenticeships at the company. To push forward cultural change at the company, all managers have also been invited to participate in the journey of development “Lead our future.” **VNG** launched a management development program under the motto “Leadership Excellence 2030+” to support the transformation process at the company. Meanwhile, the “Next Work” program was continued with the aim of developing the future working world at VNG in the dimensions of culture, space, technology and services.

## Other issues

In accordance with the **collective bargaining agreement** from 4 April 2023, the first wage increase of 5.5% came into force and was backdated to 1 March 2023. The wages for the different pay scales were increased by a further 3.0% with effect from 1 January 2024. Remuneration for trainees increased by €180 per month, backdated to 1 March 2023, and then increased by a further €70 per month on 1 January 2024. The collective bargaining agreement is valid for 14 months until 30 April 2024.



EnBW provides a comprehensive range of services to promote the **health** of its workforce. This includes, among other things, preventative medical services, vaccinations, physiotherapy treatments and psychological counseling. The sickness ratio stood at 4.8% in 2023 and was thus 0.5 percentage points lower than the figure in the previous year.

We publish more **performance indicators for employees** on our website.

[Online ↗](#)

## Other performance indicators

### Employees<sup>1</sup>

	31/12/2023	31/12/2022 <sup>2</sup>	Change in %
Smart Infrastructure for Customers	5,711	5,248	8.8
System Critical Infrastructure	11,635	11,638	0.0
Sustainable Generation Infrastructure	7,563	7,151	5.8
Other	3,721	2,943	26.4
<b>Total</b>	<b>28,630</b>	<b>26,980</b>	<b>6.1</b>
Number of full-time equivalents <sup>3</sup>	26,943	25,339	6.3

<sup>1</sup> Number of employees excluding apprentices/trainees and inactive employees.

<sup>2</sup> The figures for the previous year have been restated.

<sup>3</sup> Converted into full-time equivalents.

As of 31 December 2023, the EnBW Group had 28,630 employees, which was 1,650 more than at the end of 2022. This increase was primarily due to the intake of new employees in strategic growth fields. The increase in the number of employees in the Smart Infrastructure for Customers segment was primarily due to the increased demand for energy and storage solutions, the expansion of broadband and the billing service. The increase in the number of employees in the Sustainable Generation Infrastructure segment was mainly in the areas of Thermal Generation and Trading and Renewable Energies. Digitalization and transformation processes as well as intercompany restructuring increased the number of employees in "Other." The employee turnover ratio stood at 9.3% in 2023 and was thus 1.4 percentage points higher than the figure in the previous year.



## Occupational safety

In the area of occupational safety, we have set ourselves the goals of avoiding accidents and work-related illness and creating a safe working environment. The Group guidelines "Occupational safety and health protection" describe the responsibilities and tasks related to occupational safety and define the processes. The EnBW guidelines for occupational safety and health protection are also described in this document. The Group Occupational Safety Working Group (AK KAS) has the task of regulating issues uniformly within the Group that affect all companies. It is headed by the Chief Operating Officer Sustainable Generation Infrastructure at EnBW and has the power to make binding decisions in accordance with the company's rules of procedure.

Through training and programs of measures, we work continuously on minimizing **danger in the workplace** which could result in accidents or work-related illnesses. In 2023, 86 managers participated in the training course "Responsibilities and liability with respect to occupational safety" that was organized by the Group occupational safety department. Other training courses for managers on the theme of occupational safety were also held at numerous Group companies.

The Group-wide **Quentic software** is now being used in 31 Group companies with around 18,500 employees. In 2023, we developed a digital solution to improve the user friendliness of Quentic even further: It will be possible to enter information on unsafe situations and personal injury via the EnBW News app in the future. Since July 2023, any employee exposure to carcinogenic and mutagenic substances such as asbestos and ceramic mineral fibers is documented centrally in Quentic.

## LTIF

The key performance indicator LTIF (Lost Time Injury Frequency) is used to measure the number of LTI (Lost Time Injuries) according to the definition on p. 34<sup>7</sup>. Every company included in the LTIF for companies controlled by the Group receives an individual target from the Board of Management – the fulfillment of this LTIF target flows into the assessments for the achievement of targets in each case. The companies can also set their own individual targets that go beyond those set by the Board of Management.

### TOP

#### Key performance indicator

	2023	2022	Change in %	Forecast 2023
LTIF for companies controlled by the Group <sup>1, 2, 3</sup>	2.4	2.6	-7.7	2.1 – 2.3
LTIF overall <sup>1, 2</sup>	3.7	4.1	-9.8	3.5 – 3.7

1 LTIF indicates how many LTI occurred per one million working hours performed. Further information on the calculation of this performance indicator can be found on p. 34.

2 The LTIF for companies controlled by the Group excluding waste management and LTIF overall, which includes the area of waste management, only includes companies with more than 100 employees excluding external agency workers and contractors.

3 Newly fully consolidated companies are not included for a maximum transition period of three years.

The key performance indicator LTIF for companies controlled by the Group improved in the 2023 financial year and fell to 2.4. The average days of absence per accident increased slightly and stands at 13.8 (previous year: 13.1) for the companies controlled by the Group. This means that the severity of the accidents is almost unchanged. The LTIF overall – including our subsidiaries in the area of waste management – also fell in the reporting period to 3.7. The average days of absence per accident increased slightly – from 13.1 in the previous year to 14.2 days. Following the relatively poor figures in the previous year, due to among other things increased workloads due to the energy crisis, LTIF overall and LTIF for companies controlled by the Group are once again moving in the direction of the levels seen in 2020 and 2021.

There were no fatal accidents in the 2023 financial year, neither among our own employees nor employees of third-party companies working on behalf of the EnBW Group.

We also refer you to the details provided in the “Report on opportunities and risks” (p. 136<sup>7</sup>).

## Selected activities

Alongside the activities on a Group-wide level, individual companies have also been independently implementing other measures for achieving targets with respect to occupational safety:

In September 2023, the integrated management system for the areas of occupational safety, environment and energy at **Netze BW** was recertified in accordance with DIN EN ISO 14001, EMAS, DIN EN ISO 50001 and DIN ISO 45001. The concept phase of the “Occupational Safety Initiative 2.0” (InA 2.0), which aims to improve the occupational safety culture, was also concluded and a central safety committee was established after the completion of the pilot phase.

In the area of **conventional generation**, an external consultancy company was commissioned in 2023 to analyze the development of occupational safety at the various different sites. The measures derived as a result will now help to once more reduce the recent rise in the number of accidents. Furthermore, “Occupational Safety Days” were held again for employees at these sites. The “100 days without accidents” campaign also continued in the reporting year and this goal was achieved a total of eight times at different locations.

In the area of occupational health and safety, **EnBW Kernkraft (EnKK)** held training courses for employees and managers in 2023 to raise more awareness for the theme of resilience. One of the main focuses in 2023 was the further development of the exposure register in cooperation with EnBW.

**Gesellschaft für nukleares Reststoffrecycling (GNR, company for the recycling of residual nuclear material)** has introduced a tool for documenting employee qualifications using the Quentic software. In order to raise awareness for occupational safety, the “5 minutes for occupational safety” concept has been launched to enable teams to regularly discuss developments relevant to occupational safety.

**EnBW Ostwürttemberg DonauRies (EnBW ODR)** and its subsidiary **Netze ODR** continued its training campaign “Management responsibility to show leadership with respect to occupational safety” in 2023. The campaign was launched in the previous year in cooperation with the Employers Liability Insurance Association for Energy, Textile, Electrical and Media Products. Further training courses for managers were held as part of this campaign.

**Valeco** opened a discussion forum called “Safety minutes” in 2023 to promote the exchange of information about occupational safety at a management level and to support the development of sets of specialist instructions. A new tool for registering unsafe situations was also a main focus. In order to avoid accidents on the way to and from work, Valeco helped raise the awareness of its employees for occupational safety with a campaign on the theme of cycling. Furthermore, Valeco was certified as a “bicycle friendly employer” in this context.

**Stadtwerke Düsseldorf (SWD)** continued its “Personal drive” project at the company Netzgesellschaft Düsseldorf in 2023 with campaign days on the theme of electrical risks. In the “New Corporate Governance AS/GS” project, work started on the implementation of the measures developed for improving the control and management structure for occupational safety and health protection at SWD. Part of this work is to establish appropriate measures for transferring knowledge to managers. A new online form designed to act as an electronic log for recording small injuries was introduced in 2023. SWD’s activities in the area of occupational safety were rounded off by its “Safety Officer Day 2023,” which was held as part of the “RheinSchiene” project and attended by around 300 safety officers and guests.

**Energiedienst (ED)** introduced the occupational safety software “SAM” in 2023. It not only features various tools dealing with the theme of occupational safety but importantly also provides a better overview of any completed and pending training courses and briefings. The initiatives carried out in 2023 also included a rescue exercise at the Schwörstadt hydroelectric power plant in cooperation with the fire department and DLRG (German Lifeguard Association).

**VNG** held a variety of activities to promote occupational safety in the 2023 financial year. For example, the VNG subsidiary **BALANCE Erneuerbare Energien** started using the 6S lean method to evaluate its plants so that it will be able to guarantee a continuously high level of productivity and safety. VNG Gasspeicher had its integrated quality, environment, safety and health protection management system recertified in November 2023 and thus was once again able to show that it fulfills the requirements for DIN EN ISO 9001, ISO 14001 and ISO 45001.

At **Pražská energetika (PRE)**, the main focus in the reporting year was placed on the further training of employees with respect to occupational safety. Employees were provided with updated training documents on how to handle certain chemicals and with training courses in accordance with the current legal requirements.



## EU taxonomy

The European Commission presented the EU Green Deal in December 2019. It includes the target of reducing net emissions from greenhouse gases in the European Union to zero by 2050. A key element of the EU Green Deal is the EU taxonomy, a classification system used to define “environmentally sustainable” economic activities. The aim is to use defined requirements to classify economic activities EU-wide with respect to their contribution to six environmental objectives in order to encourage the development of sustainable financing products. The six environmental objectives are:

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

The EU Taxonomy Regulation distinguishes between “taxonomy-eligible” and “taxonomy-aligned” activities:

- An activity is **taxonomy-eligible** if taxonomy criteria exist for the activity and it matches the taxonomy description of the activity, irrespective of whether it fulfills the criteria.
- An activity is **taxonomy-aligned** if it fulfills the taxonomy criteria for the activity. In this case, it makes a significant contribution to the respective environmental objective (fulfills the technical screening criteria), causes no significant harm to any of the other environmental objectives (fulfills the technical screening criteria to do no significant harm, DNSH) and observes and complies with the minimum safeguards for occupational safety and human rights.

Alongside the two previously reported environmental objectives “climate change mitigation” and “climate change adaptation,” the reporting obligation this year also covers the other four environmental objectives “sustainable use and protection of water and marine resources,” “transition to a circular economy,” “pollution prevention and control” and “protection and restoration of biodiversity and ecosystems” for the first time.

The formulations and terms contained in the EU taxonomy are subject to uncertainty with respect to their interpretation and need further clarification. Our own interpretation is presented below: The EU Taxonomy Regulation requires the presentation of the proportions of total revenue generated by a company that are achieved using products and services associated with taxonomy-aligned economic activities and thus make a substantial contribution to the environmental objectives. EnBW believes that it is appropriate to allocate expenditure related to assets or processes associated with taxonomy-aligned economic activities to capex and opex if the measures relevant to capex and opex are implemented such that the technical screening criteria and minimum safeguards are fulfilled. In terms of our fuel switch projects, our assumption at the present time is that these plants will be taxonomy-aligned. However, it will only be possible to assess final compliance with the technical screening criteria at a later point in the implementation of these projects. Associated investment will thus be reported as part of a capex plan.

EU Regulation 2021/2139 that defines the criteria for evaluating whether an economic activity makes a substantial contribution to “climate change mitigation” or “climate change adaptation” was amended in 2023. The existing technical screening criteria were modified in this regard and new climate-related economic activities and associated technical screening criteria were added in EU Regulation 2023/2485. Companies are only obligated to carry out an evaluation of the taxonomy eligibility of these activities for the 2023 financial year. The same applies to the disclosure obligations with respect to environmental objectives 3 to 6. According to the Environmental Delegated Act adopted this year, companies are only obligated to disclose the revenue, capex and opex for this reporting year that are taxonomy-eligible in the sense of the four other environmental objectives.



Further information on our **experiences with applying the EU sustainable finance taxonomy** can be found [here](#).

Online ↗




### Implementation of the EU Taxonomy Regulation in the EnBW Group

We have accompanied and supported the development and introduction of the taxonomy from the very beginning. In particular, this included our participation in related expert groups and our reporting on selected taxonomy-aligned economic activities in the EnBW Group at an early stage for the 2020 financial year.

Since the 2021 financial year, we have already been reporting in full on the taxonomy alignment of our activities based on all of the final taxonomy criteria that were available at the time the Integrated Annual Report was prepared, insofar as it was possible to report on them and uncertainties with respect to the interpretation of the criteria have been removed. We reported on the obligatory key performance indicators revenue, capex and opex as well as voluntarily publishing information on the other performance indicators that are relevant to the ongoing management of the EnBW Group: adjusted EBITDA and capex including the proportion for entities accounted for using the equity method (expanded capex).

Full information on the taxonomy-eligible and taxonomy-aligned economic activities according to Annex II of the delegated act for the EU taxonomy can be found on [p. 147 ff.<sup>7</sup>](#). The templates for the activities in the areas of nuclear energy and fossil gaseous fuels are presented below ([p. 151 ff.<sup>7</sup>](#)).

#### Activities examined for the EU Taxonomy Regulation

 <b>Smart Infrastructure for Customers</b>	 <b>System Critical Infrastructure</b>	 <b>Sustainable Generation Infrastructure</b>
<ul style="list-style-type: none"><li>• E-mobility</li></ul>	<ul style="list-style-type: none"><li>• Electricity distribution grids</li><li>• Electricity transmission grids</li><li>• Water grids</li><li>• Water supply</li><li>• Gas distribution grids</li><li>• Gas transmission grids</li></ul>	<ul style="list-style-type: none"><li>• Onshore wind</li><li>• Offshore wind</li><li>• Solar</li><li>• Run-of-river</li><li>• Biomass</li><li>• Pumped storage</li><li>• District heating</li><li>• Electricity generation from gas</li><li>• Combined heat and power</li></ul>

We only report on activities that are taxonomy-eligible with respect to the EU’s environmental objective of “climate change mitigation.” Based on the EnBW business model, no activities could be identified that are taxonomy-eligible with respect to the EU’s environmental objectives “climate change adaptation,” “sustainable use and protection of water and marine resources,” “transition to a circular economy,” “pollution prevention and control” and “protection and restoration of biodiversity and ecosystems.”

Economic activities that could potentially be allocated to the environmental objective “climate change mitigation” and another environmental objective (e.g., the water grids) were allocated to the environmental objective “climate change mitigation.” The reason for this is that the contribution made to reducing greenhouse gas emissions was defined as the more relevant environmental contribution and is also closely associated with the EnBW corporate strategy.

The new climate-related economic activities and modified technical screening criteria published by the EU in the 2023 financial year were also analyzed for their relevance to EnBW. The amendments to Annex I and II of Delegated Regulation (EU) 2023/2485 require neither a change to the current evaluation of the taxonomy eligibility or alignment of EnBW’s climate-related economic activities nor do they necessitate the addition of new taxonomy-eligible economic activities in the EnBW reporting.

The taxonomy alignment of the economic activities listed above was derived – using the findings from previous years as a basis – by determining that they fulfilled the taxonomy criteria. This was carried out by a central project team, working together with relevant experts from the specialist departments in the EnBW Group. We describe our fundamental approach to the analysis of the taxonomy alignment of our taxonomy-eligible economic activities below. A description of the activity and an overview of how they fulfill the respective technical screening criteria for a substantial contribution to climate change mitigation and do no significant harm to other EU environmental objectives is provided in table form at the end.

Firstly, each taxonomy-eligible business activity was assessed individually to see whether it complies with the criteria for making a substantial contribution to climate change mitigation. This assessment was carried out in principle at the level of the respective plant, insofar as the substantial contribution to climate change mitigation was not considered to have been complied with by the individual activities per se.

### No significant harm to the other EU environmental objectives

In the next step, we assessed whether any significant harm was being done to the other five environmental objectives (“climate change adaptation,” “sustainable use and protection of water and marine resources,” “transition to a circular economy,” “pollution prevention and control” and “protection and restoration of biodiversity and ecosystems”). The results of the DNSH criteria assessment for each economic activity can be found in the table [\[p. 110 ff.\]](#).

### Compliance with minimum safeguards

In the third and final step, we assessed the economic activities at a Group level with respect to their compliance with the minimum social safeguards for human rights and occupational safety (prequalification process [\[p. 52 f.\]](#), information on occupational safety [\[p. 104 ff.\]](#) and the “Report on opportunities and risks” [\[p. 130 ff.\]](#)).

### Identifying and classifying economic activities

In the following table, taxonomy alignment is derived at the level of the respective activity. Each activity was initially assessed to see whether it made a substantial contribution to climate change mitigation. In the second step, the activity was analyzed to see whether it did any significant harm to the achievement of the other EU environmental objectives. The analysis of whether the activity could potentially do harm to the second environmental objective “climate change adaptation” was carried out centrally at a Group level in cooperation with the risk management department [\[p. 135 f.\]](#). At the same time, appropriate measures were taken to further develop climate risk management throughout the entire Group in the future and also integrate it into the decentralized structures. This is why the following table focuses on the environmental objectives 3 to 6. The activities for which a closer examination of the environmental objectives is necessary are to be found in the respective technical screening criteria.

The **EnBW Declaration on Human Rights** is available to download in PDF format.

[Online ↗](#)

The **technical screening criteria for the EU taxonomy** can be found here.

[Online ↗](#)

## Economic activities according to the EU taxonomy and a description of the activity

### 4.1 Electricity generation via photovoltaic technology

→ Construction and operation of solar parks to generate electricity

### 4.3 Electricity generation from wind power

→ Construction and operation of wind farms to generate electricity

### 4.5 Electricity generation from hydropower<sup>1</sup>

→ Construction and operation of run-of-river power plants to generate electricity

### 4.9 Transmission and distribution of electricity

→ Construction and operation of transmission and distribution grids for electricity

### 4.10 Storage of electricity<sup>1</sup>

→ Construction and operation of pumped storage power plants for the storage of electricity

### 4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids<sup>1</sup>

→ Manufacture of biogas for feeding into the gas grid and operation of CHP power plants with bioenergy

## Substantial contribution to climate change mitigation

- In the case of photovoltaic and wind activities and with respect to the requirement for a substantial contribution to climate change mitigation, it is not currently necessary to test compliance with any criteria because energy generation of this type will always remain significantly below the current threshold of 100 g CO<sub>2</sub>eq/kWh, even when analyzed over the entire life cycle.

- Hydropower plants make an important contribution to climate change mitigation due to their very low greenhouse gas intensity.
- The reference values from the German Environment Agency (UBA) were used as the basis for assessing the substantial contribution of run-of-river power plants, which at 2.702 g CO<sub>2</sub>eq/kWh lie significantly below the taxonomy threshold of a maximum of 100 g CO<sub>2</sub>eq/kWh.
- These plants thus comply with the wording of the requirements for economic criteria 4.5 because compliance with the taxonomy threshold for the life cycle emissions could be verified using the UBA reference values.
- The publication of the reference values by the UBA complies with the requirements (which are not specified in more detail) for "verification" by an independent third party, especially as the values are not determined by EnBW.

- The electricity grids make a substantial contribution to climate change mitigation because they are part of the synchronous grid of continental Europe (transmission grid) or its downstream grids (distribution grids).
- The distribution grid in Germany also fulfills the criteria that the majority of the connections made in the past five years were for renewable energies.

- There are no criteria that must be assessed with respect to a substantial contribution to climate change mitigation for pumped storage activities.

- Agricultural biomasses that comply with the sustainability requirements in EU Directive 2018/2001 are used to produce the biogas. Among other things, environmental surveys are carried out for this purpose.
- The criterion that no food or feed crops may be used for activity 4.13 only applies to the production of biofuels according to article 2 no. 33 Renewable Energy Directive and not to the production of biogas in general (article 2 no. 28 Renewable Energy Directive).
- The greenhouse gas emission savings (depending on the production route) are at least 65% in comparison to the relative fossil fuel comparator set out in Annex V of EU Directive 2018/2001.
- If processes for the anaerobic digestion of organic materials are used in the plants, the biogas is only used for specific purposes. Monitoring and contingency plans are also in place to minimize methane leakage.

## No significant harm to the EU environmental objectives 3 to 6 (insofar as the criteria are relevant)

- The vast majority of components for photovoltaic and wind energy power plants are designed for a very long service life, are recyclable and have a residual value at the end of their period of use (steel, aluminum, copper).
- These plant components can either be recycled within the EnBW Group or sold to third parties for further use.
- Environmental impact assessments (EIA) are carried out in accordance with the legal regulations.

- Prior to the process for reissuing expired permits in accordance with water law, a preliminary environmental impact assessment must be carried out. Depending on the results of this assessment, it may be necessary to subsequently complete an environmental impact assessment.
- The obligatory implementation of the requirements in the European Water Framework Directive is key, both for the award of new permits according to water law and also potentially at any time when the authorities subsequently issue official directives for existing permits.
- Potential mitigation measures, such as fish ladders that enable fish to descend the river, are implemented in agreement with the responsible authorities subject to appropriate deadlines.

- A waste management plan is in place that ensures maximal reuse or recycling at end of life in accordance with the waste hierarchy.
- Legal regulations are complied with when constructing overground power lines.
- Compliance with the 26th Federal Immission Control Ordinance (BImSchV) ensures fulfillment of the criteria for electromagnetic radiation.
- No oils containing PCBs are used in new equipment. The process to replace oils containing PCBs in old equipment was concluded at the beginning of the 1990s.
- Environmental impact assessments are carried out in accordance with the legal regulations.

- The same procedure is followed as for run-of-river power plants when the process to reissue expired permits according to water law is pending. The same applies to the implementation of the requirements in the European Water Framework Directive and corresponding mitigation measures.
- A waste management plan is in place that ensures maximal reuse or recycling at end of life in accordance with the waste hierarchy.

- In order to do no significant harm to the environmental objectives "sustainable use and protection of water and marine resources" and "protection and restoration of biodiversity and ecosystems," there are structural safety measures in place to prevent any pollution of groundwater.
- General preliminary assessments are also carried out to determine whether the activity is subject to an environmental impact assessment. As this activity is not subject to an EIA, the responsible authorities believe that there is no significant negative impact on the environment.
- Biogas power plants are not constructed in sensitive ecological areas. Bodies representing the public interest can raise their concerns in the resolution procedure for the submitted building applications.
- Pollution prevention and control is ensured by compliance with the legal regulations. In addition, the best available technology is used for any replacement investment.

<sup>1</sup> The KPIs for activities 4.5 and 4.10 and for 4.13 and 4.20 are combined in each case.

**Economic activities according to the EU taxonomy and a description of the activity**
**4.14 Transmission and distribution networks for renewable and low-carbon gases**

→ Construction and operation of gas grids

**4.15 District heating/cooling distribution**

→ Construction and operation of district heating grids

**4.20 Cogeneration of heat/cool and power from bioenergy<sup>1</sup>**

→ Operation of biogas CHP power plants to generate electricity and heat

**4.29 Electricity generation from fossil gaseous fuels**

→ Construction and operation of gas power plants to generate electricity

**Substantial contribution to climate change mitigation**

- This criteria set covers investment in new grids for the transport of hydrogen and other low-carbon gases, as well as investment in existing grids to increase the blend of hydrogen or other low-carbon gases in the gas system.
- The district heating grids make a substantial contribution to climate change mitigation because they use more than 50% renewable energies, 50% waste heat, 75% CHP heat or 50% of a combination of these energies and heats and are thus classified as efficient according to the EU regulations.
- The agricultural biomass used in the activity complies with the criteria laid down in EU Directive 2018/2001. Among other things, sustainability certificates are obtained for this purpose.
- Forest biomass, sewage sludge and biowaste are not used and thus it is not necessary to assess any criteria in this area.
- The greenhouse gas emission savings from the use of biomass in the combined heat and power plants is at least 80% in relation to the GHG emission-saving methodology and fossil fuel comparator set out in Annex VI to EU Directive 2018/2001.
- Direct GHG emissions of the activity averaged over 20 years are 160 to 549 kg CO<sub>2</sub>eq/kW depending on the scenario and are thus lower than 550 kg CO<sub>2</sub>eq/kW of the power plant's capacity.
- The combined cycle gas turbine (CCGT) power plants compensate for shortfalls in the electricity supply from renewable energies and ensure the security of supply. The new power plants are replacing hard coal power plants. The aim is to switch over 100% to hydrogen by 2035 at the latest. A mix with biogases is not planned.
- The generation capacities do not exceed the capacity of the previously installed power plants by more than 15%.
- The power plants are located in Germany. The Federal Republic of Germany has made the commitment to phase out coal-fired generation by 2038 so that the requirements in the EU taxonomy for these activities are fulfilled.
- Measurement equipment to monitor physical emissions is installed in accordance with the legal regulations.

**No significant harm to the EU environmental objectives 3 to 6 (insofar as the criteria are relevant)**

- The criteria for energy-efficient components are complied with by using the best available technology according to the latest standards for the new construction and repair of the gas grid. In particular, this includes the pipelines, fittings and leakage monitoring systems.
- Environmental impact assessments are carried out in accordance with the legal regulations.
- The district heating grid has no impact on water bodies during normal operation. In the event of a leakage, the damaged section is separated locally from the rest of the grid using fittings. The technology does not allow for the emptying of the district heating water into water bodies.
- The criteria for energy-efficient components are complied with by using the best available technology according to the latest standards for the new construction and repair of the district heating grids. In particular, this includes the pipelines, fittings and leakage monitoring systems.
- Environmental impact assessments are carried out in accordance with the legal regulations.
- As is the case for the manufacture of biogas and biofuels, structural safety measures, in particular, are in place to prevent any pollution of the groundwater.
- The process for carrying out EIAs is the same as for the manufacture of biogas and biofuels.
- Biogas power plants are not constructed in sensitive ecological areas. Bodies representing the public interest can raise their concerns in the resolution procedure for the submitted building applications.
- Pollution prevention and control is ensured by compliance with the legal regulations. In addition, the best available technology is used for any replacement investment.
- Preliminary assessments are carried out to determine whether the activity is subject to an environmental impact assessment and any subsequent EIAs are carried out where necessary in a project-specific manner in accordance with the Environmental Impact Assessment Act (UVPG). Otherwise, the respective projects are not approved.
- The BAT conclusions (BAT is the abbreviation for best available techniques) from the EU have been transposed into German law. All of the planned power plants comply with limits at least in line with requirements in the currently valid version of the 13th BImSchV and thus also the BAT conclusions.

<sup>1</sup> The KPIs for activities 4.5 and 4.10 and for 4.13 and 4.20 are combined in each case.

### Economic activities according to the EU taxonomy and a description of the activity

#### 4.30 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels

→ Construction and operation of CHP power plants

#### Substantial contribution to climate change mitigation

- The activity achieves primary energy savings of at least 10% compared with the reference values for the separate production of heat and electricity. Direct GHG emissions are 234 to 252 g CO<sub>2</sub>eq/kWh of energy output.
- The CCGT power plants compensate for shortfalls in the electricity supply from renewable energies and ensure the security of supply. The new power plants are replacing hard coal power plants. The aim is to switch over 100% to hydrogen by 2035 at the latest. A mix with biogases is not planned.
- The generation capacities do not exceed the capacities of the previously installed power plants.
- A reduction in GHG emissions during the life cycle and in comparison to the previously installed hard coal power plants of 55% is achieved.
- The power plants are located in Germany. The Federal Republic of Germany has made the commitment to phase out coal-fired generation by 2038 so that the requirements in the EU taxonomy for these activities are fulfilled.
- Measurement equipment to monitor physical emissions is installed in accordance with the legal regulations.

#### No significant harm to the EU environmental objectives 3 to 6 (insofar as the criteria are relevant)

- Preliminary assessments are carried out to determine whether the activity is subject to an environmental impact assessment and any subsequent EIAs are carried out where necessary in a project-specific manner in accordance with the Environmental Impact Assessment Act (UVPG). Otherwise, the respective projects are not approved.
- The BAT conclusions from the EU have been transposed into German law. All of the planned power plants comply with limits at least in line with requirements in the currently valid version of the 13th BImSchV and thus also the BAT conclusions.

#### 5.1 Construction, extension and operation of water collection, treatment and supply systems

→ Construction and operation of water grids

The net average energy consumption of the water grids operated by the EnBW Group is lower than 0.5 kWh/m<sup>3</sup> of water.

- The water passing through the grid complies with the requirements of the Drinking Water Ordinance and is monitored by the authorities – the criteria in this ordinance are stricter than those in the taxonomy.
- Environmental impact assessments are carried out in accordance with the legal regulations.

#### 6.15 Infrastructure enabling low-carbon road transport and public transport

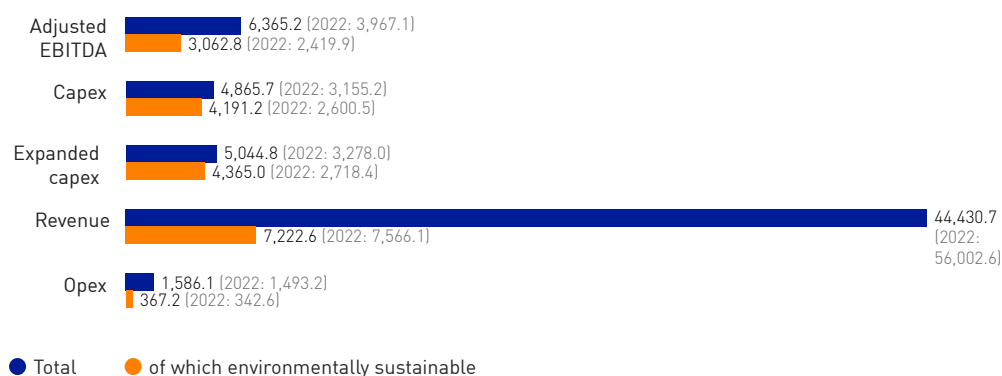
→ Construction and operation of charging infrastructure for e-vehicles

There are no criteria that must be assessed with respect to a required substantial contribution to climate change mitigation for activities related to charging infrastructure for e-vehicles.

- Water is only found at our sites in the form of rainwater. We do not use any surface waters nor do we extract any groundwater.
- The construction of charging infrastructure for e-vehicles is not included in the activities subject to an environmental impact assessment in Annex 1 to the Environmental Impact Assessment Act (UVPG): Legislators apparently assume that these activities per se do not do any significant harm to ecosystems and biodiversity. An EIA can be requested during the official approval process, although this has never occurred up to now.

The following graphic provides an overview of the proportions of the adjusted EBITDA, capex, extended capex, revenue and opex accounted for by the taxonomy-aligned economic activities:

#### Proportion of taxonomy-aligned economic activities of the EnBW Group in € million<sup>1</sup>



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

The following proportions were determined:

#### KPIs for the taxonomy-aligned business activities of the EnBW Group 2023

in € million/in %	Total	Proportion of taxonomy-aligned business activities	Proportion of taxonomy-eligible but not taxonomy-aligned economic activities	Proportion of taxonomy non-eligible business activities
Adjusted EBITDA	6,365.2	3,062.8/48.1	51.2/0.8	3,251.2/51.1
Capex	4,865.7	4,191.2/86.1	2.9/0.1	671.6/13.8
Expanded capex	5,044.8	4,365.0/86.5	2.9/0.1	676.9/13.4
Revenue	44,430.7	7,222.6/16.3	555.6/1.3	36,652.5/82.5
Opex	1,586.1	367.3/23.2	2.5/0.2	1,216.3/76.7

#### KPIs for the taxonomy-aligned business activities of the EnBW Group 2022<sup>1</sup>

in € million/in %	Total	Proportion of taxonomy-aligned business activities	Proportion of taxonomy-eligible but not taxonomy-aligned economic activities	Proportion of taxonomy non-eligible business activities
Adjusted EBITDA	3,967.1	2,419.9/61.0	247.4/6.2	1,299.8/32.8
Capex	3,155.2	2,600.5/82.4	2.5/0.1	552.2/17.5
Expanded capex	3,278.0	2,718.4/82.9	2.5/0.1	557.1/17.0
Revenue	56,002.6	7,566.1/13.5	1,639.5/2.9	46,797.0/83.6
Opex	1,493.2	342.6/22.9	2.5/0.2	1,148.1/76.9

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

#### Proportion of taxonomy-aligned adjusted EBITDA in the segments 2023

in € million/in %	Total	Proportion of taxonomy-aligned business activities	Proportion of taxonomy-eligible but not taxonomy-aligned economic activities	Proportion of taxonomy non-eligible business activities
Smart Infrastructure for Customers	239.5	-27.0/-11.3	0.0/0.0	266.5/111.3
System Critical Infrastructure	1,772.0	1,350.0/76.2	0.0/0.0	422.0/23.8
Sustainable Genera- tion Infrastructure	4,647.6	1,739.8/37.4	51.2/1.1	2,856.6/61.5

#### Proportion of taxonomy-aligned adjusted EBITDA in the segments 2022<sup>1</sup>

in € million/in %	Total	Proportion of taxonomy-aligned business activities	Proportion of taxonomy-eligible but not taxonomy-aligned economic activities	Proportion of taxonomy non-eligible business activities
Smart Infrastructure for Customers	498.4	-50.6/-10.2	0.0/0.0	549.0/110.2
System Critical Infrastructure	1,057.8	781.2/73.9	0.0/0.0	276.6/26.1
Sustainable Genera- tion Infrastructure	2,612.2	1,689.3/64.6	247.4/9.5	679.5/26.0

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

## Proportion of taxonomy-aligned expanded capex in the segments 2023

in € million/in %	Total	Proportion of taxonomy-aligned business activities	Proportion of taxonomy-eligible business activities	Proportion of taxonomy non-eligible business activities
Smart Infrastructure for Customers	458.2	183.3/40.0	0.0/0.0	274.9/60.0
System Critical Infrastructure	2,754.5	2,664.2/96.7	0.0/0.0	90.3/3.3
Sustainable Generation Infrastructure <sup>1</sup>	1,755.2	1,517.5/86.5	2.9/0.2	234.8/13.4

<sup>1</sup> The figures may not add up due to rounding differences.

Proportion of taxonomy-aligned expanded capex in the segments 2022<sup>1</sup>

in € million/in %	Total	Proportion of taxonomy-aligned business activities	Proportion of taxonomy-eligible business activities	Proportion of taxonomy non-eligible business activities
Smart Infrastructure for Customers	404.9	174.1/43.0	0.0/0.0	230.8/57.0
System Critical Infrastructure	2,005.8	1,926.4/96.0	0.0/0.0	79.4/4.0
Sustainable Generation Infrastructure	821.4	617.9/75.2	2.5/0.3	201.0/24.5

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

The adjusted EBITDA from taxonomy-aligned activities was €3,062.8 million and thus significantly higher than in the previous year. Despite the exceptionally high result in the area of Generation and Trading in 2023, the proportion of adjusted EBITDA for the Group accounted for by taxonomy-aligned activities was almost 50%. The adjusted EBITDA from taxonomy-aligned activities in the Smart Infrastructure for Customers segment was slightly improved in comparison to the previous year but remains comparatively low because the e-mobility business area is still being developed. The adjusted EBITDA from taxonomy-aligned activities in the System Critical Infrastructure segment increased to €1,350.0 million. This was mainly due to the substantial increase in revenue from the use of the grids as part of the higher investment in the expansion of the grids and from factoring in the higher expenses for the grid reserve and redispatch into prices. The proportion of adjusted EBITDA for the System Critical Infrastructure segment accounted for by taxonomy-aligned activities of 76.2% was slightly higher than the level in the previous year. The adjusted EBITDA from taxonomy-aligned activities in the Sustainable Generation Infrastructure segment of €1,739.8 million was higher than the level in the previous year. This was attributable to the positive earnings performance at the run-of-river power plants and pumped storage power plants, as well as the expansion in wind farms and photovoltaic power plants. The proportion of adjusted EBITDA for this segment accounted for by taxonomy-aligned activities of 37.4% was below the level in the previous year due to the exceptionally high result in the area of Generation and Trading.

The capex for taxonomy-aligned activities was €4,191.2 million and the proportion of capex accounted for by taxonomy-aligned activities was 86.1%, which was around 61% higher (about €1.6 billion) than the figure for the previous year. Almost half of this increase (around 46%) was attributable to higher investment in the electricity transmission and distribution grids. The investment made by our Group subsidiary TransnetBW as part of the Network Development Plan Electricity was higher, as was the investment in our electricity distribution grids made by our grid companies. Around 34% of the increase was attributable to the activity "electricity generation from wind power." In the area of offshore wind power, we invested heavily in our He Dreiht wind farm in the German North Sea in 2023. This wind farm is due to be commissioned in 2025. Around 18% of the increase was attributable to investment in our three fuel switch projects in Baden-Württemberg, which as things currently stand fulfills the EU criteria for a taxonomy-aligned activity.

The proportion of expanded capex for the Smart Infrastructure for Customers segment accounted for by taxonomy-aligned activities stood at 40.0% (previous year: 43.0%) and is thus relatively low because there are still no criteria in the EU taxonomy for many business activities, such as for the sale of commodities. The proportion in the System Critical Infrastructure segment of 96.7% was at the same level as in the previous year (96.0%) and relatively high because the electricity, gas and water grids, which account for almost the entire segment, comply with the EU taxonomy criteria. In the Sustainable Generation Infrastructure segment, the proportion of 86.5% was thus higher than



in the previous year (75.2%). The activities in the Renewable Energies area are fully taxonomy-aligned as in the previous year. The increase in this proportion is mainly attributable to the investment for our three fuel switch projects in Baden-Württemberg, which was higher in 2023 than in the previous year. The proportion of expanded capex accounted for by taxonomy-aligned activities was 86.5% based on the total investment by the EnBW Group in the context of the EU taxonomy.

Revenue from taxonomy-aligned activities of €7,222.6 million in 2023 was slightly lower than in the previous year. This development was primarily due to lower income from the settlement of redispatch measures with other transmission system operators in the System Critical Infrastructure segment that has no impact on the result. The proportion of total revenue accounted for by taxonomy-aligned activities increased slightly in comparison to 2022 to 16.3% because Group revenue from trading activities was lower than in the previous year, mainly as a result of lower prices on the electricity and gas markets.

The opex for taxonomy-aligned activities of €367.3 million was slightly higher than the figure in the previous year. Expenditure on maintenance and repair services was almost unchanged in comparison to 2022.

## Accounting policies

The proportion of sustainable **investment (capex)** predominantly refers to assets associated with taxonomy-aligned activities. In contrast to cash-relevant investment reported in the investment analysis section of the report (p. 80 f.<sup>7</sup>), non-cash-relevant activities are also relevant for taxonomy reporting. In accordance with our current interpretation, investment in our fuel switch projects, which are assigned to the economic activities 4.29 and 4.30 and make a contribution to the environmental objective of climate change mitigation, has been included in a capex plan and is reported separately below. The planned investment for these projects was defined using our investment approval process (p. 36<sup>7</sup>) and was presented to the Board of Management for approval. However, the taxonomy alignment of the power plants can only be verified following an evaluation of all of the technical screening criteria as the project progresses. The investment measures have a planning horizon of six years. The expected level of investment in the period 2022 to 2027 is €1.7 billion, of which a total of €0.4 billion has been invested up to now. To calculate the percentages, investment is included according to the following IFRS standards:

- Additions to property, plant and equipment (IAS 16)
- Additions to intangible assets (IAS 38)
- Additions to investment property (IAS 40)
- Additions to right-of-use assets from leases (IFRS 16)

The numerator for investment taken into account according to the taxonomy comprises the following:

### Composition of the capex numerator

in € million	2023	2022
Additions to property, plant and equipment <sup>1,2</sup>	3,929.4	2,316.5
of which additions as part of a capex plan	(348.7)	(60.9)
Additions to intangible assets	81.7	123.9
Additions to right-of-use assets from leases <sup>2</sup>	162.0	150.4
Additions to property held as a financial investment	0.0	0.0
Additions resulting from business combinations	18.1	9.7
<b>Total</b>	<b>4,191.2</b>	<b>2,600.5</b>

<sup>1</sup> This includes additions to provisions recognized for the decommissioning and dismantling of property, plant and equipment in the reporting period of €12.4 million (31/12/2022: €34.1 million).

<sup>2</sup> The figures for the previous year have been restated.

The capex figures for the comparative period have been adjusted due to changes in the segment reporting (p. 69<sup>7</sup>) and additions to right-of-use assets from leases according to IFRS 16.

The additions to calculate the denominator can be found in notes 10 (without consideration of the column "Goodwill"), 11, 12 and 14 (column for "Investment properties") of the notes to the consolidated financial statements.

To determine the KPI for sustainable **revenue**, the net revenue that makes a contribution to the environmental objective of climate change mitigation is divided by the total net revenue for the Group. Further information on net revenue can be found in the section on external revenue on [p. 70 f.](#) and in note 1 of the notes to the consolidated financial statements.

#### Composition of the revenue numerator

in € million	2023	2022
Revenue from contracts with customers	6,792.0	7,231.6
Other revenue	430.6	334.5
<b>Total</b>	<b>7,222.6</b>	<b>7,566.1</b>

The denominator to determine the KPI for **opex** in the sense of the Taxonomy Regulation comprises the following direct, non-capitalized costs:

- Research and development
- Building renovation measures
- Short-term leases
- Maintenance and repair costs

The numerator equals the part of the opex that is related to assets or activities associated with taxonomy-aligned economic activities. The expenditure included in the denominator covers the expenditure categories presented in the following table. The numerator for calculating the opex KPI is determined as follows:

#### Composition of the opex numerator

in € million	2023	2022
Maintenance and repair costs <sup>1</sup>	365.9	341.5
Short-term leases (not recognized as right-of-use assets)	0.9	0.7
Research and development costs	0.5	0.4
<b>Total</b>	<b>367.3</b>	<b>342.6</b>

<sup>1</sup> Includes building renovation measures.

As well as the KPIs required by the Taxonomy Regulation, we are also voluntarily reporting information on the environmentally sustainable **adjusted EBITDA** and **capex including the proportion for entities accounted for using the equity method** pursuant to IFRS 11 and IAS 28 (**expanded capex**). The sustainable adjusted EBITDA is the proportion of total adjusted EBITDA that makes a contribution to the environmental objective of climate change mitigation ([p. 71 f.](#)). With this KPI, we can create a direct link to our key performance indicator adjusted EBITDA that is relevant for the management of the company. Detailed information on this performance indicator can be found in the section on adjusted EBITDA on [p. 71 f.](#)

By reporting the expanded capex, we are disclosing all of our sustainable investment, irrespective of whether it is made within the EnBW Group. The numerator for the KPI for expanded capex is determined by taking the capex numerator from the Taxonomy Regulation and expanding it to include additions for entities accounted for using the equity method, whereby sustainable additions from acquisitions and capital increases are taken into account:

#### Composition of the expanded capex numerator<sup>1</sup>

in € million	2023	2022
Capex numerator according to EU taxonomy	4,191.2	2,600.5
Additions to entities accounted for using the equity method	173.8	117.9
<b>Total</b>	<b>4,365.0</b>	<b>2,718.4</b>

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

# EnBW AG

The financial statements of EnBW AG have been prepared in accordance with the regulations in the German Commercial Code (HGB), the German Stock Corporation Act (AktG) and the law governing the electricity and gas industries in Germany (German Energy Industry Act – EnWG). The regulations for large corporations apply.

The financial statements as audited by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, as well as the management report of EnBW AG contained in the Group management report, will be published in the company register.

The full **financial statements of EnBW AG** are available to download on our website.

[Online ↗](#)

For statements that are necessary to understand the position of EnBW AG and that are not explicitly described in the following sections, especially those relating to the strategy of the company and economic and political conditions, please refer to the information provided for the EnBW Group (p. 26 ff.<sup>7</sup> and p. 58 ff.<sup>7</sup>).

The annual net profit, which indicates the company's ability to pay a dividend, is an important performance indicator for EnBW AG.

## Results of operations of EnBW AG

### Condensed income statement of EnBW AG

in € million <sup>1</sup>	2023	2022	Change in %
Revenue	116,487.0	134,746.7	-13.6
Cost of materials	-111,978.5	-132,374.8	-15.4
Amortization and depreciation	-230.0	-201.9	13.9
Other operating result	-1,564.1	-762.2	-105.2
<b>Earnings before interest and taxes</b>	<b>2,714.4</b>	<b>1,407.8</b>	<b>92.8</b>
Financial result	-457.6	-108.1	–
Tax	-656.4	-326.4	-101.1
<b>Net profit</b>	<b>1,600.4</b>	<b>973.3</b>	<b>64.4</b>

<sup>1</sup> In accordance with German commercial law.

EnBW AG reported an annual net profit of €1,600.4 million. The improvement in comparison to the previous year was mainly influenced by the €1,306.6 million in higher earnings before interest and taxes, the decrease in the financial result of €349.5 million and the decrease in the tax result of €330.0 million.

Earnings before interest and taxes of EnBW AG is primarily determined by the revenues generated from electricity and gas sales, as well as by the associated cost of materials. The decrease in revenue of €18,259.7 million was offset by a decrease in the cost of materials of €20,396.3 million.

Revenue (after the deduction of electricity and energy taxes) of €116,487.0 million primarily includes revenue from electricity sales of €24,821.0 million and gas sales of €88,750.9 million. Electricity and gas sales comprise both the trading business, involving deliveries to trading partners and stock exchanges, and sales activities in the form of the direct delivery of energy to end customers.

The trading business recorded a decrease of €18,961.3 million in revenue in 2023 to €112,728.0 million. While gas revenues fell as a result of lower trading volumes, electricity revenues increased despite lower volumes due to higher prices secured on the markets. The decrease overall in revenue in the trading business was offset by the fall in the cost of materials of €20,564.7 million to a total of €109,187.7 million.

Revenues from sales activities were split into €1,902.4 million for electricity and €408.7 million for gas, which represented an overall increase of €314.0 million.

In the retail and end-customer sector (B2C), sales were lower than the level in the previous year, which was mainly attributable to conditions in the energy industry and the associated energy-saving measures actively taken by customers. Electricity sales fell by 0.4 billion kWh to 6.0 billion kWh, while sales in the gas business fell by 0.5 billion kWh to 3.5 billion kWh. Increased revenues in both the B2C electricity and B2C gas sectors were primarily due to price effects resulting from the market situation in the reporting year.

The cost of materials includes costs for electricity procurement of €20,966.0 million and costs for gas procurement of €86,838.8 million.

Alongside scheduled amortization and depreciation, the amortization and depreciation item includes impairment losses of €17.9 million, which relate to intangible assets.

The decrease in the other operating result was primarily attributable to reversals of impairment losses made in the previous year, which amounted to €1,018.7 million, and not made in the reporting year and a fall in income from reversals of provisions of €79.3 million, which was mainly related to provisions for onerous contracts for electricity procurement agreements. In addition, rents for gas transport increased by €154.4 million, expenses for gas storage facilities increased by €68.3 million and impairments on receivables increased by €118.3 million. This was offset to some extent by an increase in income from the disposal of assets of €511.2 million. EnBW sold minority shareholdings in He Dreiht GmbH & Co. KG and EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG, which holds 100% of the shares in TransnetBW GmbH. In addition, there was a drop in services provided by foreign subsidiaries for the trading activities of EnBW AG.

The decrease in the financial result was mainly due to higher impairment losses on financial assets of €1,009.9 million and higher interest expenses for affiliated entities of €159.2 million. This was offset to some extent by the improved investment result in particular.

The tax expense in the financial year was €656.4 million, which was €330.0 million higher than in the previous year. The taxes mainly comprise expenses for advance income tax payments of €233.2 million, additions to the provisions for corporate income tax and trade tax of €145.0 million and reversals of provisions for tax audit risks of €23.6 million. The tax result also includes out-of-period expenses for income taxes of €20.7 million, compared to out-of-period income for income taxes of €46.5 million in the previous year. The option of recognizing a surplus of deferred tax assets was not exercised.

## Net assets of EnBW AG

### Balance sheet of EnBW AG

in € million <sup>1</sup>	31/12/2023	31/12/2022	Change in %
<b>Assets</b>			
<b>Non-current assets</b>			
Intangible assets	277.4	313.6	-11.5
Property, plant and equipment	1,384.8	1,050.0	31.9
Financial assets	25,735.8	26,869.7	-4.2
	27,398.0	28,233.3	-3.0
<b>Current assets</b>			
Inventories	1,846.9	2,340.0	-21.1
Receivables and other assets	5,796.9	7,288.0	-20.5
Securities	230.0	0.0	-
Cash and cash equivalents	6,457.2	3,142.5	105.5
	14,331.0	12,770.5	12.1
Prepaid expenses	4,674.3	6,744.7	-30.7
Surplus from offsetting	47.1	31.9	47.6
	46,450.4	47,780.4	-2.8
<b>Equity and liabilities</b>			
<b>Equity</b>			
Subscribed capital	708.1	708.1	-
Treasury shares	-14.7	-14.7	-
Issued capital	(693.4)	(693.4)	-
Capital reserve	776.0	776.0	-
Revenue reserves	2,822.5	2,022.5	39.6
Retained earnings	1,155.4	652.9	77.0
	5,447.3	4,144.8	31.4
Extraordinary items for investment cost subsidies and grants	24.0	25.9	-7.3
Provisions	14,903.6	15,149.9	-1.6
Liabilities	21,118.8	23,203.2	-9.0
Deferred income	4,956.7	5,256.6	-5.7
	46,450.4	47,780.4	-2.8

<sup>1</sup> In accordance with German commercial law.

The net assets of EnBW AG as of 31 December 2023 are significantly influenced by the non-current assets (particularly the financial assets) and receivables and other assets as well as cash and cash equivalents. These are mostly offset by liabilities and provisions relating to nuclear power and for pensions and similar obligations.

Financial assets primarily consist of shares in affiliated entities of €17,622.9 million, loans to affiliated entities of €3,333.4 million, securities held as non-current assets of €2,717.1 million and investments of €2,054.5 million. The decrease of €1,133.9 million in financial assets was mainly due to amortization and depreciation of €1,144.3 million. In addition, EnBW sold minority shareholdings in He Dreiht GmbH & Co. KG and EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG, which holds 100% of the shares in TransnetBW GmbH. This was offset to some extent by payments into the capital reserves at shares in affiliated entities and the issuing of loans to affiliated entities of €658.4 million.

Trade receivables of €1,416.5 million mainly comprise receivables from trading activities and consumption accruals for electricity and gas deliveries not yet invoiced.

Receivables from affiliated entities increased by €478.2 million to €2,484.0 million. They mostly comprise receivables from intercompany settlement transactions as part of the centralized financial and liquidity management, as well as claims from profit and loss transfer agreements and short-term loans.

The decrease in other assets by €1,476.2 million to €1,852.8 million was mainly attributable to a decrease in the collateral to stock markets and trade partners of €1,790.3 million due to changes in market prices and a corresponding adjustment to the hedge strategy. As part of the sale of minority shareholdings in EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG, which holds 100% of the shares in TransnetBW GmbH, the majority of the proceeds were paid in cash and cash equivalents. The remaining payment will be made by 2028 at the latest.

Cash and cash equivalents of EnBW AG totaling €6,457.2 million largely consist of bank deposits. More details on the development of this item can be found in the section "Financial position of EnBW AG."

The decrease in prepaid expenses by €2,070.4 million to €4,674.3 million was primarily attributable to deferred earnings components from electricity and gas futures resulting from smaller differences between hedge prices and prices on the reporting date, as well as the adjustments to the hedge strategy.

The provisions for pensions and similar obligations held by EnBW AG to the amount of €7,018.1 million combine obligations from the company pension scheme and other company agreements made by major subsidiaries and EnBW AG. The resulting annual expenses for retirement benefits are reimbursed by the subsidiaries concerned in each case. In addition, provisions relating to nuclear power of €3,973.9 million are disclosed, which are formed to fulfill public law obligations and requirements in the operating licenses.

Of the liabilities totaling €21,118.8 million, €13,835.3 million have a residual term of more than one year. Overall, there are liabilities of €13,170.4 million to affiliated entities, which primarily result from intercompany settlement transactions within the framework of centralized financial and liquidity management, as well as from loan agreements.

The total decrease in liabilities by €2,084.4 million was primarily attributable to the fall in other liabilities by €3,611.9 million. The decrease in the collateral to stock markets and trade partners by €3,608.6 million was mainly due to changes in market prices and a corresponding adjustment to the hedge strategy. Trade payables also decreased by €516.3 million. In contrast, liabilities to affiliated entities and investments increased by €1,315.1 million and liabilities to banks rose by €807.6 million.

Non-current liabilities exist to the amount of €8,901.1 million to EnBW International Finance B.V. as part of the Debt Issuance Program (DIP), of which €3,363.4 million is from the issuing of five subordinated bonds, a private placement of bonds and promissory notes, and €1,537.8 million is from loan agreements with credit institutions. The main changes in comparison to the previous year were the taking out of two bank loans totaling €850.0 million. Furthermore, six new bonds were issued via EnBW International Finance B.V. each with a total volume of €3,256.7 million.

The decrease in deferred income by €299.9 million to €4,956.7 million was primarily attributable to deferred earnings components from electricity and gas futures resulting from smaller differences between hedge prices and prices on the reporting date, as well as the adjustments to the hedge strategy.

The aim is to cover the non-current pension and nuclear provisions with appropriate financial assets within an economically feasible time period. Overall, financial assets of €25,735.8 million are offset by long-term debt of €24,240.9 million.

In the financial year and on the reporting date, the liquidity of EnBW AG guaranteed the solvency of the company for the payment of current liabilities from the operating business at all times.

## Financial position of EnBW AG

In comparison to the reporting date in the previous year, the liquidity of EnBW AG increased from €3,142.5 million by €3,314.7 million to €6,457.2 million.

The cash flows of EnBW AG fundamentally arise from both its own operating business and also the operating business of the subsidiaries, with balance payments received and made via the bank accounts of EnBW AG as part of the intercompany cash pooling system within the framework of central financing and liquidity management.

Important business transactions that had an effect on the financial position of EnBW AG in the 2023 financial year are summarized below:

In the financial year, capital measures totaling €1,137.5 million were taken at subsidiaries, mainly in the area of the grids and renewable energies. In addition, EnBW sold minority shareholdings in He Dreiht GmbH & Co. KG and EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG, which holds 100% of the shares in TransnetBW GmbH.

Bank loans of €850.0 million were also taken out, while six new bonds were issued via EnBW International Finance B.V. with a volume of €3,256.7 million. This was offset to some extent by repayments of bank loans totaling €70.5 million and the repayment of a bond via EnBW International Finance B.V. of €80.7 million.

As a result of the significant improvement in the earnings before interest and taxes, there were corresponding cash inflows in the financial year, especially in the trading business.

Other business transactions with a material impact on liquidity were cash outflows from margin payments of €1,834.9 million, cash outflows in connection with the utilization of the nuclear power and pension provisions of €695.1 million and interest payments to banks of €104.6 million.

There were income tax payments of €601.0 million and loans to affiliated entities increased by €658.4 million.

This was offset to some extent in the business year by cash inflows from the receipt of dividends of €360.9 million.

A total of €297.9 million was distributed to the shareholders of EnBW AG in dividends.

## Overall assessment of the economic situation and development of EnBW AG

In our judgment, the development of the results of operations, financial position and net assets of EnBW AG as of 31 December 2023 is satisfactory after taking into account the effects described below that are not relevant to the ongoing management of the company. In the previous year, we anticipated an annual net profit to the order of around €2,000 million in 2023, influenced by positive effects not relevant to the ongoing management of the company of around €950 million.

The net profit/loss for 2023 was influenced by negative effects not relevant to the ongoing management of the company of around €1,200 million. In contrast, the operating business performed better than expected and was above the earnings forecast made at the start of the year.

The annual net profit for 2023 stands at €1,600.4 million and was primarily influenced by effects that arose both at EnBW AG itself and at its subsidiaries, which had an impact on EnBW AG due to profit and loss transfer agreements.

The main effect not relevant to the ongoing management of the company were additions to the provisions relating to nuclear power of €818.7 million (of which €537.2 million was reported as cost of materials of EnBW AG). Other negative effects arose from impairment losses on financial assets of €1,144.3 million, impairments on receivables of €162.1 million and additions to the provisions for onerous contracts of €136.7 million.



These effects were offset to some extent by income from the disposal of assets of €529.2 million, income from reversals of other provisions of €121.1 million, reversals of provisions for onerous contracts of €69.8 million and interest rate effects on non-current provisions of €165.8 million (of which in the interest result of EnBW: €138.0 million).

Based on the annual net profit of €1,600.4 million, and taking into account the profit carried forward of €355.0 million and the transfer into other revenue reserves of €800.0 million, there are retained earnings of €1,155.4 million.

We anticipate an annual net profit of around €1,400 million in 2024. This will be influenced by positive effects not relevant to the ongoing management of the company of around €250 million. Adjusted for these effects, the annual net profit will be around €1,150 million.

The amount that is ineligible for distribution as dividends is expected to be around €10 million as of 31 December 2024 and comprises the capitalized internally generated intangible assets and the valuation of the dedicated financial assets for pension provisions, whose fair value exceeded the acquisition costs.

## Opportunities and risks

As the business performance, economic situation and opportunities and risks relating to the future development of EnBW AG do not deviate from the business performance, economic situation and opportunities and risks relating to the future development of the EnBW Group, the management report of EnBW AG is combined with that of the EnBW Group [\(p. 123<sup>7</sup>\)](#).

## Comments on reporting

The consolidated financial statements of EnBW AG are prepared in accordance with section 315e (1) HGB using the International Financial Reporting Standards (IFRS) set by the International Accounting Standards Board (IASB), the adoption of which is mandatory in the EU as of the reporting date. As a vertically integrated energy supply company in the sense of EnWG, EnBW AG engages in activities in electricity distribution, activities in gas distribution, other activities within the electricity sector, other activities within the gas sector and other activities outside of the electricity and gas sectors in accordance with section 6b (3) sentence 3 and sentence 4 EnWG.

## EnBW share and dividend policy

As a result of the small proportion of EnBW shares in free float, events on the financial markets and the development of the DAX generally only have a minor influence on the development of the EnBW share price. The price of EnBW shares was €89.20 at the start of 2023 and stood at €79.20 by the end of the year.

In the long term, EnBW plans to pay out no more than 40% to 60% of the adjusted EBITDA in dividends. Based on the annual net profit of €1,600.4 million, and taking into account the profit carried forward of €355.0 million and the transfer into other revenue reserves of €800.0 million, there are retained earnings of €1,155.4 million and thus dividends will be paid for the 2023 financial year. If approved by the Annual General Meeting, the dividend to be distributed for the 2023 financial year will be €1.50 per share. This corresponds to a dividend payout ratio of 15% of the adjusted Group net profit that is attributable to shareholders.

Information on our **share price, dividends and shareholder structure** can be found on our website.

Online <sup>7</sup>

## Overall assessment of the economic situation of the Group

Our integrated approach of positioning the company along the entire value-added chain of the energy industry ensures that our business model remains resilient. We have made sustainability an integral part of our corporate strategy. We continued to pursue our strategic goals by, for example, accelerating the expansion and take-up of renewable energies, expanding the grid infrastructure, starting construction at our fuel switch projects and expanding e-mobility. Organized into three segments, we want to further strengthen our profitability and continuously improve our sustainability performance at the same time. The aim is to make the company climate neutral with respect to our own CO<sub>2</sub> emissions (Scope 1 and 2) by 2035.

**€6.4 billion**

adjusted EBITDA

The operating business at a Group level performed better in 2023 than expected and was above the earnings range forecast made at the start of the year. Adjusted EBITDA increased significantly by 60.4% in comparison to the previous year. The result in the Smart Infrastructure for Customers segment was below the previous year's level and the forecasted range. However, the fall in earnings in this segment was more than compensated for by positive developments in the other two segments. The adjusted EBITDA for the System Critical Infrastructure segment increased and was within the forecasted range. In addition, the result in the Sustainable Generation Infrastructure segment rose significantly and was at the upper end of the adjusted forecasted range, exceeding the originally forecasted range. While the adjusted EBITDA for the Renewable Energies area was at the same level as in the previous year, earnings in the Thermal Generation and Trading area were significantly higher than in the previous year. Non-operating EBITDA fell considerably in comparison to the previous year. The Group net profit/loss attributable to the shareholders of EnBW AG fell from €1,738.0 million in 2022 by €200.4 million to €1,537.6 million in the reporting year. Earnings per share amounted to €5.68 in the 2023 financial year, compared to €6.42 in the previous year.

**€5.0 billion**

green bonds since 2018

The financial position of the company remains sound. Solvency was ensured at all times thanks to the company's available liquidity and its internal financing capability, as well as external sources available for financing. As of 31 December 2023, net debt had risen by €856.1 million compared to the figure posted at the end of the previous year. This increase was mainly due to the increase in collateral. As a result of the increase in retained cash flow, the debt repayment potential was substantially higher in 2023 than the target value of between 18.0% and 21.0%. The value spread rose to 10.2% and thus exceeded the forecasted range. Gross investment in 2023 was around 56% higher than the level in the previous year. Around 79.9% of overall gross investment was attributable to growth projects.

**€4.9 billion**

gross investment

In the customers and society goal dimension, the Reputation Index fell in 2023 by three index points in comparison to the previous year to 55 points and was thus once again at the same level as in 2021, although below our forecasted range for 2023 of between 57 and 60 points. The Customer Satisfaction Index for EnBW fell by 6.5% in 2023 to a value of 130 but remained at a good level. Despite a slight fall in the satisfaction of its customers, Yello was still able to maintain its index value at an outstanding level. As in the previous year, SAIDI Electricity was within the forecasted range in 2023. In the environment goal dimension, we were able to improve the share of generation capacity accounted for by renewable energies to 46.9%. The CO<sub>2</sub> intensity of our own electricity generation fell in comparison to the previous year by 29.3% as a result of an increase in generation from renewable energy sources and the significantly lower deployment of our coal power plants. In the employees goal dimension, the People Engagement Index (PEI) remained at a very high level in comparison with the previous year and with other companies. In the area of occupational safety, the key performance indicators for LTIF fell in comparison to the previous year.

**46.9%**

share of the generation capacity  
accounted for by RE

**-29.3%**

reduction CO<sub>2</sub> intensity

**82 points**

People Engagement Index (PEI)

Business at the company developed very positively in 2023. This was primarily attributable to higher income from electricity generation in the Sustainable Generation Infrastructure segment and higher income from the use of the grids in the System Critical Infrastructure segment.

# Forecast

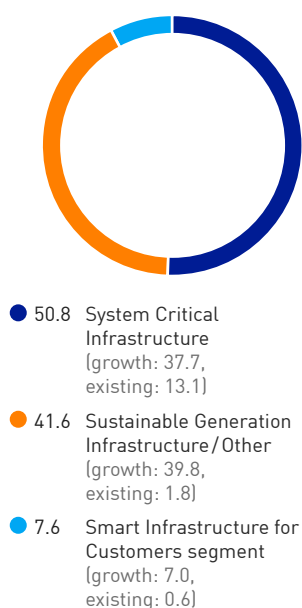
In our forecast we take a fundamental look at the expected growth and development of EnBW in the years 2024 to 2026. It should be noted that the present conditions – such as the high volatility on the markets [\(p. 66 ff. 7\)](#) – increase the level of uncertainty with which predictions about the future development of the company can be made. The expected economic, political and regulatory conditions are presented in the chapter “General conditions” [\(p. 58 ff. 7\)](#). Potential factors influencing the forecast are described in detail in the “Report on opportunities and risks” [\(p. 130 ff. 7\)](#).

## Expected trends in the finance and strategy goal dimensions

### Investment over a three-year period

In order to continue actively shaping the energy transition, gross investment of €24.5 billion is planned for the 2024 to 2026 period. This represents on average €8.2 billion per year. 15% of this investment will be on existing projects and 85% on growth projects. The majority of the gross investment (83%) will be in the System Critical Infrastructure segment and the expansion of renewable energies. We anticipate that more than 85% of our gross investment will be taxonomy-aligned according to the EU taxonomy.

Total investment 2024–2026  
in %



Around 8% of the investment is planned for the **Smart Infrastructure for Customers** segment, of which approximately 7% will be for growth investment and 1% for investment in existing facilities. This investment is mainly intended for the expansion of electromobility, as well as for the expansion of the telecommunications infrastructure.

Around 51% of the investment will flow into the **System Critical Infrastructure** segment. Growth investment will account for approximately 38% of the overall gross investment and the remaining amount of around 13% will be for upgrading the existing grids. In order to make the transmission of renewable energies from the north to the south of Germany possible, funds have been allocated to the electricity transmission grid for the realization of two HVDC projects ULTRANET and SuedLink that involve our subsidiary TransnetBW and are part of the Network Development Plan. In addition, extensive investment in the expansion, upgrading and renewal of the existing distribution grids is planned by our grid subsidiaries. Our subsidiaries terranets bw and ONTRAS have already planned to make their first investments in the core hydrogen network in the three-digit million euro range within the three-year period.

Around €10.2 billion or 42% of the investment is planned for the **Sustainable Generation Infrastructure** segment and for other investment (other investment: 1%). Around 40% of the investment will be on growth themes and around 2% on themes related to existing facilities. Investment of around €8.0 billion for the expansion of renewable energies is planned for the period 2024 to 2026, which corresponds to 33% of gross investment. This includes funds for the realization of further offshore wind farms, such as our EnBW He Dreiht wind farm in the German North Sea. After acquiring offshore wind rights in Great Britain, we are planning to construct more offshore projects in Great Britain, for which additional investment has been allocated within the three-year period. We also plan to invest in the construction of onshore wind farms and photovoltaic parks from our comprehensive project pipeline [\(p. 26 f. 7\)](#). Furthermore, the planned investment for the Sustainable Generation Infrastructure segment includes €1.9 billion for the thermal power plants. This is primarily for the construction of our three H<sub>2</sub>-ready gas power plants in order to guarantee the supply of district heating, in particular, from these three sites and maintain the security of supply in Baden-Württemberg in the future. Other investment mainly involves investment in the central IT system.

The investment program of the EnBW Group supports our strategy of expanding renewable energies and ensuring security of supply in the regulated areas of the transmission and distribution grids (electricity and gas), as well as the expansion of charging infrastructure for the benefit of electromobility.

In order to finance our investment for the energy transition, we intend to secure about half of the overall gross investment planned for the period 2024 to 2026 as cash returns in the form of **divestitures**. This includes entering into further strategic partnerships and securing cash inflows from existing participation models in specific areas of the company. Other divestitures will include the receipt of building cost subsidies.

## TOP

## Adjusted EBITDA and the share of adjusted EBITDA accounted for by the segments

Development in 2024 (adjusted EBITDA and the share of adjusted EBITDA accounted for by the segments) compared to the previous year

	Earnings performance (adjusted EBITDA) compared to the previous year		Development of the share of adjusted EBITDA for the EnBW Group accounted for by the segments	
	2024	2023	2024	2023
Smart Infrastructure for Customers	€0.25 to €0.35 billion	€239.5 million	5% to 10%	3.8%
System Critical Infrastructure	€1.9 to €2.2 billion	€1,772.0 million	35% to 50%	27.8%
Sustainable Generation Infrastructure	€2.6 to €3.1 billion	€4,647.6million	50% to 65%	73.0%
Other/Consolidation		€-293.9 million		-4.6%
<b>Total</b>	<b>€4.6 to €5.2 billion</b>	<b>€6,365.2 million</b>		<b>100.0%</b>

The adjusted EBITDA of the **Smart Infrastructure for Customers** segment is expected to increase in 2024. We anticipate that the negative earnings effects seen in 2023 will largely cease to exist. Following the removal of the price brake on electricity and gas, we anticipate a strong recovery in the market for the B2B and B2C commodity business. The share of adjusted EBITDA for the Group accounted for by this segment should be slightly higher than the level in the previous year.

The expected adjusted EBITDA for the **System Critical Infrastructure** segment will be significantly higher in 2024 than in the previous year. The main reasons for this development are higher income from the use of the grids as a result of returns on increased investment activity in projects that are included in the Network Development Plan Electricity and Network Development Plan Gas, as well as a higher return on capital employed. We expect an increase in the share of adjusted EBITDA for the Group accounted for by this segment in comparison to the previous year.

The adjusted EBITDA of the **Sustainable Generation Infrastructure** segment is expected to fall in 2024. This decrease in earnings will be due to a fall in the volatility on the markets and to the sale of generated volumes at lower prices on the market, resulting in a fall in the trading result in comparison to 2023, with an impact on the Thermal Generation and Trading area. Renewable energies are expected to contribute around €1.3 billion to earnings. After all of the pumped storage power plants have now been classified as environmentally sustainable in accordance with the EU Taxonomy Regulation (p. 108 ff.<sup>7</sup>), they will be allocated to the Renewable Energies area from 2024 onwards. The adjusted EBITDA for the Renewable Energies area including earnings from pumped storage power plants of €0.7 billion would have totaled €1.7 billion in 2023. Furthermore, the moderate expansion in power plants for the uptake of renewable energies will make a positive contribution to earnings performance. The forecasts for wind and water yields, and thus for the volume of electricity generated, are based on the long-term average. As the volumes of electricity generated in 2023 were below this level, we anticipate higher volumes in 2024 in comparison to the previous year. This will be offset to some extent by falling prices in comparison to 2023. We expect the share of adjusted EBITDA for the Group accounted for by this segment to be below the level in the previous year.

The **adjusted EBITDA for the EnBW Group** is expected to fall in 2024 and will be between €4.6 billion and €5.2 billion. We also expect the adjusted EBITDA for the Group to be at around the same level in 2025.

The expected **EBITDA** in 2024 and 2025 will develop in line with the adjusted EBITDA. We do not make any forecasts relating to material non-operating effects.

We anticipate that the **EBT relevant to remuneration** will be between €2.1 billion and €2.4 billion in 2024 and thus around the same level as in the previous year. EBT in 2025 is expected to be within the same range as in 2024. The accuracy of the forecast for EBT is dependent on exogenous factors relevant to the non-operating result that cannot be planned for, such as impairment losses, the reversal of impairment losses or impending losses on onerous contracts for electricity procurement agreements.

Assuming an adjusted EBITDA in the range of €4.6 billion to €5.2 billion, we expect to achieve a **retained cash flow** in 2024 of between €2.0 billion and €2.5 billion. Adjusted for dividend payments (including payments from investments to third parties) and income tax payments, we expect an **FFO relevant to remuneration** of between €3.5 billion and €4.0 billion. We expect that retained cash flow in 2025 will be higher than in 2024 as a result of the lower utilization of provisions.

## Debt repayment potential

TOP

Key performance indicator

	2024	2023
Debt repayment potential in %	13 – 16	41.3

We expect a significantly lower debt repayment potential of between 13% and 16% in 2024. The development of the debt repayment potential is dependent on factors within net debt that are outside of the company's sphere of influence, such as the development of interest rates for non-current provisions, the performance of the dedicated financial assets and margin payments from temporary price fluctuations on the market.

## Share of adjusted EBITDA accounted for by low-risk earnings

TOP

Key performance indicator

	2024	2023
Share of adjusted EBITDA accounted for by low-risk earnings in %	≥ 70	44.7

We anticipate that the share of adjusted EBITDA accounted for by low-risk earnings will increase significantly in 2024 due to the increase in adjusted EBITDA for the System Critical Infrastructure segment and a higher share of earnings accounted for by the Renewable Energies area, together with a reduction in the share of earnings accounted for by the Thermal Generation and Trading area.

## Proportion of taxonomy-aligned expanded capex

TOP

Key performance indicator

	2024	2023
Proportion of taxonomy-aligned expanded capex in %	≥ 85	86.5

The proportion of taxonomy-aligned expanded capex is expected to be at least 85% in 2024. This will mainly be attributable to our investment in the EnBW He Dreiht wind farm, in the construction of the three H<sub>2</sub>-ready gas power plants and in offshore projects in Great Britain, as well as our ongoing high investment in the expansion of the grids.

## Expected trends in the customers and society goal dimension

### TOP

#### Key performance indicators

	2024	2023
Reputation Index	54–58	55
Customer Satisfaction Index for EnBW/Yello	114–125/ 145–155	130/161
SAIDI electricity in min./year <sup>1</sup>	< 20	19.3

<sup>1</sup> SAIDI electricity includes all unscheduled interruptions to supply that last more than three minutes for the end consumer.

### Reputation Index

EnBW will strive to improve its reputation continuously and appreciably over the next few years. The Reputation Index is an important non-financial performance indicator because it is influenced by a whole series of factors important to the future viability of our company. The existing reputation management department and stakeholder team at EnBW can recommend measures for optimizing the reputation of the company.

### Customer Satisfaction Index

In our opinion, various external factors could have an increasingly negative impact on the satisfaction of our customers in 2024. These include, for example, the effects of the war between Russia and Ukraine, a comparatively high rate of inflation and the negative impact of the energy and budgetary policy decisions taken in Germany at the end of 2023. As a result of the sharp decrease in the procurement price for energy, it is likely that there will be different pricing levels for new and existing customer contracts on the market. This will foster a more critical opinion of energy companies among customers. Other negative effects on prices, with a corresponding impact on customer satisfaction, could arise if energy supply chains are disrupted by new regional conflicts such as in the region around Israel and the Arabian Peninsula. Economic recovery in Europe and Asia could also lead to increased demand for energy, which would cause prices for electricity and gas to rise. In addition, more investment in the grid infrastructure is needed to push forward the energy and mobility transitions and maintain the stability of the grids. Increasingly volatile developments on the market and, for example, further market exits or insolvencies of market participants could also have negative effects on the Customer Satisfaction Index.

To improve the satisfaction of our customers, we are expanding our range of sustainable energy industry services and energy solutions even further and targeting our sales activities in this direction. In this context, we are also making the product portfolio more sustainable for our customers. We are combining traditional energy products (electricity and gas) with household and energy-related products and services. This includes, for example, continuing with the swift and comprehensive expansion of the quick-charging infrastructure in Germany and extending the EnBW HyperNetwork across Germany and Europe with our partners. We will also further exploit the opportunities offered by digitalization: New and improved digital processes will allow us to offer customized products to our customers and provide them with an even better quality of service. On this basis, we expect a slightly lower value for the Customer Satisfaction Index for EnBW of between 114 and 125 points in the 2024 financial year. Through further digitalization of customer processes, flexible offers and a clear focus on sustainability, Yello is striving to achieve a Customer Satisfaction Index of between 145 and 155 points in the 2024 financial year, slightly lower than in the previous year.

### SAIDI

The grid subsidiaries of EnBW have always achieved a high level of supply reliability throughout their grid area and for their customers. The corresponding key performance indicator SAIDI Electricity, which states the average duration of supply interruptions per end consumer per year, stood at 19.3 minutes in 2023. We will continue striving to achieve a value of consistently below 20 minutes in the 2024 financial year and subsequent years.

## Expected trends in the environment goal dimension

### TOP

#### Key performance indicators

	2024	2023
Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %	6.5 – 6.8/ 56 – 57	5.7/46.9
CO <sub>2</sub> intensity in g/kWh <sup>1</sup>	390 – 450	347

<sup>1</sup> The calculation for this performance indicator does not include nuclear generation and the share of positive redispatch that cannot be controlled by EnBW.

### Installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE

We expect that the installed output of renewable energies and the share of the generation capacity of the Group accounted for by renewable energies will continue to rise in 2024. This increase will be due to the planned construction of additional onshore wind and photovoltaic power plants, as well as the increase from the addition of pumped storage power plants that do not use the natural flow of water. The reason for this reallocation as renewable energies is due to the classification of the pumped storage power plants as environmentally sustainable in accordance with the EU Taxonomy Regulation [p. 108 ff.<sup>7</sup>]. The transfer of Block 7 of the Rheinhafen steam power plant in Karlsruhe and Block 8 of the large power station in Mannheim to the grid reserve in the first half of 2024 will also increase the share of the generation capacity accounted for by RE. In subsequent years, we expect a continuous increase in the installed output of renewable energies. This will thus increase the share of the generation capacity accounted for by RE further. The expansion in renewable output is taken into account in the remuneration of the Board of Management and is a component of the Long Term Incentive (LTI).

### CO<sub>2</sub> intensity

In 2023, CO<sub>2</sub> intensity fell more than expected due to low deployment of our thermal power plants on account of prices on the market and to more favorable wind and water conditions in comparison to 2022. As a result of the changed market conditions and the return to operation of our hard coal power plant Heilbronn 7 during the course of the year, we anticipate higher generation from our thermal power plants in 2024. In combination with wind yields, which are forecast using the long-term average, we anticipate that CO<sub>2</sub> intensity in 2024 will be 390 g/kWh in the best-case scenario and 450 g/kWh in the worst-case scenario. In comparison to the reference year of 2018 used for our target of climate neutrality, this forecast corresponds to a reduction in CO<sub>2</sub> intensity of between 18% and 29%. The key performance indicator CO<sub>2</sub> intensity will be taken into account in the remuneration of the Board of Management in future and will become a component of the Long Term Incentive (LTI).

## Expected trends in the employees goal dimension

### TOP

#### Key performance indicators

	2024	2023
People Engagement Index (PEI) <sup>1</sup>	≥ 78	82
LTIF for companies controlled by the Group <sup>2,3,4</sup>	2.1	2.4
LTIF overall <sup>2,3</sup>	3.6	3.7

<sup>1</sup> Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered [except ITOs]).

<sup>2</sup> LTIF indicates how many LTI occurred per one million working hours performed. Further information on the calculation of this performance indicator can be found on p. 34<sup>7</sup>.

<sup>3</sup> The LTIF for companies controlled by the Group excluding waste management and LTIF overall, which includes the area of waste management, only includes companies with more than 100 employees excluding external agency workers and contractors.

<sup>4</sup> Newly fully consolidated companies are not included for a maximum transition period of three years.

### People Engagement Index

The People Engagement Index (PEI) stood at 82 points in the reporting year. We were thus able to once again slightly improve on the very good result from the previous year (81 points). An international benchmark index compiled using similar questions at numerous companies from various different sectors stood at 74 points in 2023. Taking into account this global benchmark score, we are striving to achieve a target value for the PEI of at least 78 points in 2024.



## LTIF

We are committed to our goal of continuously improving occupational safety within the company for both our own employees and those of our partner companies who carry out work on behalf of EnBW. Therefore, we have implemented numerous accident prevention measures. The energy crisis brought about huge changes for EnBW as an energy supply company in 2022 that continued to have a noticeable impact in 2023. As a critical infrastructure company, we have a responsibility to ensure a reliable supply of energy. Changes to working conditions and their consequences (such as an increased workload) increased the risk of accidents. We believe that this has also been reflected in the number of accidents in 2023. In 2024, we will continue the measures we introduced to improve occupational safety – especially in the area of conventional generation – in the reporting year. Despite these challenges, we are still striving to reduce the number of accidents and both the LTIF for companies controlled by the Group and LTIF overall moderately in the long term. The LTIF for companies controlled by the Group is taken into account in the remuneration of the Board of Management and is a component of the Long Term Incentive (LTI).

## Overall assessment of anticipated developments by the management

We expect a fall in adjusted EBITDA for the Group in 2024 in comparison to the previous year because the adjusted EBITDA for the Sustainable Generation Infrastructure segment will normalize again. The shares of earnings accounted for by the different segments will change accordingly. We always strive to maintain a balanced financing structure, solid financial profile and thus solid investment-grade ratings. With respect to our non-financial key performance indicators, we expect a largely stable to slightly positive development in 2024.

# Report on opportunities and risks

## Principles of the integrated opportunity and risk management system

### Opportunity and risk map

Strategic / sustainability		Operative			Financial		Compliance
Strategy	Sustainability	Business activity	Infrastructure	Implementation of growth fields	Financial management	Corporate financing	Compliance
Sustainable Generation Infrastructure ● ●	Climate change ● ●	Business processes	Plants / grids / storage / IT	Renewable energies ● ●	Market prices	Capital market	Corruption ●
Market developments / social trends ●	Environmental protection ●	Operating activities	Information security / confidentiality	Gas / biogas business	Liquidity management	Ratings	Antitrust law
System Critical Infrastructure	Weather / natural events ●	Products / contracts	Crime / sabotage / terrorism	E-mobility / digitalization	Earnings management		Data protection
Smart Infrastructure for Customers	Personnel ●	Operational projects		Expansion of the grids	Investment management		Fraud
	Occupational safety / health protection ●	Approvals / licenses / patents					Taxes and levies
	Human rights ●	Legislation / regulation / litigation ●					
	Social issues ●						
	Reputation ● ●						

● Task Force on Climate-related Financial Disclosures (TCFD) ● Corporate Social Responsibility (CSR)

The integrated opportunity and risk management system (iRM) of EnBW is based on the internationally established COSO framework as a standard for risk management systems that span entire companies, as well as the requirements of the Institute of Public Auditors in Germany (IDW). The iRM aims, through a holistic and integrated approach, to effectively and efficiently identify, evaluate and manage opportunities and risks (including monitoring) and report on the opportunity and risk position, as well as to ensure the appropriateness and functionality of related processes. Risk management involves measures for avoiding, reducing or transferring risk through adequate accounting provisions, as well as measures for managing risk tolerance. For this purpose, we define an opportunity/risk as an event that might cause a potential over-attainment/non-attainment of strategic/sustainability, operational, financial and compliance goals in the future. The iRM process also takes into account the guidelines for a non-financial declaration. In order to identify and categorize opportunities and risks, EnBW uses, among other things, the opportunity and risk map that is established throughout the Group. The risk map is used to explicitly identify potential opportunities and risks that affect the sustainable orientation of our company. As well as focusing on the fulfillment of the requirements for a nonfinancial declaration, the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) are also taken into account.

We constantly improve and enhance the maturity of our iRM management system. This gives us the chance to react to any legal or regulatory changes and also to exploit any potential for improvement that we may have identified.

## Structure and processes of the integrated opportunity and risk management system

### Structure and process of the iRM system



The structures and processes of the iRM are established throughout the Group. The central risk management & ICS functional unit is responsible for specifying methods, processes and systems for the whole Group, determining the opportunity and risk position of the Group and for reporting. The central steering body is the risk committee, which – with the involvement of specially selected units/companies – is responsible for clarifying relevant issues from various Group perspectives, as well as for determining the top opportunities/risks.

Internal reports are submitted on a quarterly basis in standardized form. In the case of any significant changes, a special report based on a formalized structure is immediately issued. Opportunities and risks can have an impact on our key financial performance indicators adjusted EBITDA, debt repayment potential, share of adjusted EBITDA accounted for by low-risk earnings and proportion of taxonomy-aligned expanded capex (p. 33<sup>7</sup>). The possible effects on the key non-financial performance indicators (p. 34<sup>7</sup>) are discussed with those responsible in the specialist areas.

Opportunities and risks are evaluated within the medium-term planning period. A financial valuation of the opportunities and risks is carried out insofar as this is possible, and the expected values and potential ranges given by the results are considered. If they lie above uniformly defined thresholds, the opportunities and risks are generally included in the Group report on opportunities and risks. The so-called top opportunities/risks and long-term opportunities and risks that are of particular importance are then added. The top opportunities/risks are determined using global opportunity and risk trends, value drivers along the value-added chain and quantitative characteristics such as relevance classes and monetary limits.

Any opportunities and risks with a probability of occurrence of up to 50% are subject to an individual review to determine whether they should be taken into account in the next planning session. Opportunities and risks with a probability of occurrence of over 50% are usually taken into account in the planning process and, as far as possible, appropriate accounting measures are taken in the consolidated financial statements in accordance with IFRS.

Opportunities and risks are generally evaluated in relation to the current planning period. This is carried out using quantitative methods involving stochastic modeling based on appropriate probability distributions. The resulting distributions enable us to derive the risk dimensions in each case,

such as the expected level for the opportunity and risk and the variation in the expected level. Risk ranges for the 98% confidence level are applied to ensure that possible extreme scenarios for individual opportunities or risks can be identified. This represents larger financial ranges in order to cover potential extreme scenarios with a higher probability.

Building on this, we then assess the risk-bearing capacity. This is done based on the continuous quantification of risks, which are aggregated using stochastic simulations to find the total risk position. The total risk position is then measured against the coverage potential. The result is an assessment of the maximum risk that EnBW can tolerate without jeopardizing its ability to continue as a going concern. This risk-bearing capacity can be used as a management instrument and fulfills the requirements of the auditing standard IDW PS 340 new version.

#### Relevance filter for classifying opportunities and risks

Strategic / sustainability	Operative	Financial	Compliance	
Achievement of strategic targets, sustainability targets, e.g., climate protection, environmental protection, reputation	Achievement of business targets, functional processes, retaining added value, customer / external effects	Achievement of financial targets, generally in accordance with medium-term planning or approved (project) budgets	Compliance with legal / official regulations and internal regulations	
<b>Relevance class 5</b>				Group reporting level
One strategic / sustainability target for the EnBW Group is not achieved	<ul style="list-style-type: none"> <li>One key operational target for the EnBW Group is not achieved</li> <li>The value added is massively disrupted across the company / business units / functional units</li> </ul>	≥ €50 million (relevance threshold for functional units and EnBW Group)	Breach of legal / official regulations and / or internal regulations with negative consequences for the EnBW Group	
<b>Relevance class 6</b>				
Several or all strategic / sustainability targets for the EnBW Group are not achieved	<ul style="list-style-type: none"> <li>Several or all operational targets for the EnBW Group are not achieved</li> <li>Value added throughout the whole Group is massively disrupted</li> </ul>	≥ €250 million	Breach of legal / official regulations and / or internal regulations with serious negative consequences for the EnBW Group	

## Structure and processes of the accounting-related internal control system

### Principles

An accounting-related internal control system (ICS) has been established at EnBW that is designed to ensure proper and reliable financial reporting. In order to guarantee that this ICS is effective, the appropriateness and functionality of the Group-wide control mechanisms are tested regularly at the level of the individual companies and at a Group level.

If any existing weaknesses are identified in the control system and are considered relevant to the financial statements, they are remedied. This accounting-related ICS methodology is based on the COSO II standard.

Once the control mechanisms have reached a standardized and monitored degree of maturity, and no material control weaknesses can be identified, the accounting-related ICS is deemed to be effective. The materiality of control weaknesses is measured as the probability of occurrence and the extent to which there could be a potential misstatement in connection with those financial statement items concerned. The accounting-related risk management system defines measures for identifying and assessing risks that jeopardize the preparation of compliant financial statements as part of the accounting-related ICS.

Despite having established an ICS, there is no absolute certainty that it will attain its objectives or that it will be complete. In individual cases, the effectiveness of the ICS can be impaired by unforeseeable changes in the control environment, fraud or human error.

## Structure

The accounting-related ICS at EnBW is organized at both a centralized and decentralized level. All key companies, business units and functional units have an ICS officer. These officers monitor the effectiveness of the ICS and evaluate any control weaknesses that may arise. An effectiveness report is prepared on an annual basis. The ICS officer at Group level assists the companies/units with the implementation of standardized procedures and also consolidates collected data.

## Process

Standardized procedures are used to ensure completeness and consistency in the preparation of the financial statements and financial reporting. The accounting-related ICS defines controls designed to ensure compliance with the accounting policies used by the Group, as well as procedures and deadlines for the individual accounting and consolidation processes. During the Group consolidation process, the rigorous implementation of the four-eye principle is observed, while random samples and deviation analyses improve quality. An annual control cycle monitors whether the documentation is up to date and also checks the appropriateness and functionality of the controls. In addition, it identifies and evaluates any control weaknesses that may arise.

A risk-based selection process defines the companies/units, significant items in the financial statements and processes including their associated control measures that are relevant.

The defined processes and controls are recorded in a central documentation system. The effectiveness of the various control activities is then assessed. If any control weaknesses are identified, their effect on the financial statements is evaluated. The results are reported at both company or unit level and at Group level. Furthermore, the Group auditing department performs ICS reviews as part of its risk-oriented audit planning.

## Appropriateness and effectiveness of the risk management system and the internal control system (iRM)

A statement on the appropriateness and effectiveness of the iRM process is made annually as part of the internal EnBW Group effectiveness report. The following are examined: the appropriateness and effectiveness of the risk management system at the level of the individual opportunities and risks, signed declarations by the management of important investments and business units and the notification to the internal audit department in the respective reporting year. Findings from the audit of the early risk detection system and the accounting-related ICS carried out by the auditor are presented in the effectiveness report. Financial and non-financial opportunities and risks identified by the system for the iRM process, and also risks identified in the compliance risk assessment are deemed relevant.

All of the individual opportunities and risks that are identified as being material before the application of the envisaged and implemented management instruments are used to assess the appropriateness and effectiveness of the system. Appropriateness is measured using a so-called gross evaluation. This gross evaluation is carried out with the aid of the iRM relevance filter and determines the level of opportunity and risk for each of the four categories: "strategic/sustainability," "operational," "financial" and "compliance." For gross relevance class 5 and above, opportunities and risks are considered appropriate and material enough to be included in the effectiveness report. Risk officers are able to deviate from this classification and can also select a lower relevance class. Management instruments are then documented for the identified opportunities and risks, and the residual level of opportunity and risk (net evaluation) is determined as part of the regular risk reporting process. Ultimately, a self-assessment of the management of the risk is carried out by the risk officer. A second person then examines the management instruments for the specific opportunity/risk to confirm whether the management of the opportunity/risk is effective or not, and so acts as an internal control at the same time. The results flow into the report on the Group effectiveness report.

The managers of the business units and investments finally confirm that they have established a process that is appropriate in accordance with the Group guidelines for complying with the requirements for the ICS and for risk management including compliance management by signing a

corresponding declaration. The results from the effectiveness report are passed on to the auditor during the audit of the early risk detection system and also to the internal audit department. The Board of Management reports on the results to the Supervisory Board and substantiates the findings.

As of the reporting date of 31 December 2023, there were no findings for the reporting year that indicated that the risk management and internal control systems were not appropriate and effective in all material respects. It is generally accepted that an internal control system cannot fully guarantee that material misstatements in accounting will be either prevented or detected.



## Non-financial declaration

As part of the non-financial declaration, we closely analyze the related opportunities and risks in the areas of compliance, social engagement and procurement, as well as in the customers and society, environment and employees goal dimensions. In order to guarantee that the requirements for a non-financial declaration are fulfilled, the established iRM methods and the associated process are used. In this context, the iRM also identifies opportunities and risks relating to climate protection and thus provides important impetus for the implementation of the recommendations of the TCFD. You can find further information on this subject on [p. 146<sup>7</sup>](#).

### Risks associated with the non-financial declaration

The non-financial declaration describes, among other things, the fundamental opportunities and risks connected with the EnBW business model and the activities based upon it that could have a possible impact on any individual issue. Material individual risks with a very high probability of a serious negative impact in relation to any of the following issues do not exist at EnBW.

#### Compliance

The observance of relevant legal regulations and internal company rules forms the basis of our business activities. Managing compliance risks at EnBW (with a main focus on corruption, bribery, antitrust, fraud and data protection risks) is the task of the compliance and data protection management system, which comprise regular risk assessments of this type. Further information on how we handle compliance risks can be found on [p. 39 ff.<sup>7</sup>](#).

#### Corporate citizenship

There are no risks in the area of corporate citizenship. In fact, we take our social responsibility for civic and social engagement seriously ([p. 44 f.<sup>7</sup>](#)).

#### Procurement

**Sustainable procurement – purchasing:** In the area of procurement, risks cannot be excluded due to increasing levels of complexity and the growing demand and heightened public interest for human rights and sustainability in the supply chain. Purchasing utilizes an active risk management system, counters procurement risks and implements the necessary measures for safeguarding against and avoiding risk. These risks are managed using defined processes especially for prequalification and other specified processes that improve the transparency of risks in the supply chain ([p. 52 f.<sup>7</sup>](#)).

**Raw materials procurement – coal and gas:** In the area of raw materials procurement and thus in the associated supply chain, there are above all potential human rights and environmental risks. In the procurement of raw materials, a multistage process is used to check whether human rights and environmental standards are being observed. All coal and gas suppliers as well as any potential suppliers are regularly subjected to a screening process. Other measures that form part of the assessment are carried out in direct cooperation with the compliance department. In coal mining and the production of natural gas, there are possible human rights risks related to the working and living conditions of people in the coal mining regions and natural gas producing regions. In addition, there are environmental risks for the immediate environment in each of these mining and gas producing regions. These risks are associated with an increased risk to the reputation of EnBW as a purchaser of these raw materials. We not only rigorously implement preventative and remedial measures in our raw material supply chains but also remain in constant contact with representatives from civil society, ensuring they are kept informed about any advances made and challenges faced in all themes relating to sustainability concerning the procurement of raw materials ([p. 54 ff.<sup>7</sup>](#)).

### Customers and society goal dimension

**Reputation:** All opportunities and risks, as well as non-financial issues, can have a positive or negative impact on reputation and thus on the key performance indicator Reputation Index [p. 87<sup>7</sup>]. The reputation management department thus identifies opportunities and risks related to reputation, develops measures to protect and improve reputation, advises the Board of Management and management and provides recommendations for action.

**Customer proximity:** Risks/opportunities arise due to the normalization of competition in the new and existing customer business, although they were significantly reduced by the electricity and gas price brake. Other factors are lower market prices since December 2022, although they remain high, as well as political uncertainty and volatile framework conditions. Opportunities exist above all through the provision of a broader range of customer-specific products and services, such as the expansion of the additional business (e-mobility bundles, heating packages, “digital energy consultant”), as well as through processes more oriented to the customer. EnBW also continued to expand its range of electromobility products and services in 2023, as well as its sustainable and digital energy industry services and energy solutions, while targeting its sales activities in this direction [p. 87 ff.<sup>7</sup>].

### Environment goal dimension

**Expansion of renewable energies:** Risks generally exist in the approval and auction process. These risks can result in delays to the further expansion of renewable energies. Due to the fact that the auctions are held on equal terms, we continue to expect a high level of competition. We measure the expansion of renewable energies with our key performance indicator “installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE” [p. 93 f.<sup>7</sup>].

**CO<sub>2</sub> intensity/climate protection:** Risks generally exist in the area of environmental protection due to the operation of power and heat generation plants and infrastructure facilities, with the possible consequences this could have for the air, water, soil and nature. The importance of climate protection is taken into account in, for example, the key performance indicator CO<sub>2</sub> intensity [p. 95 ff.<sup>7</sup>].

We counter these risks using, among other things, an environmental management system certified according to DIN EN ISO 14001, which has been established at key subsidiaries [p. 93<sup>7</sup>]. We take the safety of the population and the protection of the environment very seriously. In this context, risks also exist due to external circumstances, such as extreme weather conditions. We counter these risks using comprehensive organizational and procedural measures to reduce their impact. We ensure that the risks posed by crisis and emergency situations are mitigated quickly, effectively and with a coordinated approach through regular crisis management exercises and other measures [p. 18<sup>7</sup>]. Through our diverse range of activities in the areas of environmental, nature and species protection, we also utilize the opportunity – beyond our core activities – to make a substantial contribution to improving environmental protection. Thanks to the positive public perception of these activities, they can also have a positive impact on our key performance indicator Reputation Index [p. 87<sup>7</sup>].

At the same time, EnBW also faces potential risks due to the ongoing process of climate change. For example, more frequent extreme weather conditions leading to highly fluctuating water levels or limits being placed on emissions locally could have a negative impact, particularly on the operation of power plants and thus the security of supply (electricity grids). The operation of hydropower plants can be restricted by both a lack of, or also an abundance of, water. The output from thermal power plants that must be cooled could possibly be impacted by temperature limits on discharged water. Increasing volatility in the availability of wind, water and sun presents challenges in terms of planning certainty for the operation of power plants and the sale of volumes of electricity [p. 26 ff.<sup>7</sup>]. For this reason, the top opportunity/top risk of wind fluctuations has been reported since the Integrated Annual Report 2016, although these opportunities/risks have no material effect on non-financial issues. In addition, there is uncertainty due to increasing environmental restrictions for the realization of projects for sustainable generation and for the operation of power plants. These risks are managed and mitigated in internal processes using targeted control measures.

Alongside changes in physical climate parameters and other developments relating to or governed by environmental factors, regulatory guidelines and the potential changes associated with them, as well as changes in the market, also flow into the risk evaluation process. However, there are also



opportunities such as changing customer needs (p. 87ff.<sup>7</sup>) and an increasing demand for climate-friendly products such as e-mobility. These opportunities and risks are regularly and systematically identified Group-wide. The recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) are continuously implemented and are communicated in the report on opportunities and risks. Building on the opportunities and risk map (p. 130<sup>7</sup>), a special focus is placed on sustainability aspects – especially climate protection targets – and they are anchored deep in the risk evaluation process. We closely examine the significance of sustainability and climate protection themes for the business model and implement measures and set targets to orientate our opportunity and risk management system even more towards climate-related opportunities and risks.

### Employees goal dimension

**Engagement of employees:** Due to the persistent level of competition on the labor market, especially for qualified and highly qualified specialists, there is a fundamental risk when recruiting employees that the company will not be able to secure a sufficient number of employees with the necessary qualifications at the right time. The more intensive measures to strengthen the company's reputation as an employer, the growing interest in jobs in the energy sector and the possibility of tapping into the international job market lessen this risk to some extent. We believe that regular anonymous employee surveys, from which we derive the People Engagement Index (PEI) as a key performance indicator, are an important tool for seizing opportunities early in the areas of employee development and employee loyalty (p. 101<sup>7</sup>).

**Occupational safety:** Risks generally exist in the areas of occupational safety and health protection in our business activities. We counter these risks using comprehensive organizational and procedural measures, such as workplace-specific hazard analyses, to protect employees as well as possible against any adverse consequences. We also view these measures as an opportunity to preserve the capacity of our employees to do their work and to maintain the position of EnBW as an attractive employer. Occupational safety is measured in the employees goal dimension in the form of the key performance indicator LTIF for companies controlled by the Group and LTIF overall (p. 105<sup>7</sup>).

## Classification of opportunities and risks

The individual evaluations of the top opportunities/risks tell us – based on the level of opportunity/risk – what effects they could have with a high probability of occurrence on our key performance indicators in the finance goal dimension: adjusted EBITDA, debt repayment potential and from the 2024 financial year the two new key performance indicators share of adjusted EBITDA accounted for by low-risk earnings and proportion of taxonomy-aligned expanded capex. The top opportunities/risks are described after the implementation of risk limitation measures. The financial effects are calculated based on a 98% confidence level (which includes the probability of occurrence and the extent of the damage) and break down as follows:

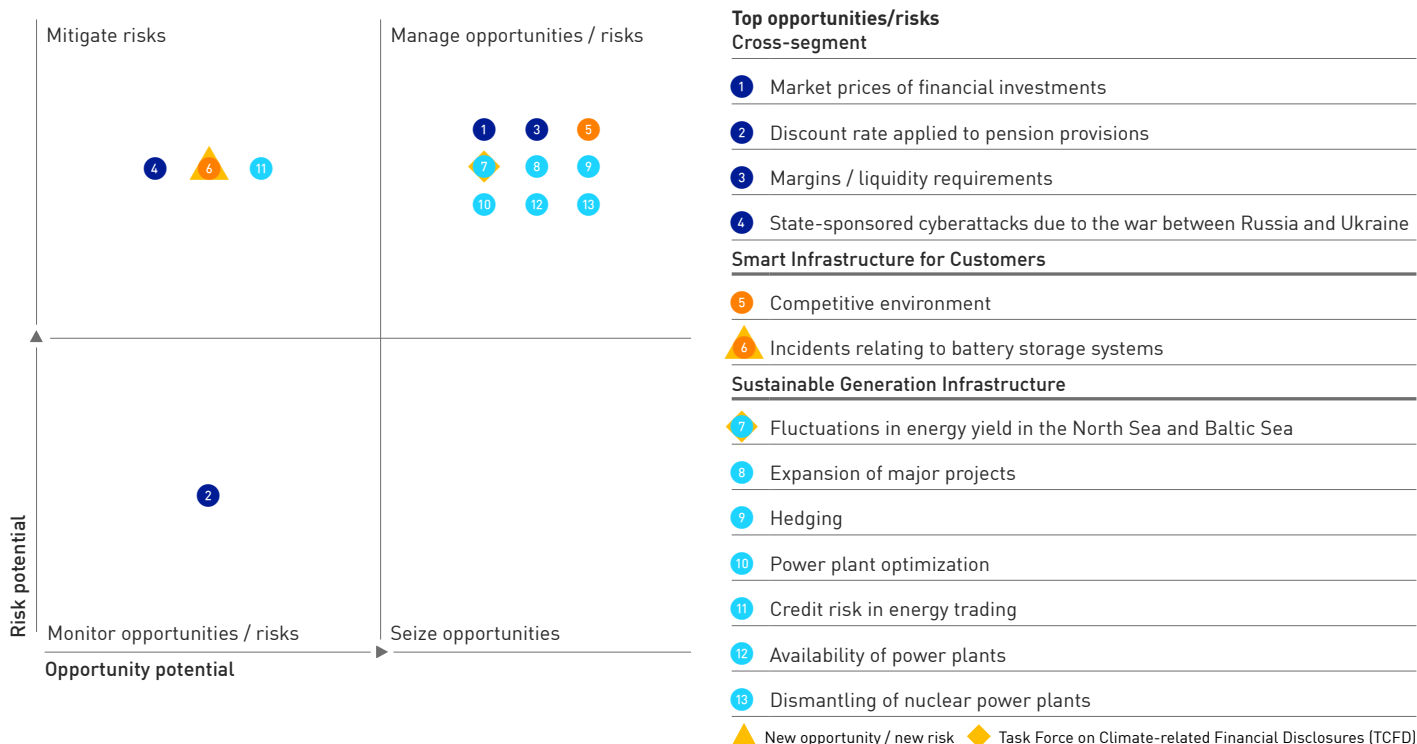
### Classification of the level of opportunity/risk

	Adjusted EBITDA	Net debt
Low	< €200 million	< €600 million
Moderate	≥ €200 million to < €550 million	≥ €600 million to < €2,000 million
Significant	≥ €550 million to < €1,000 million	≥ €2,000 million to < €3,500 million
Material	≥ €1,000 million	≥ €3,500 million

## Opportunity and risk position

The following diagram illustrates how the opportunity and risk position is reported to the Board of Management and the audit committee of the Supervisory Board. The arrangement of the top opportunities/risks in the quadrants indicates how EnBW can employ control measures to exploit the opportunities or to counteract the risks.

### Top opportunities/risks as of 31/12/2023



Details on the top opportunities/risks and their potential effects on the relevant performance indicators are listed in the following section.

The following top opportunities/risks were new in 2023:

- Incidents relating to battery storage systems

### Cross-segment opportunities and risks

Our company faces general risks from legal proceedings due to our contractual relationships with customers, business partners and employees. To a limited extent, we are also conducting legal proceedings relating to topics in the area of corporate law. For this purpose, adequate accounting provisions are made or, in the event of a probability of occurrence of <50%, adequate contingent liabilities. As a consequence, there is also an opportunity of positive effects on earnings if these provisions can be reversed once again. In addition, various court cases, investigations by authorities or proceedings and other claims are pending against EnBW. The chances of these being successful are, however, considered remote or as not sufficiently substantiated and are therefore not reported under contingent liabilities and other financial obligations.

In connection with these types of legal proceedings, we also recognize the water concession risk in Stuttgart. In the court proceedings dealing with the takeover of the water grid after the water concession in the state capital Stuttgart (LHS) expires, LHS and EnBW are still striving to reach an amicable settlement. These court proceedings have been ongoing since 2013 and suspended several times for mediation talks. Unfortunately, it was not possible to reach such an agreement due to a difference of opinion on the valuation. Therefore, there continues to be a risk in 2024 of losing the water grid without receipt of adequate compensation.

### Strategic/sustainable opportunities and risks

#### Financial opportunities and risks

**1 Market prices of financial investments:** The financial investments managed through the asset management system are subject to risks that arise from price losses and other losses in value as a result of the volatile financial market environment. The significant increase in interest rates could lead to higher refinancing costs and negatively impact the level of debt as a result. To improve the opportunity/risk ratio of the portfolio, greater focus is currently being given to sustainability criteria in our investments. There is a moderate level of opportunity and risk in 2024 and 2025. This will have an impact on net debt and thus on the key performance indicator debt repayment potential.

**2 Discount rate applied to pension provisions:** There is generally opportunity and risk associated with any change in the discount rate applied to the pension provisions because the present value of the pension provisions falls when the discount rate increases and increases when the discount rate falls. As of the reporting date of 31 December 2023, the discount rate was 3.15%, which was down 0.55 percentage points on the rate at the end of 2022 (3.7%). Against the background of the expected development of interest rates, we identify a significant level of opportunity and risk for 2024 and a material level of opportunity and risk for 2025. This will have an impact on net debt and thus on the key performance indicator debt repayment potential.

**3 Margins/liquidity requirements:** The Group's liquidity planning is subject to an inherent degree of uncertainty, especially with respect to margin payments. Sharp increases in prices and high volatility in energy trading on the commodity markets (EEX/ICE) have led to high cash inflows and outflows as part of margining processes which are beyond the normal margin requirements. There is a significant level of opportunity and a moderate level of risk for 2024 with an impact on net debt and thus on the key performance indicator debt repayment potential.

**4 State-sponsored cyberattacks due to the war between Russia and Ukraine:** The war is also being accompanied by attacks in cyberspace and the risk of state-sponsored cyberattacks remains high. According to information obtained by the Federal Office for Information Security, the threat of possible cyberattacks on critical infrastructure and suppliers could increase in the foreseeable future. On the reporting date, there was no indication that there would be more than a moderate level of risk in this area in 2024 and a low level of risk in 2025. This potential risk would have an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow. In addition, it would have an impact on the key performance indicator share of adjusted EBITDA accounted for by low-risk earnings.

#### Compliance opportunities and risks

Compliance risk assessments focus, in particular, on assessing risks and defining appropriate preventative measures in the compliance risk areas of corruption, antitrust law and data protection.

Risks for which we derive measures for fighting corruption and bribery primarily exist in sales activities relating to local authority/political business activities when dealing with public officials. Important preventative measures, especially training and advisory services, are described on [p. 39 ff.](#)<sup>7</sup>.

The incorrect handling or illicit disclosure or use of personal data poses data protection risks. These risks exist in view of the digital transformation of many business activities. Advisory and awareness services and process controls are in place to guarantee adherence to legal data protection requirements in the Group. Company-specific measures are coordinated via the compliance and data protection department.

## Smart Infrastructure for Customers segment

### Financial opportunities and risks

5 **Competitive environment:** There is a risk that the legislative framework could have an impact on the competitive situation and sales activities. This affects all EnBW brands in the electricity, gas and energy solutions business, in combination with the volatile procurement prices on the market. The risk of bad debt has reduced but nevertheless still exists. Opportunities currently exist, for example, in the expansion of the range of electromobility products and services, the provision of a broader range of customer-specific products and services, sustainable energy industry services and energy solutions, and through aligning sales activities more towards these products and services. There is a low level of opportunity and risk for 2024 and 2025 with an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow.

6 **Incidents relating to battery storage systems:** In response to six incidents relating to battery storage systems produced by a subsidiary, we carried out a careful investigation of the systems and have implemented a comprehensive range of measures. Appropriate provisions were formed to cover the subsequent costs that were incurred. In terms of any remaining residual risks, there could be a low level of risk for 2024 and 2025 with an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow.

## Sustainable Generation Infrastructure segment

### Financial opportunities and risks

7 **Fluctuations in energy yield in the North Sea and Baltic Sea:** There are generally opportunities and risks associated with wind power plants due to fluctuations in the energy yield. As we expand our wind power plants and our wind farm portfolio continues to grow, the variation in the level of opportunity and risk will naturally increase. Findings on the development of wind conditions are continuously examined to identify the possible effects of these risks and they are taken into account in the planning. There is a low level of opportunity and risk for 2024 and 2025 with an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow. In addition, there would be an impact on the key performance indicator share of adjusted EBITDA accounted for by low-risk earnings.

8 **Expansion of major projects:** There are uncertainties with respect to major projects, especially in the offshore sector, until the time the final investment decision is taken due to changes that may be made to regulatory framework conditions. There may also be additional effects arising from increasing prices and the limited availability of materials and raw materials. We have taken the decision to invest in one of our major projects. This could have an impact on the key performance indicator proportion of taxonomy-aligned expanded capex.

9 **Hedging:** When selling generated electricity volumes, EnBW is exposed to the risk of falling electricity prices and the risk of the unfavorable development of fuel prices in relation to electricity prices. The concept underlying our hedging strategy not only limits risk but also seeks to exploit opportunities. The EnBW Group has exposure to foreign exchange risks from procurement and the hedging of prices for its fuel requirements, as well as from gas and oil trading business. There is a low level of opportunity and risk for 2025 with an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow.

**10 Power plant optimization:** Following the conclusion of the hedging of generation activities, the Trading business unit will manage the further deployment of the power plants. This is being carried out as part of power plant optimization on the forward market, through the sale of system services and through placements on the spot and intraday trading platforms. There is a low level of opportunity and risk for 2024 and 2025 with an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow.

**11 Credit risk in energy trading:** There is a risk that trading partners will fail to fulfill their financial obligations or be unable to fulfill them on time. Our credit management department counters this risk by monitoring credit lines very closely, conducting stress tests and introducing measures to reduce its impact. There is a low level of risk for 2024 with an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow.

**12 Availability of power plants:** There is a general opportunity and risk that exogenous and endogenous factors will have an influence on the planned availability of our power plants and could thus increase or decrease earnings. There is a low level of opportunity and a moderate level of risk in 2024 and a low level of opportunity and risk in 2025 with respect to the pricing assumptions used for our planning. This will have an impact on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow.

**Impairment losses and impending losses on onerous contracts:** As a result of changes to the conditions in the energy industry, there is a general risk that impairment losses on power plants and the formation of provisions for impending losses on onerous contracts for long-term electricity procurement agreements could have a negative impact on earnings. As a result of the reversals of impairment losses on the conventional generation plants in the 2022 financial year, there is an increased risk of impairment losses in the future. We anticipate further impairment losses on the offshore wind farms due to the fact that they will have successively fewer operating years with EEG funding in the future.

#### Operative opportunities and risks

**13 Dismantling of nuclear power plants:** For long-term major projects such as the remaining operation and dismantling of a nuclear power plant, there is a general risk that delays and additional costs may arise over the course of time due to changed framework conditions. Moreover, there is also an opportunity to make lasting cost savings due to synergies over the course of time and due to learning effects for subsequent dismantling activities. During the project planning stage, opportunities and risks were identified that could result in reduced or additional costs, or adjustments to the term of the project. There is a low level of opportunity and risk for both 2024 and 2025 with an impact on net debt and thus on the key performance indicator debt repayment potential.

### Changes compared to the 2022 financial year

The following opportunities/risks are no longer included in the reporting because they were taken into account in the planning, the level of opportunity/risk has reduced or they were reported under other individual themes:

- Legislative and regulatory consequences
- Non-availability of critical materials and services
- Risks to the procurement and supply chain in the sales environment
- Additional expenses for the grid reserve and redispatch

#### Link to the key performance indicators

The top opportunities/risks can have an impact on our key performance indicators, whereby the effects on the non-financial key performance indicators are potential and long term in nature and more difficult to measure. They have thus been shown less boldly in the following diagram.

## Linking the top opportunities/risks with the key performance indicators

Top opportunities/risks	Key performance indicators													
	Financial performance indicators				Strategic performance indicators			Non-financial performance indicators						
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Cross-segment														
1 Market prices of financial investments														
2 Discount rate applied to pension provisions														
3 Margins / liquidity requirements														
4 State-sponsored cyberattacks due to the war between Russia and Ukraine														
Smart Infrastructure for Customers														
5 Competitive environment														
6 Incidents relating to battery storage systems														
Sustainable Generation Infrastructure														
7 Fluctuations in energy yield in the North Sea and Baltic Sea														
8 Expansion of major projects														
9 Hedging														
10 Power plant optimization														
11 Credit risk in energy trading														
12 Availability of power plants														
13 Dismantling of nuclear power plants														
Legend														
Direct effect														
Potential / long-term effect														
Task Force on Climate-related Financial Disclosures (TCFD)														

● Direct effect

○ Potential / long-term effect

◆ Task Force on Climate-related Financial Disclosures (TCFD)

## Overall assessment by the management

The significant increase in interest rates on the capital market could have a negative impact on refinancing costs and, as a result, on the level of debt. The growing threat of state-sponsored cyberattacks around the world continues to pose a high risk and the war between Russia and Ukraine continues to exacerbate the situation. There is still uncertainty with respect to the development of political and economic framework conditions for the energy sector. These factors are also influencing the deployment and availability of our power plants. There continue to be other planning uncertainties, especially with respect to our wind power plants due to natural fluctuations in the wind yield. Although this harbors risks, it can also offer opportunities with respect to the availability and direct distribution of power plant capacities, as well as in the area of hedging.

No risks currently exist that might jeopardize the EnBW Group as a going concern.

# Disclosures pursuant to sections 289a (1) and 315a (1) German Commercial Code (HGB) and explanatory report of the Board of Management

In the following, the Board of Management provides the information prescribed by sections 289a (1) and 315a (1) HGB and explains this in accordance with section 176 (1) sentence 1 AktG.

## Composition of the subscribed capital and shares in capital

The composition of the subscribed capital is described and explained in the notes to the annual and consolidated financial statements in the section “Equity.” Direct or indirect shares in capital that exceed 10% of the voting rights are described and explained in the notes to the annual financial statements in the sections “Shareholder structure” and “Disclosures pursuant to sections 33 ff. German Securities Trading Act (WpHG)” and the notes to the consolidated financial statements in section “Related parties (entities).” Information and explanations about the company’s treasury shares are presented below and can be found in note 20 of the notes to the consolidated financial statements (p. 223<sup>9</sup>).

## Restrictions relating to voting rights or transferability of shares

Agreements were reached on 22 December 2015 between, on the one hand, Zweckverband Oberschwäbische Elektrizitätswerke [Zweckverband OEW] and OEW Energie-Beteiligungs GmbH and, on the other, the Federal State of Baden-Württemberg, NECKARPRI GmbH and NECKARPRI-Beteiligungsgesellschaft mbH, which include clauses relating to restrictions of authorization over EnBW shares held by these parties and a general mutual obligation of both main shareholders to maintain parity investment relationships in EnBW AG with respect to each other. Restrictions relating to voting rights no longer exist to the knowledge of the Board of Management since the aforementioned direct and indirect EnBW shareholders annulled a shareholder agreement on 22 December 2015 that had previously existed between them.

## Legal provisions and statutes on the appointment and dismissal of members of the Board of Management and amendments to the Articles of Association

Pursuant to section 84 AktG in conjunction with section 31 MitbestG, responsibility for the appointment and dismissal of members of the Board of Management rests with the Supervisory Board. This competence is stipulated in article 7 (1) sentence 2 of the Articles of Association of EnBW AG. If, under exceptional circumstances, a necessary member of the Board of Management is missing, section 85 AktG requires that a member of the Board of Management be appointed by the court in urgent cases. The Annual General Meeting has the right to make changes to the Articles of Association in accordance with section 119 (1) no. 6 AktG. The specific rules of procedure are contained in sections 179 and 181 AktG. For practical reasons, the right to amend the Articles of Association was transferred to the Supervisory Board where such amendments affect the wording only. This option pursuant to section 179 (1) sentence 2 AktG is embodied in article 18 (2) of the Articles of Association. Pursuant to section 179 (2) AktG, resolutions by the Annual General Meeting to amend the Articles of Association require a majority of at least three quarters of the capital stock represented when passing the resolution, unless the Articles of Association stipulate a different majority, which, however, for any amendment to the purpose of the company can only be higher. Pursuant to article 18 (1) of the Articles of Association, resolutions by the Annual General Meeting require a simple majority of the votes cast, unless legal regulations or the Articles of Association stipulate otherwise. If the law requires a larger majority of the votes cast or of the capital stock represented when passing the resolution, the simple majority suffices in those cases where the law leaves the determination of the required majority to the Articles of Association.



## Authority of the Board of Management regarding the possibility to issue or redeem shares

No authorized or conditional capital nor any authorization of the Annual General Meeting pursuant to section 71 (1) no. 8 AktG for the purchase of treasury shares by the company currently exists at EnBW AG. Therefore, the company may only acquire treasury shares on the basis of other reasons justifying such purchases in accordance with section 71 (1) AktG. As of 31 December 2023, the company holds 5,749,677 treasury shares which were purchased on the basis of earlier authorizations in accordance with section 71 (1) no. 8 AktG. The company's treasury shares can be sold on the stock exchange or by public offer to all company shareholders. The use of treasury shares, in particular their sale, in any other way can only occur within the scope of the resolution issued by the Annual General Meeting on 29 April 2004. The treasury shares held by EnBW AG do not grant the company any rights in accordance with section 71b AktG.

## Material agreements of the company subject to the condition of a change of control as a result of a takeover bid and the resulting effects

The following material agreements involving EnBW AG and individual companies in the EnBW Group are subject to the condition of a change of control following a takeover bid as defined by sections 289a (1) no. 8 and 315a (1) no. 8 HGB:

The following material financing agreements of EnBW AG will become due for repayment given a change of control, insofar as the purchaser of the shares is not the Federal State of Baden-Württemberg or Zweckverband OEW or another German state-owned public law legal entity:

- sustainability-linked syndicated credit line with a volume of €1.5 billion
- committed credit lines with banks with a volume of €1.7 billion
- bilateral bank loans with a volume of around €1.8 billion
- promissory notes with a volume of €0.5 billion
- a bond issued under the Debt Issuance Program with a volume of JPY 20 billion
- a US private placement with an equivalent value of around US\$0.9 billion

The following material financing agreements of Stadtwerke Düsseldorf AG (SWD AG) will become due for repayment given a change of control, including an indirect change of control, if, after the change of control, the majority of shares in SWD AG are not held directly or indirectly by German legal entities under public law and the City of Düsseldorf does not hold at least 25.05% of the shares in SWD AG:

- promissory notes with a volume of around €0.2 billion
- bank loans/credit lines with a volume of around €0.5 billion

The following material financing agreements of VNG AG will become due for repayment given a change of control, including an indirect change of control, if, after the change of control, the majority of shares in VNG AG are not held directly by German public-sector shareholders or indirectly by these shareholders via controlled legal entities:

- consortium bank loan and bilateral credit lines with a volume of €1.4 billion
- promissory notes with a volume of around €0.3 billion

In the event of a change of control, the financing instruments described above could become due for repayment under the aforementioned conditions, which would mean that the corresponding debt instruments would have to be refinanced – possibly at less favorable conditions.

## **Compensation agreements pursuant to sections 289a (1) no. 9 and 315a (1) no. 9 HGB**

In the event of the premature termination of service on the Board of Management due to a change of control, the possibility of a severance payment for the member of the Board of Management is limited to the pro rata share of annual remuneration(s) for the residual term of the contract. However, the severance payment must not exceed three times the annual remuneration.

### **Note**

Nos. 4 and 5 of sections 289a (1) and 315a (1) HGB were not relevant for EnBW AG in the 2023 financial year.

# Indexes and tables

## Index for the non-financial declaration of the EnBW Group and EnBW AG

In accordance with sections 315b and 289b German Commercial Code (HGB), the EnBW Group and EnBW AG have been obligated to issue a non-financial declaration since the 2017 financial year. We comply with the requirements by fully integrating the non-financial declaration into the Integrated Annual Report as part of the combined management report of the EnBW Group and EnBW AG. For all of the aspects required by the HGB and also other aspects that are material from the perspective of EnBW, such as standing in society, customer satisfaction and supply quality, we fulfill the obligations by providing information about concepts, results and measures, performance indicators and opportunities and risks.

### Non-financial declaration of the EnBW Group and EnBW AG

Description of the business model	p. 17 f. <sup>7</sup>				
Materiality analysis	p. 43 <sup>7</sup>				
EU taxonomy	p. 107 ff. <sup>7</sup>				
<b>TOP Key performance indicators</b>					
Aspects	Themes	Concepts, results and measures	Target achievement 2023	Forecast 2024	Opportunities and risks
Fighting corruption and bribery	Compliance	p. 39 ff. <sup>7</sup> p. 55 ff. <sup>7</sup>	–	–	p. 134 <sup>7</sup>
Social issues	Corporate citizenship	p. 44 ff. <sup>7</sup>	–	–	p. 134 <sup>7</sup>
Respect for human rights	Procurement	p. 52 ff. <sup>7</sup>	–	–	p. 134 f. <sup>7</sup>
Standing in society	Reputation		<b>TOP Reputation Index</b>		
		p. 42 ff. <sup>7</sup> p. 87 <sup>7</sup>	p. 87 <sup>7</sup>	p. 127 <sup>7</sup>	p. 135 <sup>7</sup>
Customer satisfaction	Customer proximity		<b>TOP Customer Satisfaction Index</b>		
		p. 42 ff. <sup>7</sup> p. 87 ff. <sup>7</sup>	p. 88 <sup>7</sup>	p. 127 <sup>7</sup>	p. 135 <sup>7</sup>
Supply quality	Supply reliability		<b>TOP SAIDI Electricity</b>		
		p. 92 <sup>7</sup>	p. 92 <sup>7</sup>	p. 127 <sup>7</sup>	p. 135 <sup>7</sup>
Environmental issues	Expansion of renewable energies		<b>TOP Installed output of RE and share of generation capacity accounted for by RE</b>		
		p. 17 ff. <sup>7</sup> p. 26 ff. <sup>7</sup> p. 93 ff. <sup>7</sup>	p. 93 f. <sup>7</sup>	p. 128 <sup>7</sup>	p. 135 <sup>7</sup>
	CO <sub>2</sub> intensity / climate protection		<b>TOP CO<sub>2</sub> intensity</b>		
		p. 17 ff. <sup>7</sup> p. 26 ff. <sup>7</sup> p. 95 ff. <sup>7</sup>	p. 95 ff. <sup>7</sup>	p. 128 <sup>7</sup>	p. 135 f. <sup>7</sup>
Employee issues	Engagement of employees		<b>TOP People Engagement Index (PEI)</b>		
		p. 101 ff. <sup>7</sup>	p. 101 <sup>7</sup>	p. 128 <sup>7</sup>	p. 136 <sup>7</sup>
	Occupational safety		<b>TOP LTIF for companies controlled by the Group</b>		
		p. 104 ff. <sup>7</sup>	p. 105 <sup>7</sup>	p. 129 <sup>7</sup>	p. 136 <sup>7</sup>

The non-financial declaration is issued jointly for the EnBW Group and EnBW AG and, unless stated otherwise, covers the group of consolidated companies in accordance with the International Financial Reporting Standards (IFRS). Any differences between statements made for the Group and for EnBW AG are clearly identified in the text. Information on the business model can be found in the section "Business model" (p. 17 f.<sup>7</sup>). We have not identified any material individual risks in the 2023 financial year that have a very high probability of a serious negative impact in relation to the relevant non-financial issues.

Further information on the **GRI content index** can be found on our website.

[Online](#) <sup>7</sup>

EnBW has reported in compliance with the GRI Standards for the period from 1 January to 31 December 2023. An audit will be carried out in the second quarter of 2024 as part of the GRI content index service. Our sustainability reporting also complies with the Communication on Progress (COP) requirements for the UN Global Compact and is based to an increasing extent on the UN Sustainable Development Goals. The framework standards and the SDGs have been used as the basis for the non-financial declaration.

Information on the diversity concept can be found in the declaration of corporate management (p. 168<sup>7</sup>).

EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft has audited the consolidated financial statements and the combined management report including the contents of the non-financial declaration with reasonable assurance and has thus carried out a complete audit (except for the section “Appropriateness and effectiveness of the risk management system and the internal control system (iRM)” in the “Report on opportunities and risks”).

## Index for the Task Force on Climate-related Financial Disclosures (TCFD)

EnBW started to implement the recommendations of the TCFD in 2017. This implementation was continued in the current financial year. The index also includes other themes besides these where we are working on the further implementation of the TCFD recommendations.

### Task Force on Climate-related Financial Disclosures (TCFD)

TCFD element	Themes	Section	Page reference
Governance	<ul style="list-style-type: none"> <li>Corporate management</li> <li>Materiality analysis</li> <li>Investment guidelines</li> <li>Climate protection initiatives</li> <li>Overall assessment by the management</li> <li>Board of Management remuneration</li> </ul>	<ul style="list-style-type: none"> <li>Corporate governance</li> <li>In dialog with our stakeholders</li> <li>Strategy, goals and performance management system</li> <li>The EnBW Group</li> <li>In dialog with our stakeholders</li> <li>Strategy, goals and performance management system</li> <li>Overall assessment of the economic situation of the Group</li> <li>Corporate governance</li> <li>The EnBW Group</li> </ul>	<p>p. 37 f.<sup>7</sup></p> <p>p. 43<sup>7</sup></p> <p>p. 36<sup>7</sup></p> <p>p. 80 f.<sup>7</sup></p> <p>p. 43 f.<sup>7</sup></p> <p>p. 30 ff.<sup>7</sup></p> <p>p. 123<sup>7</sup></p> <p>p. 37<sup>7</sup></p> <p>p. 86<sup>7</sup></p>
Strategy	<ul style="list-style-type: none"> <li>Robustness of business model / scenario analysis</li> <li>Strategy, strategic development</li> <li>Interdependencies</li> <li>Materiality analysis</li> <li>Green bonds</li> <li>General conditions, climate protection</li> </ul>	<ul style="list-style-type: none"> <li>Business model</li> <li>Strategy, goals and performance management system</li> <li>Strategy, goals and performance management system</li> <li>In dialog with our stakeholders</li> <li>Strategy, goals and performance management system</li> <li>The EnBW Group</li> <li>General conditions</li> </ul>	<p>p. 18 f.<sup>7</sup></p> <p>p. 26 ff.<sup>7</sup></p> <p>p. 35 f.<sup>7</sup></p> <p>p. 43<sup>7</sup></p> <p>p. 32<sup>7</sup></p> <p>p. 77<sup>7</sup></p> <p>p. 59<sup>7</sup></p>
Risk management	<ul style="list-style-type: none"> <li>Integrated opportunity and risk management including opportunity and risk map</li> <li>Environment goal dimension: opportunities and risks</li> </ul>	<ul style="list-style-type: none"> <li>Report on opportunities and risks</li> <li>Report on opportunities and risks</li> </ul>	<p>p. 130 ff.<sup>7</sup></p> <p>p. 135 f.<sup>7</sup></p>
Performance indicators and targets	<ul style="list-style-type: none"> <li>Sustainability ratings</li> <li>Key performance indicators and long-term targets</li> <li>Climate protection targets: Science Based Targets (SBT)</li> <li>Environment goal dimension: key performance indicators and other performance indicators</li> </ul>	<ul style="list-style-type: none"> <li>The EnBW Group</li> <li>Strategy, goals and performance management system</li> <li>Strategy, goals and performance management system</li> <li>The EnBW Group</li> <li>Forecast</li> </ul>	<p>p. 76<sup>7</sup></p> <p>p. 32 ff.<sup>7</sup></p> <p>p. 30 ff.<sup>7</sup></p> <p>p. 93 ff.<sup>7</sup></p> <p>p. 128<sup>7</sup></p>

Key performance indicators for the EU taxonomy

Revenue

	Substantial contribution criteria								No significant harm to other EU objectives (DNSH)											
						The sustain- able use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The pro- tection and restoration of biodi- versity and ecosystems	Climate change mitigation	Climate change adaptation	The sustain- able use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The pro- tection and restoration of biodi- versity and ecosystems		Taxonomy- aligned proportion of revenue 2022	Category enabling activities	Category transitional activities	
	Code	Revenue	Proportion of revenue	Climate protection	Climate change adaptation											Minimum social safeguards				
		in € million	in %	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	in %	E/-	T/-	
A. Taxonomy-eligible activities		7,778.2	17.5																	
A.1 Environmentally sustainable activities (taxonomy-aligned)		7,222.6	16.3														13.5			
Electricity generation via photovoltaic technology	CCM 4.1	59.6	0.1	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.1	–	–	
Electricity generation via wind power	CCM 4.3	425.6	1.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.4	–	–	
Transmission and distribution of electricity	CCM 4.9	4,694.8	10.6	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	9.3	E	–	
Storage of electricity <sup>1</sup>	CCM 4.10	1,520.1	3.4	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	3.1	E	–	
Production of biogas and biofuels for the transport sector and liquid biofuels <sup>2</sup>	CCM 4.13	116.0	0.3	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.1	–	–	
District heating/cooling distribution	CCM 4.15	3.1	0.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.0	–	–	
Electricity generation from fossil gaseous fuels	CCM 4.29	0.0	0.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.0	–	T	
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	0.0	0.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.0	–	T	
Construction, expansion and operation of systems to extract, treat and supply water	CCM 5.1	212.7	0.5	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.4	–	–	
Infrastructure for low-carbon road traffic and public transport	CCM 6.15	190.7	0.4	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.2	E	–	
Revenue from environmentally sustainable activities (taxonomy-aligned) (A.1)																				
of which enabling activities		6,405.6	14.4	–	–	–	–	–	–	–	yes	yes	yes	yes	yes	yes	12.6	E	–	
of which transitional activities		0.0	0.0	–	–	–	–	–	–	–	yes	yes	yes	yes	yes	yes	0.0	–	T	
A.2 Taxonomy-eligible activities that are not taxonomy-aligned		555.6	1.3																	
Production of biogas and biofuels for the transport sector and liquid biofuels <sup>2</sup>	CCM 4.13	3.8	0.0	–	–	–	–	–	–	–	–	–	–	–	–	–	0.1	–	–	
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	551.8	1.3	–	–	–	–	–	–	–	–	–	–	–	–	–	0.0	–	–	
Revenue from taxonomy-eligible activities that are not taxonomy-aligned (taxonomy non-aligned activities) (A.2)																				
Total (A.1 + A.2)		7,778.2	17.5																	
B. Taxonomy non-eligible activities		36,652.5	82.5																	
Revenue from non-environmentally sustainable activities (taxonomy-aligned) (B)		36,652.5	82.5																	
Total (A + B)		44,430.7	100.0																	

1 Including 4.5 Electricity generation from hydropower.  
2 Including 4.20 Combined heat/cooling and power plants with bioenergy.

Capex<sup>1</sup>

	Substantial contribution criteria									No significant harm to other EU objectives (DNSH)								
					The sustain- able use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The pro- tection and restoration of biodi- versity and ecosystems			The sustain- able use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The pro- tection and restoration of biodi- versity and ecosystems				
	Code	Capex	Proportion of capex	Climate protection	Climate change adaptation				Climate change mitigation	Climate change adaptation					Minimum social safeguards	Taxonomy- aligned proportion of capex 2022	Category enabling activities	Category transitional activities
		in € million	in %	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	in %	E/-	T/-
A. Taxonomy-eligible activities		4,194.1	86.2															
A.1 Environmentally sustainable activities (taxonomy-aligned)		4,191.2	86.1													82.42		
Electricity generation via photovoltaic technology	CCM 4.1	74.4	1.5	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	3.00	–	–
Electricity generation via wind power	CCM 4.3	855.5	17.6	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	10.05	–	–
Transmission and distribution of electricity	CCM 4.9	2,359.1	48.5	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	51.73	E	–
Storage of electricity <sup>2</sup>	CCM 4.10	38.9	0.8	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.80	E	–
Production of biogas and biofuels for the transport sector and liquid biofuels <sup>3</sup>	CCM 4.13	11.0	0.2	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.54	–	–
Transmission and distribution networks for renewable and low-carbon gases	CCM 4.14	266.2	5.5	yes	no	no	no	no		yes	yes	yes	yes	yes	yes	8.42	–	–
District heating/cooling distribution	CCM 4.15	28.7	0.6	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.39	–	–
Electricity generation from fossil gaseous fuels	CCM 4.29	251.3	5.2	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.99	–	T
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	97.4	2.0	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.94	–	T
Construction, expansion and operation of systems to extract, treat and supply water	CCM 5.1	27.7	0.6	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	0.64	–	–
Infrastructure for low-carbon road traffic and public transport	CCM 6.15	181.0	3.7	yes	no	no	no	no	–	yes	yes	yes	yes	yes	yes	4.92	E	–
Capex from environmentally sustainable activities (taxonomy-aligned) (A.1)																		
of which enabling activities		2,579.0	53.0	–	–	–	–	–	–	yes	yes	yes	yes	yes	yes	57.4	E	–
of which transitional activities		348.7	7.2	–	–	–	–	–	–	yes	yes	yes	yes	yes	yes	1.9	–	T
A.2 Taxonomy-eligible activities that are not taxonomy-aligned		2.9	0.1															
Production of biogas and biofuels for the transport sector and liquid biofuels <sup>2</sup>	CCM 4.13	0.1	0.0	–	–	–	–	–	–	–	–	–	–	–	–	0.00	–	–
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	2.8	0.1	–	–	–	–	–	–	–	–	–	–	–	–	0.07	–	–
Capex from taxonomy-eligible activities that are not taxonomy-aligned (taxonomy non-aligned activities) (A.2)																		
Total [A.1 + A.2]		4,194.1	86.2															
B. Taxonomy non-eligible activities		671.6	13.8															
Capex from non-environmentally sustainable activities (taxonomy-aligned) (B)		671.6	13.8															
Total [A + B]		4,865.7	100.0															

1 The figures for the previous year have been restated.  
2 Including 4.5 Electricity generation from hydropower.  
3 Including 4.20 Combined heat/cooling and power plants with bioenergy.

Opex<sup>1</sup>

	Substantial contribution criteria									No significant harm to other EU objectives (DNSH)								
					The sustain- able use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The pro- tection and restoration of biodi- versity and ecosystems			The sustain- able use and protection of water and marine resources	The tran- sition to a circular economy	Pollution prevention and control	The pro- tection and restoration of biodi- versity and ecosystems				
	Code	Opex	Proportion of opex	Climate protection	Climate change adaptation				Climate protection	Climate change adaptation					Minimum social safeguards	Taxonomy- aligned proportion of opex 2022	Category enabling activities	Category transitional activities
		in € million	in %	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	in %	E/-	T/-
A. Taxonomy-eligible activities		369.9	23.3															
A.1 Environmentally sustainable activities (taxonomy-aligned)		367.3	23.2													22.9		
Electricity generation via photovoltaic technology	CCM 4.1	-1.7	-0.1	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	0.4	–	–
Electricity generation via wind power	CCM 4.3	54.7	3.4	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	4.1	–	–
Transmission and distribution of electricity	CCM 4.9	265.7	16.8	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	15.4	E	–
Storage of electricity <sup>2</sup>	CCM 4.10	14.9	0.9	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	1.0	E	–
Production of biogas and biofuels for the transport sector and liquid biofuels <sup>2</sup>	CCM 4.13	15.9	1.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	1.0	–	–
District heating/cooling distribution	CCM 4.15	0.7	0.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	0.0	–	–
Electricity generation from fossil gaseous fuels	CCM 4.29	0.0	0.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	0.0	–	T
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	0.0	0.0	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	0.0	–	T
Construction, expansion and operation of systems to extract, treat and supply water	CCM 5.1	18.8	1.2	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	1.1	–	–
Infrastructure for low-carbon road traffic and public transport	CCM 6.15	-1.7	-0.1	yes	no	no	no	no	no	–	yes	yes	yes	yes	yes	0.0	E	–
Opex from environmentally sustainable activities (taxonomy-aligned) (A.1)																		
of which enabling activities		278.9	17.6	–	–	–	–	–	–	–	yes	yes	yes	yes	yes	16.4	E	–
of which transitional activities		0.0	0.0	–	–	–	–	–	–	–	yes	yes	yes	yes	yes	0.0	–	T
A.2 Taxonomy-eligible activities that are not taxonomy-aligned		2.5	0.2															
Production of biogas and biofuels for the transport sector and liquid biofuels <sup>3</sup>	CCM 4.13	0.5	0.0	–	–	–	–	–	–	–	–	–	–	–	–	0.0	–	–
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	2.0	0.1	–	–	–	–	–	–	–	–	–	–	–	–	0.2	–	–
Opex from taxonomy-eligible activities that are not taxonomy-aligned (taxonomy non-aligned activities) (A.2)																		
Total (A.1 + A.2)		369.8	23.3															
B. Taxonomy non-eligible activities		1,216.3	76.7															
Opex from non-environmentally sustainable activities (taxonomy-aligned) (B)		1,216.3	76.7															
Total (A + B)		1,586.1	100.0															

1 The figures may not add up due to rounding differences.  
2 Including 4.5 Electricity generation from hydropower.  
3 Including 4.20 Combined heat/cooling and power plants with bioenergy.



## Contribution to the environmental objectives of the EU taxonomy

### Proportion of taxonomy-aligned and taxonomy-eligible revenue for each environmental objective

in %	Proportion of revenue/total revenue	
	Taxonomy-aligned for each environmental objective	Taxonomy-eligible for each environmental objective
Climate protection	16.3	1.3
Climate change adaptation	0.0	0.0
The sustainable use and protection of water and marine resources	0.0	0.0
The transition to a circular economy	0.0	0.0
Pollution prevention and control	0.0	0.0
The protection and restoration of biodiversity and ecosystems	0.0	0.0

### Proportion of taxonomy-aligned and taxonomy-eligible capex for each environmental objective

in %	Proportion of capex/total capex	
	Taxonomy-aligned for each environmental objective	Taxonomy-eligible for each environmental objective
Climate protection	86.1	0.1
Climate change adaptation	0.0	0.0
The sustainable use and protection of water and marine resources	0.0	0.0
The transition to a circular economy	0.0	0.0
Pollution prevention and control	0.0	0.0
The protection and restoration of biodiversity and ecosystems	0.0	0.0

### Proportion of taxonomy-aligned and taxonomy-eligible opex for each environmental objective

in %	Proportion of opex/total opex	
	Taxonomy-aligned for each environmental objective	Taxonomy-eligible for each environmental objective
Climate protection	23.2	0.2
Climate change adaptation	0.0	0.0
The sustainable use and protection of water and marine resources	0.0	0.0
The transition to a circular economy	0.0	0.0
Pollution prevention and control	0.0	0.0
The protection and restoration of biodiversity and ecosystems	0.0	0.0

## Revenue

### Template 1 Nuclear and fossil gas related activities

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	NO
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
Row	Fossil gas related activities	
1.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
2.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
3.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

### Template 2 Taxonomy-aligned economic activities (denominator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	7,222.6	16.3	7,222.6	16.3	–	–
8.	Total applicable KPI	44,430.7	100.0	44,430.7	100.0	–	–

Template 3 Taxonomy-aligned economic activities (numerator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	7,222.6	100.0	7,222.6	100.0	–	–
8.	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	7,222.6	100.0	7,222.6	100.0	–	–

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	551.8	1.3	551.8	1.3	–	–
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	3.8	0.0	3.8	0.0	–	–
8.	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	555.6	1.3	555.6	1.3	–	–

## Template 5 Taxonomy non-eligible economic activities

Row	Economic activities	in € million	%
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	139.6	0.3
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
7.	<b>Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI</b>	<b>36,512.9</b>	<b>82.2</b>
8.	<b>Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI</b>	<b>36,652.5</b>	<b>82.5</b>

## Capex

### Template 1 Nuclear and fossil gas related activities

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	NO
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
Row	Fossil gas related activities	
1.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
2.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
3.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

### Template 2 Taxonomy-aligned economic activities (denominator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	251.3	5.2	251.3	5.2	–	–
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	97.4	2.0	97.4	2.0	–	–
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	3,842.5	79.0	3,842.5	79.0	–	–
8.	Total applicable KPI	4,865.7	100.0	4,865.7	100.0	–	–

Template 3 Taxonomy-aligned economic activities (numerator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	251.3	6.0	251.3	6.0	–	–
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	97.4	2.3	97.4	2.3	–	–
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
7.	<b>Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI</b>	<b>3,842.5</b>	<b>91.7</b>	<b>3,842.5</b>	<b>91.7</b>	<b>–</b>	<b>–</b>
8.	<b>Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI</b>	<b>4,191.2</b>	<b>100.0</b>	<b>4,191.2</b>	<b>100.0</b>	<b>–</b>	<b>–</b>

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	2.8	0.1	2.8	0.1	–	–
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
7.	<b>Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>–</b>	<b>–</b>
8.	<b>Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI</b>	<b>2.9</b>	<b>0.1</b>	<b>2.9</b>	<b>0.1</b>	<b>–</b>	<b>–</b>

## Template 5 Taxonomy non-eligible economic activities

Row	Economic activities	in € million	%
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0.2	0.0
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
7.	<b>Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI</b>	<b>671.4</b>	<b>13.8</b>
8.	<b>Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI</b>	<b>671.6</b>	<b>13.8</b>



## Opex

### Template 1 Nuclear and fossil gas related activities

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	NO
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
Row	Fossil gas related activities	
1.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
2.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
3.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

### Template 2 Taxonomy-aligned economic activities (denominator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	367.3	23.2	367.3	23.2	–	–
8.	Total applicable KPI	1,586.1	100.0	1,586.1	100.0	–	–

Template 3 Taxonomy-aligned economic activities (numerator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0.0	0.0	0.0	0.0	–	–
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–
7.	<b>Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI</b>	<b>367.3</b>	<b>100.0</b>	<b>367.3</b>	<b>100.0</b>	<b>–</b>	<b>–</b>
8.	<b>Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI</b>	<b>367.3</b>	<b>100.0</b>	<b>367.3</b>	<b>100.0</b>	<b>–</b>	<b>–</b>

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities<sup>1</sup>

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		in € million	%	in € million	%	in € million	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	2.0	0.1	2.0	0.1	–	–
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
7.	<b>Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI</b>	<b>0.5</b>	<b>0.0</b>	<b>0.5</b>	<b>0.0</b>	<b>–</b>	<b>–</b>
8.	<b>Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI</b>	<b>2.5</b>	<b>0.2</b>	<b>2.5</b>	<b>0.2</b>	<b>–</b>	<b>–</b>

<sup>1</sup> The figures may not add up due to rounding differences.

Template 5 Taxonomy non-eligible economic activities


Row	Economic activities	in € million	%
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	20.0	1.3
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–
7.	<b>Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI</b>	<b>1,196.3</b>	<b>75.4</b>
8.	<b>Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI</b>	<b>1,216.3</b>	<b>76.7</b>

## Declaration of the legal representatives

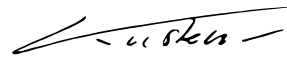
We assure to the best of our knowledge that, in accordance with the applicable accounting principles, the annual and consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the company and the Group, and that the combined management report gives a true and fair view of the business development including the result and situation of the company and the Group and also describes the significant opportunities and risks relating to the anticipated development of the company and the Group.

Karlsruhe, 11 March 2024

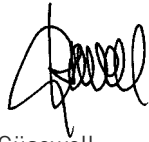
EnBW Energie Baden-Württemberg AG



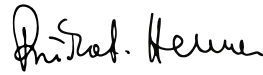
Dr. Stamatelopoulos



Kusterer



Güsewell



Rückert-Hennen

# Declaration of corporate management

162 Board of Management and Supervisory Board

168 Diversity

169 Shareholders and Annual General Meeting

169 Compliance

170 Remuneration of the Board of Management and  
the Supervisory Board

170 Transparency

171 Financial reporting and the audit

172 Declaration of compliance

Good corporate governance is an essential part of the corporate culture at EnBW Energie Baden-Württemberg AG (EnBW). We are convinced that responsible and transparent corporate governance strengthens the trust and confidence that customers, capital providers, employees and the general public place in the company, thereby contributing to its long-term success. The Board of Management and Supervisory Board have the responsibility of managing and supervising the company above and beyond merely fulfilling statutory requirements, but to do so in accordance with recognized benchmarks for good corporate governance and in harmony with the principles of a social market economy, guaranteeing the continued existence of the company and ensuring a sustainable increase in its added value. As the member of the Board of Management responsible for corporate governance, Colette Rückert-Hennen monitored compliance with the German Corporate Governance Code (DCGK) at EnBW and reported extensively to the Board of Management and Supervisory Board on all current themes pertaining to corporate governance. Both boards acknowledged the report from Colette Rückert-Hennen and subsequently approved the company's declaration of compliance, which is reproduced in full at the end of this report.

In this declaration of corporate management, the Supervisory Board and Board of Management report on the corporate governance of the company (corporate governance report) above and beyond the legal requirements according to sections 289f (2) and 315d HGB.

The corporate governance report is based on the new version of the DCGK from 28 April 2022, which was published in the German Federal Gazette on 27 June 2022, because this version of the code was definitive in the reporting period. References to the DCGK in this declaration refer to the version from 28 April 2022.

## Board of Management and Supervisory Board

Close and trusting cooperation for the good of the company is considered an integral part of the EnBW culture by the Board of Management and Supervisory Board.

The Board of Management jointly manages the company on its own responsibility. In the reporting period, the Board of Management comprised five members, of which one held the position of Chairman. The Board of Management is tasked with defining the company goals and developing the strategic orientation of the EnBW Group, agreeing this with the Supervisory Board and implementing it accordingly. In addition, the Board of Management ensures Group-wide compliance with statutory regulations and internal guidelines, as well as appropriate risk management and risk controlling.

Although the declaration of corporate management only reports on the situation as of the reporting date and thus exclusively provides information on relevant subject matter in the reporting period, we want to provide the additional information that the Board of Management has comprised four members since 9 March 2024, of which one holds the position of Chairman and one the position of Deputy Chairman. In agreement with the Supervisory Board, Andreas Schell stepped down from his Board of Management mandate and his position as Chairman of the Board of Management as of the end of 8 March 2023. The Supervisory Board appointed Dr. Georg Stamatelopoulos as Chairman of the Board of Management and Thomas Kusterer as Deputy Chairman with effect from 9 March 2024. Dr. Georg Stamatelopoulos will still be responsible for the remit "Sustainable Generation Infrastructure" until his successor has been appointed.

Important aspects of cooperation within the Board of Management are defined in its rules of procedure. These regulate, among other things, the frequency at which the meetings of the Board of Management led by the Chairman are held multiple times a month and stipulate that all important questions relating to the management of the Group and any cross-departmental issues will be addressed at these meetings. Furthermore, the rules of procedure include a rule that resolutions will be taken by the Board of Management on a majority vote basis, whereby the Chairman has the casting vote in the event of a tie.

The **curricula vitae for all members of the Board of Management** can be found on our website.

Online <sup>7</sup>

In the reporting period, the Chairman of the Board of Management was Dr. Andreas Schell. Dr. Georg Stamatelopoulos has been Chairman of the Board of Management and Thomas Kusterer Deputy Chairman since 9 March 2024. Further details on the members of the Board of Management and

the division of responsibilities can be found in the information provided on [p. 14<sup>7</sup>](#), as well as in the section “Corporate governance” under “Management and supervision” on [p. 37<sup>7</sup>](#) of the Integrated Annual Report 2023.

The standard retirement age set for members of the Board of Management at EnBW is 63 years old. In the reporting period and also currently, the members of the Board of Management did not and do not hold more than three positions on supervisory boards at non-Group listed companies or on supervisory bodies at non-Group companies that have comparable requirements. As in the past, there were also no known conflicts of interests for the members of the Board of Management in the 2023 financial year. EnBW did not enter into any significant transactions with individuals or companies that are related to a member of the Board of Management in the reporting period.

In the reporting period, the Board of Management discussed the Six-Monthly Financial Report and the quarterly statements with the audit committee of the Supervisory Board before publication.

The Supervisory Board of EnBW is comprised of 20 members, half of which are representatives elected by the shareholders and half by employees. The Chairman of the Supervisory Board is Lutz Feldmann.

The elected employee and shareholder representatives began their term of office at the conclusion of the Annual General Meeting of EnBW on 5 May 2021. The defined term of office for the elected members of the Supervisory Board ends at the conclusion of the ordinary Annual General Meeting in 2026.

There were changes to the composition of the Supervisory Board in the reporting period.

As previously reported in the declaration of corporate management 2022, the process to elect employee representative members of the Supervisory Board of EnBW Energie Baden-Württemberg AG in accordance with the German Co-Determination Act, which started in October 2020 and was temporarily interrupted due to the coronavirus pandemic, was concluded on 8 February 2023. In the election of the delegates in accordance with the Third Electoral Code to the German Co-Determination Act on 8 February 2023, the current members of the Supervisory Board Achim Binder, Ulrike Weindel, Klarissa Lerp, Stefan Paul Hamm, Michaela Kräutter and Dr. Bernd-Michael Zinow were reelected and the candidates Joachim Rudolf, Bernad Lukacin, Christina Ledong and Thorsten Pfirrmann were elected as members of the Supervisory Board for the first time. The four newly elected members of the Supervisory Board replace the former members Dietrich Herd, Thomas Landsbek, Dr. Nadine Müller and Jürgen Schäfer, who all stepped down from the Supervisory Board on 8 February 2023 following the election of their successors.

In addition, Lothar Wölfle (shareholder representative) stepped down from his position as a member of the Supervisory Board as of the end of 13 May 2023. Based on a proposal by the Supervisory Board, the ordinary Annual General Meeting appointed Heiner Scheffold on 3 May 2023 as a member of the Supervisory Board with effect from the start of 14 May 2023 until the end of the regular election period for his predecessor.

Further details on the Supervisory Board and its composition can be found in the information provided on [p. 303 ff.<sup>7</sup>](#) and [p. 307 ff.<sup>7</sup>](#), as well as in the section “Corporate governance” under “Management and supervision” on [p. 38<sup>7</sup>](#) of the Integrated Annual Report 2023.

The key task of the Supervisory Board is to advise and supervise the Board of Management on its management of the company. In general, all members of the Supervisory Board have the same rights and obligations and are not bound by orders or instructions. Important aspects of the cooperation within the Supervisory Board are defined in its rules of procedure. These rules require the Supervisory Board to meet regularly for ordinary meetings, as well as for extraordinary meetings as necessary, that are chaired by the Chairman. The members of the Board of Management generally participate in the meetings, although the Supervisory Board can also convene without the Board of Management if necessary. The Board of Management regularly, comprehensively and promptly informs the Supervisory Board in accordance with the rules of procedure for the Supervisory Board about, in particular, all of the issues listed in section 90 of the German Stock Corporation Act (AktG), all important financial and non-financial performance indicators and the risks faced by the company and the Group and their development, strategy, planning, the accounting process, the appropriateness



and effectiveness of the internal control system, risk management system and the internal auditing system, compliance and other important matters.

Between the meetings of the Supervisory Board, there is ongoing communication between the Chairman of the Supervisory Board and the Board of Management, particularly with the Chairman of the Board of Management, in order to discuss issues relating to the strategy, planning, business performance, risk situation, risk management and compliance within the company. He is immediately informed about important events that are material for the assessment of the situation, development and management of the company by the Chairman of the Board of Management. If necessary, the Chairman of the Supervisory Board then reports to the Supervisory Board and may also convene an extraordinary meeting.

In addition, the rules of procedure for the Supervisory Board also define business activities and measures that may only be carried out by the Board of Management with the approval of the Supervisory Board. Furthermore, resolutions are also passed by the Supervisory Board on a majority vote basis, whereby the Chairman of the Supervisory Board has the casting vote in the event of a tie in accordance with the Articles of Association of EnBW. If ordered by the Chairman of the Supervisory Board, resolutions can also be passed outside of meetings, if this is not opposed by a majority of the members of the Supervisory Board. The Supervisory Board provided detailed information on its main activities and the contents of its discussions in the 2023 financial year in its report to the Annual General Meeting. The rules of procedure for the Supervisory Board are not published on the Internet.

Another important task of the Supervisory Board is to appoint and, if necessary, dismiss the members of the Board of Management. In this context, the Supervisory Board works together with the Board of Management to ensure appropriate long-term succession planning for the Board of Management. This is the task of the personnel committee. It consults regularly and in close communication with the Chairman of the Board of Management on issues relating to the up-to-dateness and further development of the Board of Management structure, the division of responsibilities and ensuring the Board of Management remits can be filled after the end of the term of office, taking into account the current terms of office. In advance of any decision to appoint a new member of the Board of Management, a requirement profile is developed in good time as necessary and a comprehensive selection process is usually carried out with the aid of specialist support.

In order to improve the efficiency of its work and to handle complex issues, the Supervisory Board has formed specialist committees:

- **Nomination committee:** Dr. Danyal Bayaz, Dr. Dietrich Birk, Stefanie Bürkle, Lutz Feldmann (Chairman), Dr. Wolf-Rüdiger Michel, Gunda Röstel
- **Audit committee:** Michaela Kräutter, Dr. Hubert Lienhard, Bernad Lukacin, Dr. Wolf-Rüdiger Michel, Thorsten Pfirmann, Gunda Röstel (Chairwoman), Heiner Scheffold, Ulrike Weindel
- **Personnel committee:** Dr. Danyal Bayaz, Achim Binder, Stefanie Bürkle, Lutz Feldmann (Chairman), Stefan Paul Hamm, Joachim Rudolf
- **Finance and investment committee:** Dr. Danyal Bayaz, Achim Binder, Dr. Dietrich Birk, Stefanie Bürkle, Lutz Feldmann (Chairman), Stefan Paul Hamm, Joachim Rudolf, Dr. Bernd-Michael Zinow
- **Mediation committee** (pursuant to section 27 (3) German Co-determination Act (MitbestG)): Dr. Danyal Bayaz, Achim Binder, Lutz Feldmann (Chairman), Klarissa Lerp
- **Digitalization committee:** Christina Ledong, Dr. Hubert Lienhard (Chairman), Bernad Lukacin, Marika Lulay, Harald Sievers, Ulrike Weindel
- **Ad hoc committee:** Achim Binder, Gunda Röstel, Harald Sievers, Dr. Bernd-Michael Zinow (Chairman)
- **Special committee** (until 3 May 2023): Dr. Danyal Bayaz, Achim Binder, Lutz Feldmann (Chairman), Stefan Paul Hamm, Gunda Röstel, Joachim Rudolf, Lothar Wölfle, Dr. Bernd-Michael Zinow

In order for the Supervisory Board to optimally perform its functions, it formed a special committee at its meeting on 29 September 2022 with immediate effect that served until the end of the day of the Annual General Meeting of EnBW Energie Baden-Württemberg AG on 3 May 2023. This special committee examined, in particular, the impact of the war between Russia and Ukraine on the business of EnBW and its subsidiaries. The special committee comprised four members of the Supervisory Board who were shareholder representatives and four members who were employee representatives.

The **report to the Annual General Meeting** is accessible to the general public here.

Online ↗

In accordance with the DCGK, the nomination committee exclusively comprises shareholder representatives and proposes suitable candidates to the Supervisory Board for election as members of the Supervisory Board at the Annual General Meeting.

The audit committee is responsible, in particular, for monitoring accounting, the accounting process, the appropriateness and effectiveness of the internal control system, the risk management system, the internal auditing system, the audit and compliance. It presents a justified recommendation for the appointment of the auditor to the Supervisory Board, which includes at least two candidates if the company intends to issue an invitation to tender for the audit mandate in accordance with article 16 (3) EU Regulation 537/2014. The audit committee monitors the independence of the auditor and is also responsible for supervising the additional services provided by the auditor, the award of the audit mandate to the auditor, the definition of areas of focus for the audit, monitoring the quality of the audit and negotiating the auditor's fees with the auditor.

The Chairwoman of the audit committee, Gunda Röstel, is independent and is not a former member of the Board of Management of EnBW. As the long-standing Commercial Director of Stadtentwässerung Dresden GmbH and Authorized Officer of Gelsenwasser AG, she possesses expertise in the field of accounting and special knowledge and experience in the application of accounting principles and internal control and risk management systems. As a result, and also through her position as Chairwoman of the audit committee for several years, she also possesses expertise in the field of auditing. She has special knowledge and experience in this field that also covers the aspect of sustainability reporting and its auditing, which has already been practiced at EnBW for several years with the participation of Mrs. Röstel. In her position as the Chairwoman of the audit committee over the last few years, she has gained even more expertise in the aforementioned fields. As a long-standing chief executive and member of management boards at various companies and in his role as a member of the audit committee over many years, Dr. Hubert Lienhard also has expertise in the fields of accounting and auditing, including special knowledge and experience in the application of accounting principles and with internal control and risk management systems, as well as in the area of auditing including sustainability reporting and its auditing.

The full version of the **Report of the Supervisory Board** is published here.

Online <sup>7</sup>

The roles of the other committees of the Supervisory Board and their specific activities in the past financial year are described in the Report of the Supervisory Board for the 2023 financial year.

The chairpersons of the committees report on the work carried out in their committees at the latest at the next plenary meeting of the Supervisory Board. No separate rules of procedure exist for the Supervisory Board committees; they are subject to the rules of procedure for the Supervisory Board and all relevant procedural rules contained therein.

The Supervisory Board has set specific objectives for its composition that take into account the company's situation and has developed a competency profile for the entire Supervisory Board, whereby the special rules defined in the German Co-determination Act and associated legislation were and are taken into account for employee representatives. The primary aim is to guarantee that the members collectively possess the knowledge, skills and specialist experience required to properly perform their functions.

The objectives for the composition of the Supervisory Board that are currently valid and were valid during the entire reporting period appropriately take into account the international activities of the company, potential conflicts of interest, an appropriate number of independent members in the estimation of the Supervisory Board, age limits for members of the Supervisory Board apart from the exception described below, a maximum time limit for the period of service on the Supervisory Board and diversity, whereby the special rules defined in the German Co-determination Act and associated legislation were and are taken into account for employee representatives.

In the past reporting year, the Supervisory Board also examined the independence criteria defined in the German Stock Corporation Act and the DCGK. The Supervisory Board came to the conclusion that these criteria have – as in the past – been satisfied and that it comprised and still comprises a sufficient number of independent members and reflects the shareholder structure, whereby it is of the opinion that all shareholders on the Supervisory Board are independent in the sense of the DCGK and this proportion of members is appropriate. Refer to the overview on [p. 303f.<sup>7</sup>](#) of the Integrated Annual Report 2023 for the names of the shareholder representatives on the Supervisory Board.

Alongside the successfully achieved objective of continuing to ensure a majority of independent members, the Supervisory Board will take care to avoid any conflicts of interest also in future.

The Supervisory Board does not believe that it is necessary to define quantitative objectives with respect to internationality due to the structure and business activities of the company. The newly added recommendation in the DCGK in 2022 that the competency profile for the Supervisory Board should also cover expertise on sustainability issues that are significant to the company has already been fulfilled by the competency profile for the EnBW Supervisory Board since 2017. The rules of procedure for the Supervisory Board stipulate that candidates proposed to the Annual General Meeting for the election of shareholder representatives as members on the Supervisory Board should generally not be older than 70 at the time of the election. This general age limit was exceeded in the reporting period by Dr. Hubert Lienhard. However, there are no doubts surrounding the suitability of Dr. Hubert Lienhard as a member of the Supervisory Board. On the contrary, the membership of Dr. Hubert Lienhard on the Supervisory Board also clearly serves the interests of the company. As the Supervisory Board is aware that exceptions may be desirable because long-term members of the Supervisory Board bring long-standing knowledge and experience to the board, it has ultimately defined a maximum time limit for the period of service on the Supervisory Board of three full election periods, which was not reached or exceeded during the reporting period or currently by any member of the Supervisory Board.

The Supervisory Board has not defined any further diversity targets beyond the legal regulations that apply to the company for the minimum proportion of women and men and the previously described objectives for its composition.

#### Competency profile of the Supervisory Board



The competency profile of the Supervisory Board stipulates that the eight fields of competency of particular significance to the company shown in the diagram must be covered to an appropriate extent by the members of the Supervisory Board in its entirety.

The Supervisory Board possesses the knowledge and skills required to perform its functions. The objectives for its composition were fully taken into account by the Supervisory Board during the reporting period with respect to its composition and the appropriate coverage of its competency profile. The Supervisory Board is convinced that the competency profile is appropriately covered when each of the eight fields of competency of particular significance to the company are covered by several members of the Supervisory Board. However, it does not strive to ensure that every field of competency is covered by all members of the Supervisory Board (which would correspond to a coverage rate of 100%) as this would be unrealistic for a Supervisory Board with a diverse composition. In the 2023 financial year, the Supervisory Board in its entirety had the following coverage rates for the eight fields of competency, whereby the Supervisory Board successfully covered its defined competency profile:

Field of competency	Coverage by members of the Supervisory Board
Finances and accounting	55%
Strategy and innovation	50%
Law, corporate governance and compliance	30%
Communication	50%
Business fields	45%
Board of Management and HR issues	70%
Regulation and politics	55%
Sustainability and environment	60%

In its future proposals to the Annual General Meeting for the election of members, the Supervisory Board will continue to take into account the objectives for its composition and will strive to ensure that the competency profile continues to be covered by the Supervisory Board in its entirety.

The **curricula vitae for all members of the Supervisory Board** can be found on our website.

Online <sup>7</sup>

The curricula vitae for all members of the Supervisory Board have been published on the company website and provide information on the relevant knowledge, skills and experience of the members and have been supplemented by an overview of their main activities in addition to their position on

the Supervisory Board. These curricula vitae are updated on an annual basis for all members of the Supervisory Board.

The members of the Supervisory Board are all able to dedicate the expected amount of time required for their activities on the Supervisory Board. The Supervisory Board will also ensure for its future proposals to the Annual General Meeting for the election of new members of the Supervisory Board that all candidates are able to dedicate the expected amount of time required for their activities on the Supervisory Board. In the 2023 financial year, the majority of the members of the Supervisory Board participated in more than half of the meetings of the Supervisory Board and the majority of the members of the Supervisory Board participated in more than half of the meetings of the committees on which the member serves; this was also noted in the Report of the Supervisory Board to the Annual General Meeting. Participation via telephone and videoconference is also valid, although this form of participation was not a normal occurrence for any member of the Supervisory Board in accordance with the suggestion in the DCGK, except for those meetings of the Supervisory Board in which all members participated via an electronic form of communication. In the reporting period, all meetings of the Supervisory Board were held in person. Some meetings of its committees were held in digital form via telephone and videoconference.

In its proposals made to the Annual General Meeting for the forthcoming by-election of members, the Supervisory Board will also disclose the personal and business relationships of each candidate with the company, the company's corporate bodies and with shareholders holding a major interest in the company, whereby this information will be limited to information that the Supervisory Board considers material in order for a shareholder to cast their vote objectively.

No former members of the Board of Management of EnBW were members of the Supervisory Board during the reporting period nor are they currently members. The members of the Supervisory Board also did not perform any advisory or board functions for important competitors of EnBW during the reporting period nor do they currently.

Every member of the Supervisory Board is bound to act in the interests of the company. In making decisions, members may not pursue personal interests or take advantage of business opportunities intended for the company. Conflicts of interest, particularly those that could arise due to advisory or board functions for customers, suppliers, lenders or other third parties, must be disclosed to the Supervisory Board. In such cases, the Supervisory Board will disclose any conflicts of interest that have arisen and how they were handled in its report to the Annual General Meeting. Any material conflict of interest relating to a member of the Supervisory Board that is not merely of a temporary nature will result in the termination of their position. Advisory and other service agreements and contracts for work between a member of the Supervisory Board and EnBW require the approval of the Supervisory Board.

The Supervisory Board regularly assesses how effectively the Supervisory Board as a whole and its committees are performing their duties (self-assessment). The Supervisory Board last carried out a self-assessment at its meeting on 10 November 2023. To prepare for the review, the members of the Supervisory Board completed a comprehensive questionnaire on content-related and organizational themes as in previous years and discussed, among other things, the results of the questionnaires in detail. In addition, the implementation of the findings drawn from the efficiency review from the previous year were examined.

The members of the Supervisory Board are responsible for participating in any necessary basic and further training measures required for their tasks and are supported appropriately and as necessary by the company in this area. This not only includes providing them with regular information on themes and developments related to the current situation of the company with respect to legal issues, the energy industry, financial industry or other relevant aspects, as well as other subjects relevant to the work on the Supervisory Board, but also comprises corresponding on-site appointments and events. In 2023, the company provided the Supervisory Board with the opportunity to take a further training course on the topics "basic information on sustainability/SBTi" and "in-depth information on the climate and benchmarking" on 3 March 2023. Numerous members of the Supervisory Board participated. Furthermore, the Supervisory Board were provided with information on the challenges posed by the energy transition from the perspective of a transmission grid operator and the tasks and challenges involved in managing the system as part of a meeting on-site

at the central control station of TransnetBW on 27 September 2023. An e-learning platform designed for supervisory boards that is managed and continuously updated by an external service provider is also available for further training purposes.

In accordance with the corresponding suggestion in the DCGK, the Chairman of the Supervisory Board is prepared to enter into discussions with investors on specific issues relating to the Supervisory Board. Discussions of this type were not held in the reporting period.

The actions of the Board of Management and the Supervisory Board are governed by statutory regulations and internal Group guidelines (compliance). The Board of Management also reported continuously on compliance issues in the 2023 financial year and discussed them in detail with the Supervisory Board and the audit committee of the Supervisory Board. More detailed information on this area will be provided in the "Compliance" section below. Information on the relevant corporate governance practices that go above and beyond the legal requirements and the recommendations and suggestions in the DCGK will also be given there.

The **Articles of Association** are accessible to the general public here.

Online <sup>7</sup>

Further information – above and beyond that provided above – on the procedures of the Board of Management and Supervisory Board and its committees, as well as on corporate governance practices, can be found in the section "Corporate governance" under "Management and supervision" on p. 37f.<sup>7</sup> of the Integrated Annual Report 2023, in the "Report of the Supervisory Board" on p. 10ff.<sup>7</sup> of the Integrated Annual Report 2023 and in articles 7 to 13 and 19 of the Articles of Association.

## Diversity

The Supervisory Board has decided that all of the statutory and self-defined regulations for its composition (objectives for the composition, competency profile, legal targets for the proportion of women, age limit, maximum time limit for the period of service, see here the information above in the section "Board of Management and the Supervisory Board" on p. 162ff.<sup>7</sup>) will form the diversity concept in the sense of section 289f (2) no. 6 HGB. The primary goal of this concept is to ensure that the Supervisory Board can properly perform its tasks and is helped in this process by the diversity of its composition. This concept is implemented through the election of shareholder representatives by the Annual General Meeting. In the reporting period, the objectives defined in the concept were achieved.

The proportion of women on the Supervisory Board in its entirety continuously stood at at least 30% in the reporting period. This figure was calculated from the proportion of women among the shareholder representatives of 30% and the proportion of women among the employee representatives of 40%. The proportion of women on the Supervisory Board of EnBW in its entirety of 35% fulfills the minimum statutory requirement of 30%. The shareholder and employee representatives resolved before the last election of members to the Supervisory Board to veto the overall fulfillment of this statutory minimum proportion by the shareholder and employee representatives combined in accordance with section 96 (2) sentence 3 AktG for the length of the current election period, so that the minimum proportion in accordance with the legal requirements must be fulfilled by both sides. This should make it possible to better plan the composition of the Supervisory Board.

In terms of the composition of the Board of Management, the Supervisory Board also takes diversity into account when appointing new members of the Board of Management, while acknowledging the limited number of members of the Board of Management. Therefore, it has resolved that the standard age limit for the Board of Management defined by the Supervisory Board together with the target for the proportion of women will form the diversity concept in the sense of section 289f (2) no. 6 HGB. The primary goal of this concept is to ensure that the Board of Management can properly perform its tasks and is strengthened here by the diversity of its composition. This concept is implemented through the appointment of members of the Board of Management by the Supervisory Board. In the reporting year, the objectives defined in the concept were achieved.

For the period from 1 July 2017 until 30 June 2022, the Supervisory Board had set the target of one woman on the Board of Management that should be achieved at least by the end of this defined time period. This target has been met since the start of the term of office of Colette Rückert-Hennen on 1 March 2019. No target was defined for the period from 1 July 2022 onwards because there is no

longer any obligation to set a target for the Board of Management according to the legal regulation in section 111 (5) sentence 9 AktG.

The Board of Management has set the goal of further increasing the proportion of women at both management levels below the Board of Management in the period from 1 January 2021 to 31 December 2025. At both the first level (top management) and second level (upper management), the proportion of women should increase to at least 20%. This target was not yet achieved in the reporting period in top management. Nevertheless, it was possible to increase the proportion of women from 11.1% in the previous year to 15.4% in the reporting period. In upper management, the proportion of women increased from 23.1% in the previous year to 24.7% in the reporting period, which meant that the set targets were still achieved at the second level. We will continue to develop measures based on the HR strategy to achieve and stabilize the set targets.

## Shareholders and Annual General Meeting

All **documents for the Annual General Meeting** are accessible to the general public on our website.

Online ↗

The shareholders of EnBW exercise their rights at the Annual General Meeting, including their right to vote. Prior to the Annual General Meeting, EnBW publishes the agenda and all of the relevant reports and documents that shareholders may require to evaluate it. These include the current annual report for the last completed financial year, which is available in an easily accessible format on the Internet. Any counter motions to items on the agenda of the Annual General Meeting received by the specified deadline are also made publicly available on the website.

Our shareholders have the opportunity to use a proxy appointed by the company if they are not able to personally attend the Annual General Meeting.

The ordinary Annual General Meeting 2023 took place in virtual form without the physical presence of shareholders or their proxies. Video and audio of the Annual General Meeting were broadcast online for shareholders and their representatives via a password-protected Investor Portal. In addition, the Annual General Meeting was broadcast live on the Internet as it was in the last few years until the end of the speech by the Chairman of the Board of Management.

## Compliance

Compliance as an expression of all measures required for the observance of statutory regulations and internal guidelines is regarded as an essential management and supervisory task at EnBW. Since 2009, the compliance department has established a Group-wide compliance organization and defined the necessary rules and processes. The compliance department is responsible for the prevention, detection and sanctioning of corruption, the prevention of violations against competition and antitrust laws and the prevention of money laundering. The topic of data protection is the responsibility of the legal, market, data protection and digital business models department.

The regular in-person training events – which were supplemented by online training events in the reporting year – cover the latest compliance and data protection issues. One of the main focuses of the compliance activities is conveying a compliance culture. Providing advice and completing regular risk assessments are also part of the compliance activities. In cooperation with the internal audit department, control measures to ensure compliance with internal guidelines are implemented. The selective internationalization of EnBW is being accompanied by the compliance and data protection departments.

The most important compliance functions for the Group are represented on the compliance committee. The compliance department uses this body to coordinate the Group-wide compliance activities. Implementation of the centrally defined compliance measures in the decentralized units is controlled through the compliance forum, which is comprised of compliance officers from the most important Group companies and business units.

Preventative compliance measures are defined using a Group-wide compliance risk assessment on an annual basis as part of the compliance and data protection program of EnBW. These include communication and training measures, the introduction and development of rules and processes,



central management of guidelines and business partner auditing. The compliance culture is an aspect taken into account in all of the compliance activities. In particular, training measures are not only designed to convey knowledge but also to reinforce attitudes among employees for compliance-conforming activities, so that they can make their own contribution to the avoidance of compliance breaches.

Internal and external whistleblowers can report compliance breaches and suspected cases to the compliance department, to an ombudsperson commissioned for this purpose by EnBW as an external point of contact or since August 2023 via a digital whistleblower tool on the Internet. The ombudsperson can guarantee whistleblowers absolute confidentiality and anonymity with respect to EnBW. It is also possible to submit anonymous reports using the whistleblower tool. Reported compliance breaches and suspected cases are then handled by the compliance committee task force using a standardized process. The Head of Compliance reports on the status of the implementation of measures and on current compliance breaches to the Board of Management and audit committee of the Supervisory Board every quarter. An annual report is prepared for the Supervisory Board.

The compliance management system (CMS) is aligned to the risk situation of the company and continuously updated and examined.

## Remuneration of the Board of Management and the Supervisory Board

The **remuneration report** is available as a separate report **together with other documents** on our website.

[Online ↗](#)

The remuneration of the Board of Management and the Supervisory Board are both presented in a detailed remuneration report. This can be found in a separate report on the company website. We refer you to this report at this point. The system of variable remuneration for the Board of Management that was resolved by the Supervisory Board in 2023 and approved by the Annual General Meeting on 3 May 2023 is described in detail in the remuneration report for the Board of Management. The documents described above that have to be made accessible according to sections 289f and 315d HGB are publicly available for download on the EnBW website. This declaration of corporate management is also publicly available there.

## Transparency

**Information on the business situation of EnBW** is made available to the public on our website.

[Online ↗](#)

EnBW ensures the transparency stipulated in the DCGK at all times by keeping shareholders, the capital market, financial analysts, shareholder associations and the interested public up to date on material business changes at the company. In order to provide consistent information in good time to all interested groups, the company mainly relies on the Internet.

In particular, EnBW provides information on its business situation in the Integrated Annual Report, interim financial information, the press conference on the annual results, telephone conferences for investors and analysts to accompany the publication of quarterly and annual results and at other events such as investor conferences. The corresponding documents are publicly available on the EnBW website. The financial calendar also published on our website provides adequate notice of the publication dates for the Integrated Annual Reports and interim financial information, as well as the date of the Annual General Meeting, the press conference for the annual results and investor conferences.

If specific information on a matter relating to EnBW or the shares and bonds issued by EnBW which is not public knowledge should become available outside the regular reporting framework that could significantly influence the stock prices of these securities, we announce this insider information in the form of ad hoc notifications. In the 2023 financial year, ad-hoc notifications were published on 14 February 2023, 4 May 2023, 4 August 2023 and 31 October 2023.

In the 2023 financial year, EnBW did not receive any notices about transactions involving EnBW shares, EnBW bonds, emission allowances or related financial instruments by persons in managerial positions or those persons closely related to them. There were also no securities subject to disclosure requirements held by any members of the Board of Management or the Supervisory Board.



## Financial reporting and the audit

Financial reporting at EnBW is carried out in accordance with the requirements of the International Financial Reporting Standards (IFRS), and, where applicable, the German Commercial Code (HGB) and German Accounting Standards (GAS). The Annual General Meeting on 3 May 2023 elected EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Stuttgart, as auditor of the financial statements and the consolidated financial statements for the 2023 financial year and as auditor for the review of the condensed financial statements and interim management report contained in the Six-Monthly Financial Report, as well as for all reviews of additional interim financial information in the sense of section 115 (7) of the German Securities Trading Act (WpHG) in the 2023 financial year. At the same time, EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft was elected as the auditor for the review of all additional interim financial information in the sense of section 115 (7) WpHG in the 2024 financial year, insofar as such a review is carried out before the next Annual General Meeting.

The audit committee and its Chairwoman also commissioned EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft to audit the non-financial declaration published for the reporting period.

The Board of Management discussed the interim financial information with the audit committee before its publication. The consolidated financial statements for the 2023 financial year were made available to the public within 90 days of the end of the financial year and the Quarterly Statements and the Six-Monthly Financial Report for the 2023 financial year were made available within 45 days after the end of the relevant reporting period.

EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft was commissioned by the audit committee and its Chairwoman to perform the audit. The audit committee ensured in advance of the Annual General Meeting on 3 May 2023 that there was no doubt concerning the independence of the auditing firm to be commissioned and received a declaration of independence before submitting the proposal for the appointment of the auditor. This declaration also included the scope of other services, especially in the consultancy sector, which were provided to EnBW and its Group companies in the past financial year or have been contractually agreed for the following financial year. The agreement with the auditor stipulates that the audit committee must be informed immediately about any grounds for exclusion or conflicts of interest that arise during the audit unless such grounds are immediately eliminated. In addition, it was also agreed that the auditor would immediately inform the audit committee on all facts and events significant to the tasks of the Supervisory Board that come to the attention of the auditor during the performance of the audit and that the auditor would inform the Supervisory Board or make a corresponding note in the audit report if facts were uncovered during the performance of the audit that demonstrate that the declaration of compliance issued by the Board of Management and Supervisory Board in accordance with section 161 AktG is incorrect. Furthermore, it was ensured in accordance with article 5 EU Regulation 537/2014 that neither the auditor nor any member of his network provided prohibited non-audit services to EnBW or EnBW Group companies. The audit committee discussed the audit risk assessment, audit strategy, audit planning and audit results with EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft. The Chairwoman of the committee regularly discussed the progress of the audit with the auditor and reported on this to the committee. Both the audit committee and its Chairwoman regularly consulted with the auditor, sometimes without the presence of the Board of Management. EnBW did not have any share option programs or similar securities-based incentive schemes for the company in the reporting period nor does it currently have such programs or schemes.

In accordance with article 16 of the EU Audit Regulation (EU Regulation No 537/2014 of 16 April 2014), the audit committee of the Supervisory Board carried out a selection process in 2022 for the audit of the separate and consolidated financial statements of EnBW Energie Baden-Württemberg AG and certain separate financial statements and subgroup financial statements for Group companies integrated into the EnBW consolidated financial statements for the period covering the 2024 to 2028 financial years. At the end of this selection process, the audit committee of the Supervisory Board recommended – and provided reasons for the recommendations – of BDO AG Wirtschaftsprüfungsgesellschaft, Hamburg, and EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Stuttgart, for the period covering the 2024 to 2028 financial years. The Supervisory Board was notified that the preferred choice of the audit committee was BDO AG Wirtschaftsprüfungsgesellschaft, Hamburg, and was provided with the reasons for this decision. The audit committee also declared that its recommendation was free of any undue influence from third parties and emphasized, in particular, that there

was no clause of the type described in article 16 (6) of EU Regulation 537/2014 of 16 April 2014 that could have restricted its choice to certain auditors. On 8 December 2022, the Supervisory Board decided, based on the recommendation and preference of its audit committee and following the selection process carried out in accordance with article 16 of the EU Audit Regulation (EU Regulation No 537/2014 of 16 April 2014), to select the company BDO AG Wirtschaftsprüfungsgesellschaft for the audit of the separate and consolidated financial statements of EnBW Energie Baden-Württemberg AG and the separate financial statements and subgroup financial statements of certain EnBW Group companies for the period covering the 2024 to 2028 financial years and to propose this company to the Annual General Meeting as auditor of the financial statements and the consolidated financial statements for the previously stated period. This decision was taken more than one year before the first audit period to ensure compliance with the prescribed one-year “cooling-in” phase before the start of the audit period covered by the new auditor and the members of its network that is stipulated in article 5 (1) b of the EU Audit Regulation (EU Regulation No 537/2014 of 16 April 2014). The ordinary Annual General Meeting 2024 will be presented with a proposal for the election of BDO AG Wirtschaftsprüfungsgesellschaft as auditor of the financial statements and the consolidated financial statements for the 2024 financial year.

## Declaration of compliance

In accordance with section 161 AktG, the Board of Management and the Supervisory Board of EnBW Energie Baden-Württemberg AG declared on 7 December 2023 that: “Since its last declaration of compliance on 8 December 2022, EnBW Energie Baden-Württemberg AG complied with the recommendations of the Government Commission for the German Corporate Governance Code in the version published in the German Federal Gazette on 28 April 2022, with the exception of the following deviations described and will also comply with the recommendations in this version of the Code in future with the following exceptions:

Publication of the rules of procedure of the Supervisory Board (Recommendation D.1 DCGK)

The procedures of the Supervisory Board and the composition and procedures of the committees of the Supervisory Board are described in detail in the declaration of corporate management according to section 289f (2) no. 3 HGB, which is published on an annual basis. In addition, the annual, written Report of the Supervisory Board according to section 171 (2) AktG reports in detail on the work of the Supervisory Board and its committees. Against this background, the Board of Management and Supervisory Board do not consider it expedient to also publish the rules of procedure of the Supervisory Board as they contain details on the rules at a technical level that will not provide any information of additional value to shareholders, which is why the recommendation in D.1 of the Code is not followed.

Disclosure of the composition of a peer group of other third-party entities to assess the total remuneration of the members of the Board of Management (Recommendation G.3 sentence 1 DCGK)

A horizontal comparison of other third-party entities as proposed by the recommendation in G.3 sentence 1 of the Code would result in a considerable administrative burden with respect to the procurement and evaluation of data, especially as the composition of a specific peer group would be subject to constant change. A horizontal comparison would thus be associated with considerable costs on a regular basis due to the commissioning of external consulting services.

Therefore, it is preferable to not always automatically carry out a specific peer group comparison each time remuneration is defined or examined, even if a horizontal comparison per se or a specific peer group comparison are generally expedient, and thus to continue only carrying out this process from time to time to compare the customariness of the total remuneration of the members of the Board of Management to other third-party entities.

Should a horizontal comparison be carried out from time to time based on a company-specific peer group comparison, the Board of Management and Supervisory Board believe that it is not expedient to publish the composition of the peer group because the composition of the peer group may allow conclusions to be drawn about the strategic considerations of the Supervisory Board, which should not be accessible to competitors. In the interests of the company, the recommendation in G.3 sentence 1 of the Code is, therefore, not followed.

Comprehensibility of the target achievement for members of the Board of Management (Recommendation G.9 sentence 2 DCGK)

The law for the implementation of the European Union's second shareholder rights directive ("ARUG II") introduced a new remuneration report in section 162 AktG that contains detailed information on the remuneration of the members of the Board of Management, including minimum and maximum values for the performance indicators for the STI and LTI. The publication of further information on any additional qualitative criteria that are defined annually by the Supervisory Board for the STI remuneration would reveal sensitive company information about strategic targets. This information should not be accessible to competitors, which is why in the interests of the company the recommendation in G.9 sentence 2 of the Code is not followed.

The granting of variable remuneration to the Board of Management in company shares (Recommendation G.10 sentence 1 DCGK)

Section G.10 of the Code recommends that the variable remuneration for members of the Board of Management should be predominantly invested in company shares or granted as share-based remuneration. Based on the fact that only 0.39% of the share capital of EnBW Energie Baden-Württemberg AG is in free float and the EnBW share is thus a narrow-market security with reduced liquidity on the stock exchange, it is not expedient to implement this recommendation at the company. Therefore, the recommendation in G.10 sentence 1 of the Code is not followed.

Accessibility of the long-term variable remuneration components to members of the Board of Management (Recommendation G.10 sentence 2 DCGK)

In its recommendation in G.10 sentence 2, the Code proposes that members of the Board of Management shall be able to access granted long-term variable remuneration components only after a period of four years. The intention behind this recommendation in the Code is to create greater incentive for sustainable business activities. The long-term variable remuneration components for members of the Board of Management of EnBW Energie Baden-Württemberg AG are based on a three-year measurement period. For the Board of Management and Supervisory Board, it is not clear why, and the European Commission has not given any further justification as to why, a four-year period should be advantageous at all in comparison to a three-year period. Due to the fact that the three-year period applied up to now has proven successful in the last few years and an extension is not considered expedient, the recommendation in G.10 sentence 2 of the Code is not followed.

The declaration was also published separately. This page also includes a link to the download center where all of the declarations of compliance of EnBW published since 2002 are available.

**This declaration of compliance and the declarations from previous years** are published here.

Online <sup>7</sup>

Karlsruhe, 11 March 2024

EnBW Energie Baden-Württemberg AG

On behalf of the Board of Management

Colette Rückert-Hennen

On behalf of the Supervisory Board

Lutz Feldmann

# Financial statements of the EnBW Group

<b>175</b>	<b>Income statement</b>	214	(11) Property, plant and equipment
<b>176</b>	<b>Statement of comprehensive income</b>	216	(12) Leases
<b>177</b>	<b>Balance sheet</b>	219	(13) Entities accounted for using the equity method
<b>178</b>	<b>Cash flow statement</b>	219	(14) Other financial assets
<b>179</b>	<b>Statement of changes in equity</b>	221	(15) Trade receivables
<b>180</b>	<b>Notes to the 2023 financial statements of the EnBW Group</b>	221	(16) Other assets
180	General principles	222	(17) Inventories
180	Consolidation principles	222	(18) Financial assets
181	Consolidated companies	222	(19) Cash and cash equivalents
181	Changes in the consolidated companies	223	(20) Equity
181	First-time full consolidation of affiliated entities 2023	227	(21) Provisions
182	Deconsolidation of fully consolidated companies 2023	232	(22) Deferred taxes
182	Changes in the shareholdings in fully consolidated companies 2023	234	(23) Liabilities and subsidies
183	Changes in the shareholdings in fully consolidated companies 2022	238	(24) Assets held for sale
183	Changes in accounting policies		
185	Significant accounting policies		
195	Exercise of judgment and estimates when applying accounting policies		
198	Impact of the war between Russia and Ukraine		
198	Disclosures on climate change		
201	Currency translation		
<b>202</b>	<b>Notes to the income statement and the balance sheet</b>	<b>239</b>	<b>Other disclosures</b>
202	(1) Revenue	239	(25) Earnings per share
204	(2) Other operating income	239	(26) Accounting for financial instruments
205	(3) Cost of materials	255	(27) Contingent liabilities and other financial commitments
206	(4) Personnel expenses	257	(28) Significant restrictions
206	(5) Other operating expenses	257	(29) Audit fees
207	(6) Amortization and depreciation	258	(30) Exemptions pursuant to section 264 (3) or section 264b HGB
207	(7) Investment result	258	(31) Declaration of compliance with the German Corporate Governance Code
209	(8) Financial result	259	(32) Share deals and shareholdings of key management personnel
210	(9) Income tax	259	(33) Notes to the cash flow statement
212	(10) Intangible assets	263	(34) Additional disclosures on capital management
		264	(35) Segment reporting
		268	(36) Related parties (entities)
		269	(37) Related parties (individuals)
		270	(38) Additional disclosures
		288	(39) Significant events after the reporting date
		<b>289</b>	<b>Independent auditor's report</b>

# Income statement

in € million	Notes	2023	2022	Change in %
Revenue including electricity and energy taxes		44,916.6	56,524.0	-20.5
Electricity and energy taxes		-485.9	-521.4	-6.8
<b>Revenue</b>	(1)	44,430.7	56,002.6	-20.7
Changes in inventories		146.3	51.9	–
Other own work capitalized		355.1	305.3	16.3
Other operating income	(2)	4,507.4	7,348.0	-38.7
Cost of materials	(3)	-35,725.3	-51,148.4	-30.2
Personnel expenses	(4)	-2,895.2	-2,591.8	11.7
Impairment losses <sup>1</sup>	(26)	-276.6	-112.3	146.3
Other operating expenses	(5)	-4,804.1	-5,382.1	-10.7
<b>EBITDA</b>		5,738.3	4,473.2	28.3
Amortization and depreciation	(6)	-2,397.0	-2,332.0	2.8
<b>Earnings before interest and taxes (EBIT)</b>		3,341.3	2,141.2	56.0
Investment result	(7)	-89.2	276.8	–
of which net profit/loss from entities accounted for using the equity method		(-114.5)	(23.9)	–
of which other profit/loss from investments		(25.3)	(252.9)	(-90.0)
Financial result	(8)	-411.3	-22.6	–
of which finance income		(860.2)	(1,039.2)	(-17.2)
of which finance costs		(-1,271.5)	(-1,061.8)	(19.7)
<b>Earnings before tax (EBT)</b>		2,840.8	2,395.4	18.6
Income tax	(9)	-1,008.2	-551.5	82.8
<b>Group net profit</b>		1,832.6	1,843.9	-0.6
of which profit/loss shares attributable to non-controlling interests		(295.0)	(105.9)	–
of which profit/loss shares attributable to the shareholders of EnBW AG		(1,537.6)	(1,738.0)	(-11.5)
<b>EnBW AG shares outstanding (million), weighted average</b>		270.855	270.855	0.0
<b>Diluted earnings per share from Group net profit (€)<sup>2</sup></b>	(25)	5.68	6.42	-11.5
<b>Basic earnings per share from Group net profit (€)<sup>2</sup></b>	(25)	5.68	6.42	-11.5

<sup>1</sup> According to IFRS 9.

<sup>2</sup> In relation to the profit/loss attributable to the shareholders of EnBW AG.

# Statement of comprehensive income

in € million<sup>1,2</sup>

	Notes	2023	2022	Change in %
<b>Group net profit</b>		<b>1,832.6</b>	<b>1,843.9</b>	<b>-0.6</b>
Revaluation of pensions and similar obligations	(21)	-534.3	2,388.9	-
Entities accounted for using the equity method	(13)	0.8	-0.1	-
Income taxes on other comprehensive income	(9)	151.4	-610.0	-
<b>Total of other comprehensive income and expenses without future reclassifications impacting earnings</b>		<b>-382.1</b>	<b>1,778.8</b>	<b>-</b>
Currency translation differences		-29.0	66.1	-
Cash flow hedge	(26)	-1,179.3	2,171.2	-
Financial assets at fair value in equity	(14)	200.6	-232.4	-
Entities accounted for using the equity method	(13)	-2.8	2.8	-
Income taxes on other comprehensive income	(9)	254.6	-585.7	-
<b>Total of other comprehensive income and expenses with future reclassifications impacting earnings</b>		<b>-755.9</b>	<b>1,422.0</b>	<b>-</b>
<b>Total other comprehensive income</b>		<b>-1,138.0</b>	<b>3,200.8</b>	<b>-</b>
<b>Total comprehensive income</b>		<b>694.6</b>	<b>5,044.7</b>	<b>-86.2</b>
of which profit/loss shares attributable to non-controlling interests		(144.1)	(83.8)	72.0
of which profit/loss shares attributable to the shareholders of EnBW AG		(550.5)	(4,960.9)	-88.9

1 The figures for the previous year have been restated. The basis adjustments in inventories in cash flow hedge are no longer disclosed in total other comprehensive income. The figure for the previous year has been adjusted by the effect of the basis adjustments in the amount of €622.9 million and income tax in the amount of €-185.0 million. Further information can be found in the statement of changes in equity.

2 Further information is available in the notes under (20) "Equity."

# Balance sheet

in € million	Notes	31/12/2023	31/12/2022
<b>Assets</b>			
<b>Non-current assets</b>			
Intangible assets	(10)	3,166.2	3,218.2
Property, plant and equipment	(11), (12)	25,429.8	22,705.3
Entities accounted for using the equity method	(13)	1,393.4	1,134.0
Other financial assets	(14)	6,628.5	6,560.1
Trade receivables	(15)	370.1	329.4
Other non-current assets	(16)	2,298.0	2,957.6
Deferred taxes	(22)	226.0	79.4
		<b>39,512.0</b>	<b>36,984.0</b>
<b>Current assets</b>			
Inventories	(17)	2,804.0	3,835.7
Financial assets	(18)	3,078.1	1,348.3
Trade receivables	(15)	4,575.6	5,591.3
Other current assets	(16)	8,754.1	15,261.0
Cash and cash equivalents	(19)	5,995.1	6,475.6
		<b>25,206.9</b>	<b>32,511.9</b>
<b>Assets held for sale</b>	(24)	0.0	7.8
		<b>25,206.9</b>	<b>32,519.7</b>
		<b>64,718.9</b>	<b>69,503.7</b>
<b>Equity and liabilities</b>			
<b>Equity</b>	(20)		
<b>Shares of the shareholders of EnBW AG</b>			
Subscribed capital		708.1	708.1
Capital reserve		774.2	774.2
Revenue reserves		8,559.5	7,272.7
Treasury shares		-204.1	-204.1
Other comprehensive income		-529.0	412.1
		<b>9,308.7</b>	<b>8,963.0</b>
<b>Non-controlling interests</b>		<b>6,544.3</b>	<b>3,806.3</b>
		<b>15,853.0</b>	<b>12,769.3</b>
<b>Non-current liabilities</b>			
Provisions	(21)	11,410.9	10,483.9
Deferred taxes	(22)	835.6	958.1
Financial liabilities	(23)	15,003.5	11,927.3
Other liabilities and subsidies	(23)	3,462.7	4,695.2
		<b>30,712.7</b>	<b>28,064.5</b>
<b>Current liabilities</b>			
Provisions	(21)	2,528.7	3,346.8
Financial liabilities	(23)	1,464.2	963.9
Trade payables	(23)	5,049.9	8,443.3
Other liabilities and subsidies	(23)	9,110.4	15,915.9
		<b>18,153.2</b>	<b>28,669.9</b>
		<b>64,718.9</b>	<b>69,503.7</b>



# Cash flow statement

in € million<sup>1,2</sup>

	Notes	2023	2022
<b>1. Operating activities</b>			
Group net profit		1,832.6	1,843.9
Income tax	(9)	1,008.2	551.5
Investment and financial result	(7), (8)	500.5	-254.2
Amortization and depreciation	(6)	2,397.0	2,332.0
Change in provisions excluding obligations from emission allowances	(21)	203.9	36.2
Result from disposals of assets	(2), (5)	0.3	-3.4
Other non-cash-relevant expenses/income	(2), (3), (5)	626.7	-1,248.3
Change in assets and liabilities from operating activities		-4,762.8	-1,224.9
Net balance of inventories and obligations from emission allowances	(17)	(-398.9)	(-2,624.8)
Net balance of trade receivables and payables, services not yet invoiced and payments on account that have been made and received	(15), (23)	(-3,152.2)	(2,592.2)
Net balance of other assets and liabilities	(16), (23)	(-1,211.7)	(-1,192.3)
Income tax paid	(9), (16), (23)	-906.7	-227.9
<b>Cash flow from operating activities</b>		<b>899.7</b>	<b>1,804.8</b>
<b>2. Investing activities</b>			
Capital expenditure on intangible assets and property, plant and equipment	(10), (11)	-4,403.8	-2,770.7
Disposals of intangible assets and property, plant and equipment	(10), (11)	50.7	57.9
Cash received from subsidies for construction cost and investments	(23)	104.5	106.4
Cash paid for the acquisition of companies and interests in entities accounted for using the equity method as well as in joint operations	(13)	-215.7	-110.4
Cash received from the sale of companies and interests in entities accounted for using the equity method as well as in joint operations	(13)	0.0	24.7
Cash payments for securities, financial investments and other financial assets	(14), (18), (23)	-5,992.8	-4,817.6
Cash received for securities, financial investments and other financial assets	(14), (18), (23)	4,130.3	4,347.8
Interest received	(8)	331.7	122.4
Dividends received	(7)	198.1	304.6
<b>Cash flow from investing activities</b>		<b>-5,797.0</b>	<b>-2,734.9</b>
<b>3. Financing activities</b>			
Interest paid	(8)	-421.2	-318.8
Dividends paid	(20)	-417.1	-399.4
Cash received for changes in ownership interest without loss of control	(20)	1,487.4	303.3
Cash paid for changes in ownership interest without loss of control		0.0	-1.6
Increase in financial liabilities	(23)	4,964.2	17,900.4
Repayment of financial liabilities	(23)	-1,372.9	-16,222.1
Repayment of lease liabilities	(12)	-175.2	-183.3
Cash received for capital increases in non-controlling interests	(20)	624.6	43.0
Cash paid for capital reductions in non-controlling interests	(20)	-17.9	-42.8
Other cash paid at non-controlling interests	(18)	-252.6	-344.1
<b>Cash flow from financing activities</b>		<b>4,419.3</b>	<b>734.6</b>
<b>Net change in cash and cash equivalents</b>	(19)	<b>-478.0</b>	<b>-195.5</b>
Change in cash and cash equivalents due to changes in the consolidated companies	(19)	6.4	0.3
Net foreign exchange difference and other changes in cash and cash equivalents	(19)	-8.9	17.7
<b>Change in cash and cash equivalents</b>	(19)	<b>-480.5</b>	<b>-177.5</b>
Cash and cash equivalents at the beginning of the period	(19)	6,475.6	6,653.1
<b>Cash and cash equivalents at the end of the period</b>	(19)	<b>5,995.1</b>	<b>6,475.6</b>

1 Further information is available in the notes under (33) "Notes to the cash flow statement."

2 The figures for the previous year have been restated. Further information is available in the notes under (33) "Notes to the cash flow statement."

# Statement of changes in equity

in € million<sup>1,2</sup>

	Other comprehensive income										Total
	Subscribed capital and capital reserve <sup>3</sup>	Revenue reserves	Treasury shares	Revaluation of pensions and similar obligations	Currency translation differences	Cash flow hedge	Financial assets at fair value in equity	Entities accounted for using the equity method	Shares of the shareholders of EnBW AG	Non-controlling interests	
Notes				(20), (21)		(20), (26)	(14), (20)	(13), (20)			
As of 01/01/2022	1,482.3	5,742.1	-204.1	-2,559.3	43.0	136.0	9.3	-1.9	4,647.4	3,851.9	8,499.3
Other comprehensive income				1,759.8	51.6	1,572.7	-163.9	2.7	3,222.9	-22.1	3,200.8
Group net profit		1,738.0							1,738.0	105.9	1,843.9
<b>Total comprehensive income</b>	<b>0.0</b>	<b>1,738.0</b>	<b>0.0</b>	<b>1,759.8</b>	<b>51.6</b>	<b>1,572.7</b>	<b>-163.9</b>	<b>2.7</b>	<b>4,960.9</b>	<b>83.8</b>	<b>5,044.7</b>
Derecognition in the cost of hedged items						-437.9			-437.9	0.0	-437.9
Dividends		-297.9							-297.9	-193.2	-491.1
Change in non-controlling interests due to the sale of shares		90.8							90.8	197.9	288.7
Change in non-controlling interests due to the acquisition of shares									0.0	-1.8	-1.8
Other changes <sup>4</sup>		-0.3							-0.3	-132.3	-132.6
As of 31/12/2022	1,482.3	7,272.7	-204.1	-799.5	94.6	1,270.8	-154.6	0.8	8,963.0	3,806.3	12,769.3
Other comprehensive income				-379.3	5.6	-752.9	141.6	-2.1	-987.1	-150.9	-1,138.0
Group net profit		1,537.6							1,537.6	295.0	1,832.6
<b>Total comprehensive income</b>	<b>0.0</b>	<b>1,537.6</b>	<b>0.0</b>	<b>-379.3</b>	<b>5.6</b>	<b>-752.9</b>	<b>141.6</b>	<b>-2.1</b>	<b>550.5</b>	<b>144.1</b>	<b>694.6</b>
Derecognition in the cost of hedged items						30.9			30.9	0.0	30.9
Dividends		-297.9							-297.9	-350.9	-648.8
Acquisition of subsidiaries with non-controlling interests									0.0	-4.5	-4.5
Change in non-controlling interests due to the sale of shares		47.1				15.1			62.2	2,227.2	2,289.4
Other changes <sup>4</sup>									0.0	722.1	722.1
As of 31/12/2023	1,482.3	8,559.5	-204.1	-1,178.8	100.2	563.9	-13.0	-1.3	9,308.7	6,544.3	15,853.0

1 The figures for the previous year have been restated. A separate line item has been added to disclose basis adjustments in inventories in the cash flow hedge. This led to a reduction in total other comprehensive income for the previous year of €437.9 million.

2 Further information is available in the notes under (20) "Equity."

3 Of which subscribed capital €708.1 million (31/12/2022: €708.1 million, 01/01/2022: €708.1 million) and capital reserve €774.2 million (31/12/2022: €774.2 million, 01/01/2022: €774.2 million).

4 Of which capital increases by minority shareholders of €847.8 million (previous year: €43.0 million). Of which capital reductions by minority shareholders of €113.9 million (previous year: €177.3 million).

# Notes to the 2023 financial statements of the EnBW Group

## General principles

In accordance with section 315e (1) German Commercial Code (HGB), EnBW Energie Baden-Württemberg AG (EnBW), as the highest-level parent company in the EnBW Group, prepares the consolidated financial statements according to the International Financial Reporting Standards (IFRS), the adoption of which is mandatory in the European Union as of the reporting date. The IFRIC Interpretations (IFRIC) promulgated by the IFRS Interpretations Committee are also taken into account. IFRS and interpretations whose application is not yet mandatory are not adopted. The consolidated financial statements therefore comply with those IFRS and interpretations issued by the International Accounting Standards Board (IASB), which have been endorsed by the EU.

The consolidated financial statements are presented in millions of euros (€ million). The income statement as well as the statement of comprehensive income, the balance sheet, the cash flow statement and the statement of changes in equity of the EnBW Group are presented separately. In the interest of clarity, items have been combined in the income statement and in the balance sheet, and disclosed separately and explained in the notes. Rounding differences may occur due to the methods used to carry out the calculations.

The income statement has been prepared using the nature of expense method.

Significant events in the reporting period are described in the section “The EnBW Group” of the management report.

The consolidated financial statements are prepared as of the reporting date of the parent company’s financial statements. The parent company’s financial year is the calendar year.

The registered office of the company is in Karlsruhe, Germany. The address is EnBW Energie Baden-Württemberg AG, Durlacher Allee 93, 76131 Karlsruhe. It is entered at the District Court of Mannheim under HRB no. 107956.

EnBW’s principal activities are described in the segment reporting.

EnBW’s Board of Management prepared and released the consolidated financial statements for issue on 11 March 2024.

## Consolidation principles

The financial statements of the domestic and foreign companies included in the consolidation were prepared in a standardized manner in accordance with the accounting policies that are applicable at EnBW. Business combinations are accounted for using the acquisition method. The cost of a business combination is measured based on the fair value of the assets acquired and liabilities assumed or entered into as of the acquisition date. Non-controlling interests are measured at the proportionate fair value of the identified assets and the liabilities assumed. Incidental acquisition costs are expensed as incurred. If the business combination is achieved in stages, the acquisition-date fair value of the acquirer’s previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss when the acquirer obtains control. Any excess of the cost of a business combination plus the amount of any non-controlling interest in the acquiree over the acquired identifiable assets, assumed liabilities and contingent liabilities is reported as goodwill if positive or, if negative, is reassessed and recognized through profit or loss.

A change in the ownership interest in an entity that continues to be fully consolidated is accounted for as an equity transaction. All remaining interests are remeasured at fair value upon loss of control.

Receivables, liabilities and provisions between the consolidated entities are netted. Intercompany income is set off against the corresponding expenses. Intercompany profits and losses are eliminated unless they are not of minor importance.

### Consolidated companies

In accordance with the full consolidation method, all subsidiaries under the control of the Group are included. The Group controls an associate if it is exposed to risks or has rights to variable returns as a result of its involvement in the associate, and the Group has the ability to use its power over the associate in a way that affects the amount of the returns from the associate. In the full consolidation process, the assets and liabilities of a subsidiary are included in the consolidated financial statements in their entirety.

The equity method is used when there is a joint arrangement in the form of a joint venture or a significant influence may be exercised over the business policy of the associate, but the entity does not qualify as a subsidiary.

Joint arrangements that are classified as joint operations are reported based on the proportion of the assets, liabilities, income and expenses which are attributable to us in compliance with the respective applicable IFRS.

Interests in subsidiaries, joint ventures or associates that, in the Group's opinion, are of minor significance, are recognized at amortized cost. Indicators for determining the materiality of subsidiaries are the revenue, earnings and equity of these companies. Investments of <20% are recognized at fair value.

There are no reciprocal shareholdings in the EnBW Group as defined by section 19 (1) German Stock Corporation Act (AktG).

The consolidated companies are as follows:

#### Type of consolidation

Number of companies	31/12/2023	31/12/2022
Fully consolidated companies	256	235
Entities accounted for using the equity method	25	26
Joint operations	3	3

### Changes in the consolidated companies

Of the companies included in the consolidated financial statements by way of full consolidation, 10 (previous year: 8) domestic companies and 16 (previous year: 1) foreign companies were consolidated for the first time in the reporting year. A total of 2 (previous year: 0) domestic companies and 1 (previous year: 2) foreign company were deconsolidated. Gains and losses on deconsolidation were immaterial in both the reporting year and the previous year. In addition, 2 (previous year: 2) domestic companies and no (previous year: 1) foreign companies were merged.

### First-time full consolidation of affiliated entities 2023

EnBW acquired several smaller companies in the 2023 financial year. The considerations paid of €74.2 million included €61.7 million in the form of cash and cash equivalents. There were no significant incidental acquisition costs incurred as part of the transactions. The value of the non-controlling interests was calculated pro rata based on the identifiable net assets. The amount reported for goodwill is preliminary due to the fact that the analysis of the fair value of the assets and liabilities has not yet been concluded. In particular, it represents synergies in the area of generation and sales and is not deductible for tax purposes.

Following their full consolidation, the acquired companies contributed €29.3 million to revenues and €9.6 million to earnings after income taxes in the 2023 financial year. If they had been fully consolidated since the beginning of the year, Group revenue would have increased by €42.2 million

to €44,472.9 million, and earnings after income taxes would have increased by €10.9 million to €1,808.0 million.

The following assets and liabilities were taken over as part of the acquisition:

in € million	Fair value
Intangible assets	34.5
Property, plant and equipment	60.4
Other non-current assets	2.3
Cash and cash equivalents	28.5
Other current assets	43.5
<b>Total assets</b>	<b>169.2</b>
Non-current liabilities	82.1
Current liabilities	32.0
<b>Total liabilities</b>	<b>114.1</b>
Net assets <sup>1</sup>	55.1
Net assets allocated to non-controlling interests	(14.7)
Net assets attributable to the shareholders of EnBW AG	(40.4)
<b>Consideration paid</b>	<b>74.2</b>
Considerations paid allocated to non-controlling interests	(19.2)
<b>Goodwill</b>	<b>14.6</b>

<sup>1</sup> The calculation of the fair value of these assets and liabilities has not yet been concluded because analyses relating to the assets and liabilities are still outstanding. Therefore, provisional values have been stated in accordance with IFRS 3.45.

The fair value of the trade receivables acquired as part of the business combination stood at €11.6 million. There were no material individual impairment losses. The total amount of the trade receivables was largely collected so that the gross value corresponded to the fair value of the trade receivables.

## Deconsolidation of fully consolidated companies 2023

### Deconsolidation of bmp greengas GmbH

bmp greengas GmbH, Munich, filed an application to open protective shield proceedings on 25 May 2023. The order from the District Court of Munich to begin preliminary insolvency proceedings under self-administration on 30 May 2023 led to a significant and prolonged restriction in the rights of the parent company with respect to the assets and management of bmp greengas GmbH and thus to a loss of control for the period of the insolvency proceedings under self-administration. Other operational expenditure of €4.2 million was realized as a result of the deconsolidation. bmp greengas GmbH is a leading distributor of biomethane in Europe and an expert in green gases.

## Changes in the shareholdings in fully consolidated companies 2023

### Sale of interest in EnBW He Dreiht GmbH & Co. KG

EnBW sold 49.9% of its shareholding in EnBW He Dreiht GmbH & Co. KG, Biberach an der Riß (formerly EnBW He Dreiht GmbH, Varel) on 31 July 2023 to APKV Direkt Infrastruktur GmbH, Munich, Allianz Leben Direkt Infrastruktur GmbH, Munich, AZ-SGD Direkt Infrastruktur GmbH, Munich, AIP II Holding 8 K/S, Copenhagen/Denmark and NBIM Germany ReInfra AS, Oslo/Norway. Our shareholding in EnBW He Dreiht GmbH & Co. KG fell to 50.1% as a result of this transaction. EnBW He Dreiht GmbH & Co. KG will continue to be included as a fully consolidated company in the consolidated financial statements of EnBW. The proceeds from the disposal of the shares were €311.1 million which were paid to EnBW in cash and cash equivalents. Transaction costs of €7.0 million were incurred. The value transferred to the non-controlling interest was €196.9 million. The difference between the disposal proceeds (after transaction costs and taxes) and the value transferred to the non-controlling interest of €105.3 million was recognized in equity under revenue reserves.

### Sale of interest in EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG

EnBW sold 24.95% of its shareholding in EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG, Karlsruhe, on 30 November 2023 to SWK Holding GmbH, Stuttgart, and a further 24.95% of its shareholding to Expand Netzbetreiber GmbH, Frankfurt am Main, a subsidiary of KfW. EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG holds 100% of the shares in TransnetBW GmbH. Our shareholding in EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG fell to 50.1% as a result of this transaction. EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG and its subsidiary TransnetBW will continue to be included as fully consolidated companies in the consolidated financial statements of EnBW. The non-controlling interest was assigned a value of €2,045.4 million. The difference between the disposal proceeds (after interest, transaction costs of €12.1 million and taxes) and the value transferred to the non-controlling interest of €-58.1 million was recognized in equity under revenue reserves. The majority of the proceeds were paid in cash and cash equivalents in the reporting year, while the remaining payment will be made by 2028 at the latest.

### Changes in the shareholdings in fully consolidated companies 2022

#### Sale of interest in SunInvest GmbH & Co. KG

EnBW sold 49.9% of its shareholding in SunInvest GmbH & Co. KG, Stuttgart, to Windpark Uetze Ost GmbH & Co. KG, Munich, on 30 September 2022. Our shareholding in SunInvest GmbH & Co. KG fell to 50.1% as a result of this transaction. SunInvest GmbH & Co. KG will continue to be included as a fully consolidated company in the consolidated financial statements of EnBW. The proceeds from the disposal of the shares were €301.5 million and were paid to EnBW in cash and cash equivalents. Transaction costs of €7.5 million were incurred. The value transferred to the non-controlling interest was €195.7 million. The difference between the disposal proceeds (after transaction costs and taxes) and the value transferred to the non-controlling interest of €91.3 million was recognized in equity under revenue reserves.

in € million	2022
Consideration received (less costs to sell and taxes)	287.0
Shares allocated to non-controlling interests	195.7
Non-operating amount recognized under revenue reserves	91.3

### Changes in accounting policies

#### First-time adoption of amended accounting standards

The International Accounting Standards Board (IASB) adopted the following new standards and amendments to existing standards whose application is mandatory as of the 2023 financial year:

**First-time adoption of amended accounting standards**

Announcement	Changes	Mandatory adoption for the EnBW Group	Impact on the EnBW consolidated financial statements
Amendments to IAS 1: Disclosures of Accounting Policies	Companies must now only disclose their material accounting policies rather than their significant accounting policies.	01/01/2023	No material impact.
Amendments to IAS 8: Definition of Accounting Estimates	Clarification of the distinction between changes to accounting policies and changes to accounting estimates.	01/01/2023	No material impact.
Amendments to IAS 12: Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction	Clarification that the recognition exemption for deferred taxes does not apply to cases in which the initial recognition of an asset and a liability gives rise to equal taxable and deductible temporary differences.	01/01/2023	No material impact.
Amendments to IAS 12: International Tax Reform — Pillar Two Model Rules	Exception to the obligation to recognize deferred taxes that arise from the introduction of the Pillar Two model rules, with extended obligations for disclosure in the notes.	01/01/2023	No material impact.
Insurance Contracts and Amendments to IFRS 17	IFRS 17 covers the accounting of insurance contracts by the insurer and replaces the previous standard IFRS 4.	01/01/2023	No material impact.

**Effects of new accounting standards that are not yet mandatory**

The IASB published the following amendments to standards whose adoption is not yet mandatory for the 2023 financial year. Their application in the future is subject to their endorsement by the EU into European law. There are no plans for premature application.

**Effects of new accounting standards that are not yet mandatory**

Announcement	Changes	Mandatory adoption for the EnBW Group <sup>1</sup>	Expected impact on the EnBW consolidated financial statements
Amendments to IAS 1: Classification of Liabilities as Current or Non-current	Clarification of the requirements for classifying debt as current or non-current.	01/01/2024	No material impact.
Amendments to IAS 1: Non-current Liabilities with Covenants	Clarification that only covenants that must be complied with on or before the reporting date are relevant for classifying the debt as current or non-current, as well as disclosure obligations for the notes.	01/01/2024	No material impact.
Amendments to IAS 7 and IFRS 7: Supplier financing agreements	Additional disclosure obligations related to supplier financing agreements (reverse factoring).	01/01/2024	No material impact.
Amendments to IAS 21: Lack of Exchangeability	Clarification of which exchange rate to use when the spot exchange rate is not observable.	01/01/2025	No material impact.
Amendments to IFRS 16: Lease Liability in a Sale and Leaseback	Refinement of the valuation of lease liabilities so that no profit or loss related to a retained right-of-use is recognized.	01/01/2024	No material impact.

<sup>1</sup> This date refers to the intended date of adoption according to the IASB insofar as the endorsement by the EU into European law is still pending.



## Significant accounting policies

### Intangible assets

Intangible assets acquired for a consideration are carried at amortized cost and, except for goodwill, are amortized using the straight-line method over their useful life. The amortization period of purchased software ranges from three to five years; the amortization period of concessions for power plants is between 15 and 65 years. Customer relationships are amortized over their expected useful life of between 4 and 30 years. Concession agreements in the areas of electricity, gas, district heating and water are in place between individual entities in the EnBW Group and the municipalities. Concession agreements are amortized over their term (generally 20 years).

Internally generated intangible assets are recognized at cost if it is probable that a future economic benefit from the use of the assets will flow to the company and the cost of the asset can be reliably determined. At the EnBW Group, these assets relate to software programs that are amortized on a straight-line basis over a useful life of five years. If the recognition criteria are not satisfied, costs are expensed immediately through profit or loss in the year in which they were incurred.

The useful lives and amortization methods are reviewed regularly.

In accordance with the provisions of the IFRS, goodwill from business combinations is not amortized, but tested for impairment at least once a year and whenever there is any indication that the recoverable amount may be lower than the carrying amount.

### Property, plant and equipment

Items of property, plant and equipment are measured at cost. Items that are subject to wear and tear are depreciated using the straight-line method over the expected useful life of their individual components. Depreciation is recorded pro rata temporis in the year of addition.

Maintenance and repair costs are recorded as expenses. Renewal or maintenance expenses which lead to future economic benefits of an asset are capitalized.

Construction cost subsidies and household connection costs, as well as investment grants and subsidies, are not deducted from the cost of the asset concerned, but recognized on the liabilities side of the balance sheet.

The power plants also contain the present value, net of depreciation, of the estimated cost of decommissioning. Changes in estimates relating to decommissioned power plants are recognized through profit or loss. Any changes in estimates relating to power plants that are currently in operation due to changes in assumptions concerning the future development of costs are generally recognized without effect on profit or loss by adjusting the appropriate balance sheet items. If the respective property, plant and equipment are already fully depreciated, the change in estimate is recognized in the income statement.

Depreciation on our major items of property, plant and equipment is computed using the following uniform Group-wide useful lives:

#### Useful life

##### in years

Buildings	25 – 50
Power plants	10 – 50
Electricity distribution plants	25 – 45
Gas distribution plants	5 – 55
Water distribution plants	15 – 40
District heat distribution plants	15 – 30
Telecommunications distribution facilities	4 – 20
Other equipment, factory and office equipment	4 – 14

The useful lives and amortization methods are reviewed regularly. Property, plant and equipment are derecognized upon disposal or when no further economic benefits are expected from their continued use or sale. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement in the period the asset is derecognized.

### **Borrowing costs**

If a qualifying asset requires a substantial period of time (more than twelve months) to be made ready for its intended use, the borrowing costs incurred until it is ready for its intended use that are directly attributable to its acquisition or production are capitalized as part of the respective asset. Where there are specific debt financing arrangements, the respective borrowing costs incurred are recognized. Where the debt financing arrangements are not specific, borrowing costs are capitalized using a uniform rate within the Group of 2.9% (previous year: 1.5%). Borrowing costs totaling €83.2 million were capitalized in the current financial year (previous year: €26.1 million).

### **Leases**

For more information, please refer to note [12] "Leases."

A lease is an agreement that conveys the right to use an asset for a period of time in exchange for the payment of a consideration. The rights of use to the leased assets must, in general, be reported for all leases in which the EnBW Group is the lessee. These are recognized under property, plant and equipment. Correspondingly, the payment obligations from leases must be reported as lease liabilities. In subsequent valuations, the right-of-use assets are depreciated over the term of the lease. The lease liabilities, which are reported under other liabilities, are determined based on the present value of the payment obligations arising from the lease and recognized accordingly using the effective interest method. The lease payments considered in this process are discounted using the interest rate implicit in the lease, insofar as this can be determined. Otherwise, the payments are discounted using the incremental borrowing rate. In the case of power purchase agreements (PPA), the EnBW Group purchases generated electricity and the associated guarantees of origin from a renewable energy power plant that belongs to the supplier. This arrangement is considered to be a lease according to IFRS 16 if EnBW generally takes all of the output produced by the power plant and can also decide how the power plant is deployed.

In the case of short-term leases and leases involving low-value assets, the option of using the simplified approach is utilized and the lease payments are recognized as an expense in the income statement. Moreover, the option not to separate lease and non-lease components is utilized, except in the case of leases for vehicles, real estate and gas caverns.

Leases where the EnBW Group as lessor transfers substantially all the risks and rewards of ownership of the leased asset to the lessee are classified as finance leases. In this case, a receivable is recognized for the amount of the net investment in the lease. The payments made by the lessee are split into repayments for the principal and interest income and recognized accordingly using the effective interest method. All other leases are classified as operating leases. In the latter cases, the leased asset is reported under property, plant and equipment and depreciated over its useful life. The payments made by the lessee are recognized as income on a straight-line basis over the term of the lease.

### **Entities accounted for using the equity method**

At the time of acquisition they are recognized at cost and subsequently recognized according to the amortized proportionate net assets. The carrying amounts are increased or reduced each year by the proportionate profit or loss, dividends paid and other changes in equity. This means that when shareholdings are being measured, only the company's proportional equity, rather than its assets and liabilities, is shown in the consolidated financial statements. Any goodwill is included in the stated value of the shareholding in question. Any negative differences are recognized in profit or loss in the investment result. If the losses attributable to EnBW at a company accounted for using the equity method equal or exceed the value of the interest in this company, no further loss is recorded unless EnBW has assumed obligations, or made payments, on behalf of the company. The interest in the company accounted for using the equity method is the carrying amount of the investment, plus any long-term interests that, in substance, form part of EnBW's net investment in the company.

### Impairment losses/reversals of impairment losses

The carrying amounts of intangible assets, property, plant and equipment, investment properties and entities accounted for using the equity method are tested for impairment when circumstances or events indicate that there could be an impairment or increase in value. If such indications exist, the recoverable amount of the asset concerned is determined through impairment testing. The recoverable amount is the higher of the fair value less costs to sell and the value in use.

The fair value is determined on the basis of a business valuation model and reflects the best estimate of the amount at which a third party would acquire the asset. The business valuation models utilize cash flow plans approved by the Board of Management that are based on, among other things, the medium-term plans valid as of the date of the impairment test. The three-year medium-term plans are created at the level of the individual business units and consolidated to form plans for the Group. These plans are based on past experience and on estimates concerning future market developments, in general, as well as in specific sectors. A longer detailed planning period is utilized if necessitated by commercial or regulatory requirements, or in the case of finite evaluations especially in the Sustainable Generation Infrastructure segment.

Key assumptions underlying the determination of fair value less costs to sell include projections of future electricity and gas prices, raw materials prices, company-specific investing activities, the regulatory framework as well as growth and discount rates. In the case of extended detailed planning periods, the future development of the European electricity and gas markets is modeled using different scenarios. All of the assumptions described above are based on internal and external estimates and also take climate-related effects into account. For example, the impact of the German climate targets and the company's own climate targets are taken into account in the scenarios for determining expected long-term commodity prices.

Discounting is carried out based on the weighted average cost of capital (WACC) or, at entities accounted for using the equity method, generally on the basis of the cost of equity. The cost of equity is determined from the expected return on a long-term risk-free federal bond plus a company-specific risk premium. Borrowing costs are derived using the basic interest rate plus a risk premium. The risk premium takes into account an adequate risk premium for a peer group, while the discount rates used for the individual cash-generating units take into account the equity structures of a peer group and a country-specific risk.

The value in use corresponds to the present value of the future cash flows expected to be derived from an asset or cash-generating unit. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. If it is not possible to determine the recoverable amount for an individual asset, the recoverable amount is determined for the cash-generating unit (CGU) to which the asset can be allocated. In order to take account of expected price-related and volume-related growth, constant growth rates of 0.0% to 1.5% (as in the previous year) are used to extrapolate the cash flows beyond the detailed planning period for all cash-generating units that have an unlimited time period as a basis.

For further information on the scenarios, please refer to the section "Disclosures on climate change."

For more information, please refer to note (10) "Intangible assets."

Goodwill arising from business combinations is allocated to the cash-generating units or groups of cash-generating units (CGUs) that are expected to achieve synergies from the business combination.

The carrying amount of these CGUs is tested for impairment at least once a year. An additional test is performed whenever there is any indication that the carrying amount may not be recoverable.

If the recoverable amount of an asset falls short of its carrying amount, an impairment loss is recognized in profit or loss immediately. For impairment losses on CGUs to which goodwill has been allocated, the goodwill is reduced first. If the impairment loss exceeds the carrying amount of the goodwill, the difference is allocated proportionally to the remaining non-current assets of the CGU.

If the reason for a previously recognized impairment loss no longer exists at a later date, the impairment loss is reversed. The increased carrying amount of the asset attributable to a reversal may not exceed the carrying amount that would have been determined had no impairment loss been recognized in previous years (amortized cost).

An impairment loss recognized for goodwill may not be reversed in a subsequent period. Accordingly, impairment losses on goodwill are not reversed.

### Investment properties

Investment properties include land and buildings which are held to earn rental income or for capital appreciation and are not used by EnBW itself. Investment properties are measured at cost less depreciation and, for the term of their finite useful life, are depreciated over a term of 25 to 50 years using the straight-line method.

### Financial assets

For financial assets, a differentiation is made between debt instruments and equity instruments. Debt instruments are split into three business models: "hold," "hold to collect and sell" and "other." The business models determine the measurement categories for the debt instruments. The "hold" business model includes trade receivables, lease receivables and loans, which are generally held to maturity and are thus allocated to the "measured at amortized cost" measurement category. Trade receivables mainly comprise contracts with customers. Receivables are recognized as such at the time a good is delivered or after the conclusion of an associated performance period, because this is the point in time at which there is an unconditional claim to receipt of the consideration and only the passage of time is required until the payment is due. As in the previous year, loans subject to market interest rates are recognized at nominal value and low-interest or interest-free loans at present value. The "hold to collect and sell" business model comprises fixed-income and floating-rate interest securities. These are allocated to the "measured at fair value through profit or loss" or "measured at fair value in equity" measurement categories. A cash flow characteristics test in accordance with IFRS 9 is carried out for these securities to test whether the cash flows arise exclusively to make interest and redemption payments on the outstanding amount. The securities that do not pass the cash flow characteristics test are measured at fair value in equity, otherwise the securities are measured at fair value through profit or loss. The "other" business model comprises all debt instruments that are not allocated to the "hold" or "hold to collect and sell" business models. As a result, these debt instruments are allocated to the "measured at fair value through profit or loss" measurement category.

Equity instruments are allocated to the “measured at fair value through profit or loss” measurement category. The option of measuring equity instruments at fair value in equity without recycling is not currently being utilized.

To determine the fair value, the market price on the reporting date is taken for publicly listed financial assets. If no active market exists, the fair value is determined using the most recent market transaction or using a valuation method (such as the discounted cash flow method or the multiplier method). If the input parameters for such a valuation cannot be reliably determined with the amount of effort appropriate for the materiality of the equity instrument, the valuation is carried out at acquisition costs. Trade receivables usually have short terms to maturity. Consequently, their carrying amounts as of the reporting date approximate their fair value. Receivables that bear off-market interest or are interest free with remaining terms to maturity of more than one year are reported in the balance sheet at present value. For other current assets, it is assumed, as in the previous year, that the fair value approximates the carrying amount. For non-current other assets, the market value is determined by discounting the expected future cash flows. Financial assets are derecognized when the contractual claims to the cash flows expire or have been effectively transferred. In order to give proper consideration to the growing importance of climate risks, our fund managers use sustainability principles, including the UN Principles for Responsible Investment (UN PRI), when selecting each individual investment. Special climate risks are generally taken into account in the respective investment processes. At the same time, compliance with the regulations in the Sustainable Finance Disclosure Regulation (SFDR) when making investments will significantly increase transparency in the future.

#### Impairment of financial assets

The impairment model according to IFRS 9 incorporates forward-looking expectations and is based on expected credit losses. Financial assets that belong to the “measured at amortized cost” or “measured at fair value in equity” measurement categories are impaired using the 3 stage impairment model according to IFRS 9. For financial assets in the “measured at amortized cost” or “measured at fair value in equity” categories, a risk provision is determined at the time of acquisition in the amount of the expected loss within one year (12-month PD) (**risk provision stage 1**).

If there has been significant deterioration in the borrower’s credit rating, the calculation horizon is extended to cover the lifetime of the receivable (**risk provision stage 2**).

The default risk has significantly increased/deteriorated resulting in a **transfer to risk provision stage 2** when the following criteria are met:

- A payment is more than 30 days past due, whereby an earlier transfer based on findings from the claims management process is also fundamentally possible.
- There has been a significant deterioration in the credit rating. As long as the absolute default risk is classified as low, the asset is generally not transferred to stage 2. It can be assumed in this process that a financial instrument has a “low default risk” if it fulfills the criteria to achieve an “investment grade” credit rating.

In order to evaluate whether there has been a significant change in the default risk, any actual or expected significant changes are also examined, taking into account, among other things, the following factors:

- external or internal credit rating of the financial instrument
- business/financial or economic framework conditions
- operating result of the borrower
- regulatory/economic or technological environment of the borrower
- financial support from a parent company
- payment history
- quality of the guarantees provided by a shareholder
- information on delayed payments

If the credit rating has deteriorated so much as to jeopardize payment or the borrower has actually defaulted, the asset is transferred to **risk provision stage 3**. The risk provision is also calculated here based on the expected losses over the lifetime of the receivable. In contrast to the previous stages, any interest income is now recognized on the basis of the net carrying amount after impairment and using the effective interest rate, and no longer on the basis of the gross carrying amount.

Default is assumed if the payment is 90 days or more past due or if the payment is no longer considered likely due to other events (such as opening insolvency proceedings).

The expected credit loss is determined by multiplying the credit risk parameters “Exposure at Default” (EaD), “Probability of Default” (PD) and “Loss Given Default” (LGD). The probability of default over a given time horizon is based on external ratings (if available). Due to the low number of defaults with respect to financial assets, the loss given default is calculated based on a weighted estimate by experts.

For trade receivables, receivables from investments and lease receivables with no significant financing component according to IFRS 15, the simplified approach for determining impairments according to IFRS 9 is used irrespective of their term. Accordingly, the expected loss over the whole lifetime is always used as the risk provision (risk provision stage 2).

When using the simplified approach, the expected loss is determined using default rates. Portfolios with the same risk characteristics are defined and then used to derive historical credit default rates. The following criteria are used to form the portfolios: the same type of contractual conditions for the assets, comparable counterparty characteristics and similar credit ratings for the assets in the portfolio. The expected loss rates are calculated based on historical defaults for each customer group. The historical loss rates are adjusted to reflect the current economic environment and forward-looking information on macroeconomic factors that could have an impact on the payment behavior of our customers. Gross domestic product has been identified as the most relevant factor in this area. In exceptional cases, the default probability is taken from default probabilities that are available externally instead of using historical data. If there is objective evidence that the credit rating for the asset has deteriorated, it is transferred to risk provision stage 3.

As in the previous year, receivables are generally written off when the receivable is deemed irrecoverable. Possible factors could be:

- an unsuccessful enforcement order
- filing for insolvency proceedings or opening the subsequent insolvency proceedings or refusal to open the insolvency proceedings due to a lack of assets
- a declaration about the ineligibility of the receivable in a court order

However, receivables may only be written off when there is no liability that could be offset against it. Impairment loss expenses are netted as a separate item on the income statement.

### Inventories

Inventories are recorded at cost. As a rule, they are measured at average prices. Pursuant to IAS 2, costs of conversion contain the direct costs and an appropriate portion of the necessary materials and production overheads including depreciation. Costs of conversion are determined on the basis of normal capacity utilization. Borrowing costs are not capitalized as a component of costs of conversion. Appropriate allowance is made for risks relating to reduced usability. Where necessary, the lower net realizable value compared to the carrying amount is recognized. Reversals of impairment losses on inventories are deducted from the cost of materials.

Inventories acquired for trading purposes are recognized at fair value less costs to sell. Basis adjustments are carried out on inventories purchased in connection with cash flow hedges in the form of an increase or decrease in acquisition costs. Amounts are reclassified to the income statement when the hedged item impacts profit or loss.

#### **Emission allowances**

Emission allowances acquired for production purposes are recognized at cost as inventories. In contrast, emission allowances acquired for trading purposes are recognized as other assets at fair value through profit or loss.

The obligation to return emission allowances is accounted for under other provisions. The carrying amount of the provision is determined based on the carrying amount of the existing emission allowances. If further emission allowances are needed, they are accounted for at their fair value as of the reporting date.

#### **Treasury shares**

Own equity instruments which are repurchased (treasury shares) are deducted from equity. No gain or loss is recognized in the income statement on the purchase, sale, issue or cancellation of the Group's own equity instruments.

#### **Non-controlling interests**

Non-controlling interests comprise the positions within net assets attributable to minority shareholders and the gains or losses and other components of the overall result attributable to these shareholders.

The value of non-controlling interests is calculated pro rata based on the identifiable net assets. Non-controlling interests are presented separately from the equity of the shareholders of the parent company within Group equity.

#### **Provisions for pensions and similar obligations**

For defined benefit plans, provisions for pensions and similar obligations are determined using the projected unit credit method in accordance with IAS 19. This method considers current and future pension benefits known at the reporting date as well as future anticipated salary and pension increases. Actuarial gains and losses are recorded in their entirety in the financial year in which they arise. They are reported outside of the income statement in the statement of comprehensive income as part of the cumulative changes not impacting income and recorded in equity. There will be no recognition in profit and loss in subsequent periods. Plan assets of funds established to cover the pension obligations are deducted from the provision. The service cost is disclosed in personnel expenses, while the net interest portion of additions to the provision and the return on plan assets are recorded in the financial result. Payments for defined contribution plans are recognized as personnel expenses.

#### **Provisions relating to nuclear power**

The Act for the Reorganization of Responsibility in Nuclear Waste Management, which came into force in the middle of June 2017, establishes new rules for the roles and financial responsibilities of the German government and operators. According to the new law, operators are responsible for the decommissioning and dismantling of their nuclear power plants, as well as for the conditioning and proper packaging of the radioactive waste. The provisions accumulated for these purposes will remain with the companies. The transport, intermediate storage and final storage of the waste is the responsibility of the German government, who has been provided with the money to finance these tasks by the operators of the nuclear power plants. The evaluation of the provisions is carried out mainly on the basis of estimates, which for the decommissioning and dismantling of nuclear power plants, as well as for the conditioning and packaging of radioactive waste, are primarily derived from sector-specific appraisals. The provisions are recognized at the discounted settlement amount at the time they originated.

### Other provisions

Other provisions take account of all legal or constructive obligations towards third parties resulting from past events that are identifiable at the reporting date, to the extent that it is probable that they will lead to an outflow of resources in future and their amount can be reliably estimated. The provisions are recognized at their settlement amount. They are measured at the estimated future amount or the amount most likely to be incurred.

The non-current provisions are stated at the future amount needed to settle the obligation discounted to the reporting date. This does not apply to provisions for pensions and similar obligations. These are subject to special rules in accordance with IAS 19.

When measuring the value of provisions related to the windfall profit levy, the option of applying the forward market correction according to section 17 StromPBG was utilized.

### Deferred taxes

Deferred taxes are recorded in accordance with the temporary concept (IAS 12) on all temporary differences between the tax accounts and the IFRS balance sheet of the individual entities. The Group only applies the exception to the recognition and disclosure of deferred taxes if they result from the application of the Pillar Two model rules for a global minimum tax rate. Deferred taxes from consolidation entries are recognized separately. Deferred tax assets are recognized on deductible temporary differences and carryforwards of unused tax losses if it is reasonably certain that they will be recovered.

Deferred taxes are calculated on the basis of the tax rates that apply or that are expected to apply in the individual countries at the time of utilization. A tax rate of 29.7% was applied for German Group companies (previous year: 29.7%). Tax assets and tax liabilities are netted with each other by consolidated tax group or entity if the conditions to do so have been satisfied.

### Financial liabilities

Financial liabilities are recorded at fair value upon initial recognition. After initial recognition, they are measured at amortized cost. Lease liabilities are recognized under other liabilities at the present value of the outstanding lease payments.

The fair value of bonds listed on the capital market is the nominal value multiplied by the quoted price as of the reporting date. For current financial liabilities, it is assumed that the fair value corresponds to the carrying amount. For non-current financial liabilities, the market value is determined by discounting the expected future cash outflows. If these financial liabilities are subject to floating interest rates, the carrying amount corresponds to the fair value. Financial liabilities are derecognized when the contractual obligations have been fulfilled or extinguished.

### Trade payables and other liabilities

Trade payables and other liabilities are recognized at the amount repayable. Trade payables primarily have short terms to maturity. Consequently, their carrying amounts as of the reporting date approximate their fair value. For current other liabilities, it is assumed that the fair value corresponds to the carrying amount. For non-current other liabilities, the market value is determined by discounting the expected future cash outflows. The construction cost subsidies and household connection costs carried as liabilities are reversed to revenue in some cases based on the use of the subsidized item of property, plant and equipment, and in other cases according to the electricity and gas grid fee ordinance. As a rule, the period of reversal for construction cost subsidies is between 20 and 45 years. Investment cost subsidies are reversed over the depreciation period of the subsidized assets through profit or loss in other operating income.

Other liabilities includes lease liabilities that are recognized at the present value of the outstanding lease payments.



**Assets held for sale and liabilities directly associated with assets classified as held for sale**

Assets held for sale are individual non-current assets and groups of assets that can be sold in their present condition, whose sale is highly probable and that satisfy all the criteria defined in IFRS 5. The item “liabilities directly associated with assets classified as held for sale” includes liabilities that are part of a group of assets held for sale.

Assets classified as assets held for sale are measured at the lower of carrying amount and fair value less costs to sell, and depreciation on such assets ceases.

Gains or losses from measuring individual assets and groups of assets held for sale are disclosed as profit or loss from continuing operations until they are finally sold.

**Derivatives**

Derivatives are measured at fair value in accordance with IFRS 9. Both the counterparty's credit default risk and that of the company itself are taken into account in the calculation of fair value. Default risk with respect to an individual counterparty is calculated on the basis of the net risk position. In the case of derivatives for which net recording is not permitted, the credit default risk calculated on the basis of the net position is recorded in proportion to the fair value before the value adjustment. In accordance with the “net approach,” this involves allocating the value adjustment solely to the derivatives' asset or liability surplus that arises. The derivatives are recognized under other assets and other liabilities and subsidies.

Derivatives are measured using quoted prices in active markets such as stock market prices. Where such prices are not available, the fair values are determined by reference to generally accepted valuation techniques. Quoted prices in active markets are used as inputs wherever possible. If they are not available either, entity-specific planning assumptions are considered in the valuation.

If they are contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item, in accordance with the entity's expected purchase, sale or usage requirements (own use), they are not recognized as derivatives under IFRS 9, but as executory contracts in accordance with IAS 37.

Derivatives are allocated to the “measured at fair value through profit or loss” measurement category unless hedge accounting is used.

For derivatives used in a hedge, the accounting treatment of changes in fair value depends on the nature of the hedging transaction.

In the case of changes in the fair value of cash flow hedges which are used to offset future cash flow risks arising from existing hedged items or highly probable forecast transactions, the unrealized gains and losses are initially recognized directly in equity (other comprehensive income) in the amount of the hedged item covered. Amounts are derecognized from equity either when the hedged item impacts profit or loss on the income statement or in the case of hedged inventories by an adjustment to the cost of acquisition of the hedged inventory (basis adjustment).

In the case of a fair value hedge used to hedge the fair value of reported assets or liabilities, the gains or losses from the measurement of derivatives and the associated hedged items are recognized in profit or loss.

Foreign currency risks from investments with a foreign functional currency are secured by hedges of a net investment in a foreign operation. Unrealized exchange rate differences are initially recognized in equity and reclassified to profit or loss when the foreign operation is sold.

Hedging relationships are designated in accordance with the risk management goals and strategies explained in note (26) "Accounting for financial instruments." The economic relationship between the hedging instrument and the hedged items, as well as the evaluation of the expected effectiveness of the hedge, are documented at the beginning. Primary and derivative financial instruments will be netted in the balance sheet if an unconditional right to offset exists, or when there is an intention to offset or realize the asset and settle the liability.

#### **Power purchase agreements (PPAs) and power sale agreements (PSAs)**

The accounting method used for long-term power purchase agreements and power sale agreements, which include the physical delivery of energy, depends on the design of the respective agreement. The first step is to check whether EnBW has no control (IFRS 10) or joint control (IFRS 11) over the company or the asset. The next step is to check whether the contract is considered a lease (IFRS 16). This is the case if the consumer enjoys the entire economic benefits of its use and can decide on the use of the asset. Otherwise, a PPA or PSA can be accounted for as a financial instrument according to IFRS 9. If IFRS 9 cannot be applied due to the own use exception, the contract is considered an executory contract for which a provision for anticipated losses only needs to be recognized if the contractual obligation is classified as an onerous contract (IAS 37).

There is no physical delivery of electricity in the case of virtual contracts. They are considered to be financial agreements, which generally meet the definition of a derivative according to IFRS 9.

#### **Contingent liabilities**

Contingent liabilities are possible obligations to third parties or present obligations where the probability of an outflow of resources is remote or the amount cannot be determined reliably. Contingent liabilities outside of company acquisitions are not recognized.

#### **Financial guarantees**

Financial guarantees are contracts where EnBW is required to make specified payments to reimburse the holder for a loss incurred because a debtor fails to meet its payment obligations under the financial guarantee. Financial guarantees are accounted for according to IFRS 9 and not IFRS 17. They are measured at fair value upon initial recognition. After initial recognition, the financial guarantees are measured at the higher of amortized cost and the best estimate of the present obligation as of the reporting date.

#### **Revenue recognition**

According to IFRS 15, revenue is recognized when control over a good or service has been transferred to the customer. Service contracts for a fixed fee, whose primary purpose is the provision of a service and not the transfer of an insurance risk, are recognized in the EnBW Group in accordance with IFRS 15 and not IFRS 17. Revenue is measured according to the consideration defined in the contract with the customer, whereby sales deductions such as price discounts or variable components must be taken into account. Amounts collected on behalf of third parties are excluded from this process. Revenue is recognized net of VAT and after the elimination of intercompany sales. Costs for obtaining contracts are immediately recognized as an expense when they arise, insofar as the amortization period for the assets is one year or less. If the amortization period is longer, they are capitalized. The amortization template works in line with the transfer of the good or service to the customers and is based on the average customer-retention period. An adjustment to the transaction price to take account of a significant financing component is not required because no contracts have currently been concluded where the time period between the transfer of the promised good or service to the customer and the payment by the customer exceeds one year, or such contracts fall under the exception in IFRS 15.62.

For further information, please refer to the section "Leases."

Please refer to note (1) "Revenue" for more details on the accounting policies.

Please refer to note [21] “Provisions” for more information on **provisions**.

## Exercise of judgment and estimates when applying accounting policies

The preparation of the consolidated financial statements requires judgments and estimates to be made in applying the accounting policies that affect the reported amounts of assets and liabilities, revenue and expenses, and the disclosure of contingent liabilities.

EnBW regularly reviews its expectations with respect to medium- and long-term price trends in the relevant procurement and sales markets and its estimates with respect to energy industry conditions. In particular, this review takes into account the clearly defined and accelerated climate protection efforts of the German government, with the implementation of the EU Green Deal through effective regulations and the impact of geopolitical conflicts.

In the 2022 financial year, the expected prices for gas, coal, CO<sub>2</sub> allowances and electricity increased, particularly in response to the changes on the gas markets due to the war between Russia and Ukraine. In the 2023 financial year, the expected prices for electricity, gas and coal fell and the expected price for CO<sub>2</sub> allowances increased following a review of the medium-term price expectations in comparison to the previous year. In contrast to our expectations in the previous year, we are predicting a slight increase in the prices for electricity, gas and coal in the long term. It is possible that climate protection policies could further reduce the service lives of conventional power plants. This would have an impact on the valuation of the power plants and the impending losses from long-term electricity procurement agreements. For further information on the impact of climate change, please refer to the section “Disclosures on climate change.”

Judgment must be exercised, in particular, in the process of applying the accounting policies:

- Whether certain commodity futures contracts should be accounted for as derivatives as defined by IFRS 9 or as executory contracts in accordance with the provisions of IAS 37.
- The accounting methods used for long-term power purchase agreements (PPAs) and power sale agreements (PSAs) are determined based on the design of the agreement.
- For contracts for the purchase or sale of LNG, it is necessary to assess whether they fulfill the criteria for a financial instrument according to IFRS 9. Based on the development of the global LNG market, it must be determined whether a sufficiently liquid market exists for the fulfillment of LNG contracts on a net basis. Even in view of the latest developments on the LNG market, we still believe in line with our previous assessments that there is no active market. Therefore, the contracts do not fall under the scope of IFRS 9 and are instead recognized in the respective reporting period.
- Financial assets must be allocated to the “measured at amortized cost,” “measured at fair value through profit or loss” or “measured at fair value in equity” measurement categories according to IFRS 9.
- In the case of contracts with customers, individually definable goods or services must be identified and assessed to determine whether the relevant performance obligation is delivered on a particular date or over a period of time. An appropriate measure of progress must also be determined in order to recognize revenue over the respective period of time. As the customer generally benefits from the service evenly over time, revenue is recognized on a straight-line basis. When determining the transaction price for the transfer of goods and services, it is especially important to identify any variable considerations (such as discounts) and evaluate the extent to which they should be included in the transaction price. Judgment is also required for measuring the level of any variable considerations. These estimates are based, in particular, on the contractual conditions and past empirical values.
- In the case of emission allowances, the company must decide whether they are being used to compensate for production-related emissions or for trading purposes.
- An evaluation must be carried out when including companies in the consolidated companies for the EnBW Group, to decide whether EnBW has control, joint control or exercises a significant influence over the respective company. Alongside the voting rights, contractual rules and the actual circumstances are also taken into account.

We refer you to the explanations of “Power purchase agreements (PPAs) and power sale agreements (PSAs)” in the section “Significant accounting policies” for more information.

We refer you to the explanations of “Financial guarantees” in the section “Significant accounting policies” for more information.

We refer you to the explanations of “Emission allowances” in the section “Significant accounting policies” for more information.

Please refer to the full list of shareholdings in note [38] “Additional disclosures” for more information on the **consolidated companies**.

These estimates are based on assumptions and forecasts which, by their very nature, are uncertain and may be subject to change. The key future-oriented assumptions and other sources of uncertainty as of the reporting date, concerning estimates which have given rise to a considerable risk that material adjustments of carrying amounts of assets and liabilities may be required in the next financial year, are explained below:

**Goodwill:** A review is carried out on every reporting date to identify whether there are any indications of impairment and goodwill is tested for impairment at least once a year. The impairment test involves estimates that concern, above all, future payment surpluses. The underlying assumptions are described in the section “Significant accounting policies” under “Impairment losses/reversals of impairment losses.” To determine the recoverable amount, an appropriate discount rate must be chosen. Future changes in the macroeconomic, industry or company situation may reduce payment surpluses or increase the discount rate, and thus potentially lead to an impairment of goodwill.

**Property, plant and equipment:** Property, plant and equipment are tested for impairment when circumstances or events indicate that there could be an impairment or increase in value. For our power plants in particular, in addition to technical progress and damage, a change in expectations regarding short, medium- and long-term electricity prices and the service life of the power plants may lead to impairment losses or their reversal. The underlying assumptions are described in the section “Significant accounting policies” under “Impairment losses/reversals of impairment losses.” A suitable interest rate must be used when performing the impairment tests. If this interest rate changes, for example due to a change in the macroeconomic or industry situation, recognition of impairment losses or reversals of impairment losses may also be necessary.

**Impairment of financial assets:** In order to determine impairments on financial assets, assumptions about the default risk are made that influence the loss rates. The assumptions are made based on the historical experiences of the Group and flow into the calculation of the impairments as input factors. Changes to market conditions and forward-looking estimates before the end of the relevant reporting period are also taken into account in the calculations. The most important assumptions and input factors are described in the section “Significant accounting policies.”

**Determining the fair value of financial assets and financial liabilities:** The fair value of financial assets and financial liabilities is determined by reference to quoted market prices, insofar as the financial instruments are traded on an active market, or by using valuation techniques such as the discounted cash flow method. Where the parameters used in the valuation techniques are not supported by observable market data, assumptions need to be made which can affect the fair value of financial assets and financial liabilities.

**Contracts for the purchase and sale of LNG:** It is necessary to assess whether contracts for the purchase and sale of LNG fulfill the criteria for a financial instrument according to IFRS 9. Based on the development of the global LNG market, it must be determined whether a sufficiently liquid market exists for the fulfillment of LNG contracts on a net basis. We still believe that there is no active market. Therefore, the contracts do not fall under the scope of IFRS 9 and are instead recognized in the respective reporting period.

**Pension provisions:** When calculating pension provisions, compared to the actual obligations incurred over time, differences may arise from the selection of underlying assumptions, such as the discount rate or trends, the use of biometric probabilities based on the 2018 G Heubeck mortality tables and the accepted approximation methods for future pension increases from the statutory pension insurance fund.

The underlying assumptions for determining the expected market price are described in the explanations under "Impairment losses/reversals of impairment losses" in the section "Significant accounting policies."

**Nuclear provisions:** The provisions for the decommissioning and dismantling of the power plants, as well as for the conditioning and packaging of radioactive waste, are based mainly on sector-specific external appraisals that are updated annually. These appraisals are based on cost estimates of the settlement value for each obligation. The uncertainty inherent in the estimates is due primarily to departures from the assumed cost development and changes in payment dates. Changes in the discount rate could also lead to an adjustment of the nuclear provisions.

**Provisions for onerous contracts:** Provisions for onerous contracts are generally set up for onerous procurement and sales agreements. A change in the expected market prices on the procurement or sales side or in the discount rates may lead to an adjustment of the provisions for onerous contracts.

**Warranty provisions:** Provisions for statutory warranty obligations associated with products sold or services rendered are estimated on the basis of historical warranty data at the time of the sale. These provisions are regularly adjusted to take new information into account.

**Acquisition accounting:** For acquisition accounting purposes, all identifiable assets, liabilities and contingent liabilities acquired in a share purchase are recognized at fair value as of the date of acquisition for first-time consolidation purposes. Estimates are used to calculate the fair value of these assets and liabilities as of the date of acquisition. Land and buildings as well as other equipment, factory and office equipment are generally measured by independent appraisers. Marketable securities are recognized at market price. If the purchase price agreement includes contingent considerations, accounting for those purchase price components also requires estimates.

The measurement of intangible assets is based on the nature of the intangible asset as well as the complexity of determining fair value. Fair value is therefore determined on the basis of an independent external valuation appraisal.

**Income tax:** Estimates are also needed to capitalize tax refund claims, to set up tax liabilities and to assess the temporary differences arising from differences in the accounting treatment of certain items in the financial statements between the consolidated balance sheet in accordance with IFRS and the tax accounts. These estimates also take into account uncertainties with respect to the way income tax is handled by the respective tax authority. Capitalization of tax assets and the setting up of tax liabilities are fundamentally only recognized if the relevant payments are likely. Deferred tax assets or liabilities are recognized on temporary differences. Deferred tax assets are, in principle, only recognized when the future tax advantages will probably be realized or where deferred tax liabilities exist. Deferred tax assets are recognized for all carryforwards of unused tax losses to the extent that it is probable that taxable profit will be available against which the loss carryforwards can be utilized. The judgment exercised by management regarding the anticipated timing and level of future taxable profits, as well as regarding future tax planning strategies, is significant in determining the amount of deferred tax assets that can be recognized. If considered material, changes to climate-relevant matters are also taken into account when determining future taxable profit.

**Entities accounted for using the equity method:** IFRS financial statements were not available to us for all entities. Therefore, these entities were accounted for using the equity method based on an estimate of the HGB-IFRS differences. Investments that are accounted for using the equity method in the consolidated financial statements are tested for impairment when circumstances or events indicate that there could be an impairment loss or increase in value. The impairment test involves estimates that concern, above all, future payment surpluses. To determine the recoverable amount, an appropriate discount rate must be chosen. Future changes in the macroeconomic, industry or company situation may reduce payment surpluses or increase the discount rate, and thus potentially lead to an impairment of the investments.

Potential effects due to changes in estimates are explained in the context of the relevant topics in the respective sections.

## Impact of the war between Russia and Ukraine

The war between Russia and Ukraine is continuing to cause uncertainty on the energy market. It has resulted in, among other things, fluctuations in prices in the gas and electricity sector on the reporting dates and fluctuations in procurement costs. In addition, it is continuing to cause interruptions to the supply chains and rising inflation rates.

Due to the looming threat of a gas shortage, our coal-fired power plants were deployed more frequently in the second half of 2022 to ensure the security of supply. The supply situation in the gas sector had already improved by the end of 2022. This situation continued throughout the whole of 2023 and meant that the gas storage facilities were more than 40% full on average in April and exceeded the statutory requirements on the reporting dates in the second half of the year. Prices on the wholesale market fell as a result throughout the year. As a consequence, the thermal power plants were deployed less than planned in 2023. Our forward-looking hedging policies improved profitability and led to a significant increase in earnings in this segment.

As a result of the war between Russia and Ukraine and the associated shifts on the market, it was necessary for bmp greengas GmbH (bmp) to submit an application in accordance with section 270 a InsO on 25 May 2023 for the opening of protective shield proceedings. The company initiated the insolvency proceedings under self-administration on 1 August 2023. As a result of this loss of control, it was necessary to deconsolidate bmp and also impair the receivables from this company. The described effects of €245 million had a particular impact on the item "Impairment losses" and "Other operating expenses." The insolvency plan was approved by the Insolvency Court in Karlsruhe on 28 December 2023. It has been legally binding since 12 January 2024. The insolvency plan included a payment of €120 million into the capital reserve at bmp and this was completed on 31 January 2024. Following the termination of the insolvency proceedings, the company will be included in the consolidated financial statements again.

Despite the volatile market conditions, we remain committed to our strategic alignment.

## Disclosures on climate change

EnBW is transforming itself from an energy supply company into a sustainable and innovative infrastructure partner. Sustainability is an important element of our business model and also a feature of our strategic alignment. As an energy company, EnBW can make a particularly effective contribution to climate protection.

Further information can be found in the management report under "Our climate protection goals."

The Group is planning to gradually phase out coal power by 2028 and become climate neutral with respect to its own emissions (Scope 1 and 2) by the end of 2035 at the latest. EnBW already announced the development of science-based climate protection targets as part of the Science Based Targets initiative (SBTi) in October 2021. We concluded this process in early 2023 and the targets were certified by the SBTi. We have thus aligned our climate protection targets with the targets of the Paris Agreement. The reduction targets follow a 1.5 degree-aligned path for Scope 1 and 2 emissions and a "well below 2 degrees"-aligned path for Scope 3 emissions. The aim is to reduce CO<sub>2</sub> emissions in the Group in Scopes 1 and 2 by 83% by 2035 (based on the reference year of 2018). In the same period, the EnBW Group aims to reduce its emissions from gas sales, which account for the majority of its Scope 3 emissions, by 43% in comparison to the reference year 2018. The Group intends to offset any residual Scope 1 and 2 emissions in the period after 2035 on a transitional basis by purchasing CO<sub>2</sub> certificates and thus supporting recognized climate change mitigation projects until the emissions have been completely reduced to zero. Along this path, we have also defined various intermediate targets and milestones: We will reduce our Scope 1 and 2 emissions by 50% by 2027 and by 70% by 2030 (based on the reference year of 2018).

In view of the growing importance of climate-related risks, EnBW's strategic considerations take into account the requirements of the energy transition and the profound changes that will take place due to the transformation towards climate neutrality with the effects they will have on all business sectors and private households. We place particular focus on the expansion of renewable energies, electricity consumption, the expansion of the grids, grid stability and the security of supply.

The main focus of this investment is the expansion of the grids, especially the central SuedLink and ULTRANET projects of our grid subsidiary TransnetBW for the future energy supply in Germany, the expansion of renewable energies, such as the planned realization of the EnBW He Dreiht offshore wind farm and the construction of H2-ready gas power plants in Altbach/Deizisau, Stuttgart-Münster and Heilbronn, and further developments in the Smart Infrastructure for Customers segment, for example, in the context of a further expansion of broadband, telecommunications and electromobility. We apply sustainability criteria when making investment decisions even more resolutely than before and are aligning our growth accordingly. In this context, we examine the requirements with respect to climate protection, possible implementation paths and the implications for the business model in particular. This creates an important basis for assessing the opportunities and risks for our business that will arise due to climate change and the dynamic regulatory environment associated with it.

In order to evaluate these opportunities and risks, we use real developments to derive four realistic future scenarios that take into account all of the different aspects of the energy transition. These scenarios are primarily characterized by two dimensions: climate protection and the sustainable economic growth that is achievable in the long term. In this context, climate protection means the transformation towards a climate-neutral company. The economic growth that can be sustainably achieved is a key variable influencing, e.g., the demand for electricity or commodity prices. The scenarios that are relevant to EnBW differ according to the rate of transformation towards a climate-neutral company. Scenarios 1 and 2 assume "normal" economic growth within the scope of so-called potential growth. In scenario 1, there will be a slight delay in achieving the goal of climate neutrality because it will not be possible to comprehensively solve the practical challenges associated with the implementation of the energy transition. In scenario 2, the climate targets defined in the EU Green Deal will be largely achieved up to the middle of the century. In scenarios 3 and 4, it is assumed that there will be a long-term, permanent deviation in economic development that lies outside the scope of potential growth. In scenario 3, it is assumed that there will be higher growth because climate protection has been given a lower priority. In scenario 4, weaker economic growth is assumed. In this scenario, the transformation to climate neutrality will be achieved at the slowest pace.

Based on the assumptions made for specific variables, possible paths for how the energy markets (especially electricity and gas) will develop in the long term are derived for the four scenarios. In the process, we predict the wholesale market prices for electricity in simulated calculations using computer models. These simulations also take into account physical risks, such as the influence meteorological fluctuations may have on the electricity market due to the availability of wind and sunlight, and thus make it possible to incorporate potential changes to the physical environment due to climate change into the calculations. The scenarios can thus provide us with quantitative descriptions that serve as the basis for assessing the business of EnBW and, in particular, also allow us to evaluate the opportunities and risks associated with climate change.

The EnBW consolidated financial statements as of 31 December 2023 were prepared taking into consideration the opportunities and risks related to climate change and to the goals for our strategy, sustainability and climate protection, including climate neutrality. Physical risks resulting from extreme weather events, such as floods, periods of extreme heat and drought, forest fires, hail, storms, etc., could have an impact on the balance sheet in the form of, for example, disruptions to production or production losses, the impairment of assets or additional expenses for reconstruction or purchase of replacements, and are reported based on their materiality. However, they could also lead to long-term changes in climatic and ecological conditions that would indirectly impact the balance sheet via valuation assumptions (e.g., temperature trends, hours of sunshine or wind levels). Transitory risks during the transition to a climate-neutral economy primarily arise in connection with potential political, taxation and regulatory measures, as well as social expectations (e.g., changes in customer demand for renewable instead of conventional energy). Material and foreseeable effects



with an impact on assets, liabilities, income and expenses, as well as any contingent liabilities, were taken into account in the financial statements.

The underlying parameters for material evaluations and estimates made in the reporting year are based fundamentally on the detailed planning period for the Group and, in the long term, on a weighting of the four scenarios described above. These assumptions are consistent with the assumptions for assessing the robustness of the business model and the assumptions made in the risk management system.

Climate-related effects have an impact on the Group's net assets, financial position and results of operations particularly in the following areas:

Area	Notes	Contents
Uncertainty inherent in estimates	Section "Exercise of judgment and estimates when applying accounting policies"	<ul style="list-style-type: none"> <li>Assumptions on the useful lives of non-financial assets, e.g., a residual useful life until 2028 is assumed for the coal power plants due to the early phaseout of coal</li> <li>Valuation assumptions for impairment tests, especially for cash flow forecasts</li> <li>Assumptions related to future taxable results with an impact on the recognition and valuation of deferred taxes</li> </ul>
Revenue	(1) Revenue	<ul style="list-style-type: none"> <li>In the case of customer groups who pay according to rolling annual statements, the transaction prices for electricity and gas deliveries is calculated based on past consumption values while taking into account the current temperature influences and time of year</li> <li>The revenues from long-term power purchase agreements for wind and solar energy are dependent on the hours of sunshine and wind levels</li> </ul>
Leases	(12) Leases	<ul style="list-style-type: none"> <li>In the case of agreements for variable lease payments, which mainly relate to long-term power procurement agreements with variable volumes of electricity from wind and solar energy, the size of the lease payments is dependent on the hours of sunshine and amount of wind</li> </ul>
Provisions, contingent liabilities and other financial commitments	(21) Provisions (27) Contingent liabilities and other financial commitments	<ul style="list-style-type: none"> <li>Provisions are formed for the obligation to return emission allowances in the European emissions trading system.</li> <li>The German nuclear power plant operators have cover from risks due to nuclear damage that could occur as a result of physical risks (e.g., earthquakes, floods, persistently high temperatures).</li> </ul>
Sustainable financing	(23) Liabilities and subsidies	<ul style="list-style-type: none"> <li>In accordance with our Green Financing Framework, the proceeds from the green bonds are exclusively used in the areas of renewable energies (offshore wind, onshore wind and photovoltaics), clean transport (charging infrastructure for electromobility) and the electricity grids.</li> <li>The proceeds from the green promissory note of our subsidiary VNG can only be used for environmentally sustainable projects. The focus here in the medium to long term will be green gases, primarily biogas and sustainably produced hydrogen.</li> <li>Two bank loans taken out specifically to finance the EnBW He Dreiht offshore wind farm.</li> <li>The financing conditions for the sustainability-linked syndicated credit line are linked to CO<sub>2</sub> intensity and the share of generation capacity accounted for by renewable energies.</li> </ul>
Remuneration of the Board of Management	(37) Related parties (individuals)	<ul style="list-style-type: none"> <li>Since performance period 2022–2024, the level of the long-term multi-year variable remuneration (LTI) has not only been dependent on the financial performance indicator EBT but also on compliance with sustainability criteria defined annually by the Supervisory Board; please refer to the detailed presentation on this aspect in the remuneration report of EnBW AG published according to stock corporation law.</li> </ul>



## Currency translation

In the separate financial statements of the entities, business transactions in foreign currency are translated at the rate of the transaction date. Non-monetary items are measured at the rate prevailing when they were first recorded. Monetary items are translated at the closing rate as of the reporting date. Translation differences from monetary items that are allocable to operating activities are recognized in other operating income or other operating expenses with effect on profit or loss. Translation differences from financing activities are disclosed in the financial result.

The reporting currency of EnBW, which is also the functional currency, is the euro (€). The financial statements of the Group entities are translated to euros. Currency translation is performed in accordance with IAS 21 “The Effects of Changes in Foreign Exchange Rates” using the modified closing rate method. Under this method, the assets and liabilities of entities that do not report in euros are translated at the mean rate prevailing on the reporting date, while expenses and income are translated at the average annual rate. The companies concerned are commercially independent foreign entities. Differences from the currency translation of assets and liabilities compared to the translation of the previous year, as well as translation differences between the income statement and the balance sheet, are recognized directly in equity under other comprehensive income. The same procedure is applied by analogy for foreign entities accounted for using the equity method.

Currency translation was based on the following exchange rates, among others:

€1	Closing rate		Average rate	
	31/12/2023	31/12/2022	2023	2022
Swiss franc	0.93	0.98	0.97	1.01
Pound sterling	0.87	0.89	0.87	0.85
US dollar	1.11	1.07	1.08	1.05
Czech koruna	24.72	24.12	24.00	24.56
Japanese yen	156.33	140.66	151.91	138.00
Danish krone	7.45	7.44	7.45	7.44
Polish zloty	4.34	4.68	4.54	4.68
Swedish krona	11.10	11.12	11.47	10.63

# Notes to the income statement and the balance sheet

## (1) Revenue

Revenue from contracts with customers is recognized when control over a good or service has been transferred to the customer. The electricity and energy tax paid by the entities is deducted from revenue in the income statement. In the interest of a more accurate presentation of the business development, income and expenses from energy trading businesses are disclosed net. The net disclosure means that revenue from energy trading businesses is reported net of the related cost of materials. For the 2023 financial year, the reduced energy trading revenue was €64,833.3 million (previous year: €273,779.5 million).

Following an amendment to the Energy Industry Act (section 24b) in response to the extraordinary development of prices on the energy and raw materials markets and for the purpose of reducing the burden on end consumers, the German transmission system operators are now able to receive subsidies to finance some of their transmission grid costs in 2023. In this context, Transnet BW received around €573 million in the 2023 financial year that was recognized as revenue through profit or loss.

Alongside revenue from contracts with customers, there is other revenue from ordinary business activities. This is how it breaks down:

in € million	2023	2022
Revenue from contracts with customers	43,988.0	55,657.0
Other revenue	442.7	345.6
<b>Total</b>	<b>44,430.7</b>	<b>56,002.6</b>

The change in revenue is explained in more detail in the management report in the section “The EnBW Group” and mainly relates to revenue from contracts with customers.

The following table shows a breakdown of revenue by region and products for the different segments of the EnBW Group.

### External revenue by region

2023 in € million	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Genera- tion Infrastructure	Other/ Consolidation	Total
Revenue from contracts with customers by region	17,249.2	5,889.1	20,828.6	21.2	43,988.1
Germany	(13,464.0)	(5,752.4)	(12,365.0)	(13.4)	(31,594.8)
European currency zone excluding Germany	(627.7)	(6.8)	(7,803.0)	(0.0)	(8,437.5)
Rest of Europe	(3,148.5)	(129.9)	(628.5)	(7.8)	(3,914.7)
Rest of world	(9.0)	(0.0)	(32.1)	(0.0)	(41.1)
Other revenue	0.0	438.8	3.8	0.0	442.6
<b>Total</b>	<b>17,249.2</b>	<b>6,327.9</b>	<b>20,832.4</b>	<b>21.2</b>	<b>44,430.7</b>

## External revenue by region

2022 in € million <sup>1</sup>	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Genera- tion Infrastructure	Other/ Consolidation	Total
Revenue from contracts with customers by region	18,754.5	6,353.9	30,541.0	7.5	55,656.9
Germany	(15,009.2)	(6,171.2)	(19,410.9)	(7.5)	(40,598.8)
European currency zone excluding Germany	(638.3)	(3.6)	(10,691.6)	(0.0)	(11,333.5)
Rest of Europe	(3,100.9)	(179.1)	(437.8)	(0.0)	(3,717.8)
Rest of world	(6.1)	(0.0)	(0.7)	(0.0)	(6.8)
Other revenue	0.0	343.5	2.2	0.0	345.7
<b>Total</b>	<b>18,754.5</b>	<b>6,697.4</b>	<b>30,543.2</b>	<b>7.5</b>	<b>56,002.6</b>

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

## External revenue by product

2023 in € million	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Genera- tion Infrastructure	Other/ Consolidation	Total
Revenue from contracts with customers by product	17,249.2	5,889.1	20,828.6	21.2	43,988.1
Electricity	(8,484.0)	(4,110.9)	(6,666.5)	(1.2)	(19,262.6)
Gas	(7,481.0)	(917.3)	(13,497.1)	(0.0)	(21,895.4)
Energy and environmental services/ other	(1,284.2)	(860.9)	(665.0)	(20.0)	(2,830.1)
Other revenue	0.0	438.8	3.8	0.0	442.6
<b>Total</b>	<b>17,249.2</b>	<b>6,327.9</b>	<b>20,832.4</b>	<b>21.2</b>	<b>44,430.7</b>

## External revenue by product

2022 in € million <sup>1</sup>	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Genera- tion Infrastructure	Other/ Consolidation	Total
Revenue from contracts with customers by product	18,754.5	6,353.8	30,541.0	7.5	55,656.8
Electricity	(6,833.5)	(4,661.3)	(11,221.0)	(0.0)	(22,715.8)
Gas	(10,730.8)	(744.6)	(18,629.0)	(0.0)	(30,104.4)
Energy and environmental services/ other	(1,190.2)	(947.9)	(691.0)	(7.5)	(2,836.6)
Other revenue	0.0	343.6	2.2	0.0	345.8
<b>Total</b>	<b>18,754.5</b>	<b>6,697.4</b>	<b>30,543.2</b>	<b>7.5</b>	<b>56,002.6</b>

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

One of the Polish subsidiaries was restructured at the beginning of 2023 in order to comply with the Polish energy industry regulations. The grid business at this company was previously reported in the "Smart Infrastructure for Customers" segment but will be part of the "System Critical Infrastructure" segment from the 2023 financial year onwards. The figures for the previous year have been restated accordingly.

Revenues mainly arise from goods supplied or services rendered over a particular time period.

The most important services are described below:

**Electricity and gas deliveries:** The revenues primarily result from the transfer of electricity and gas to customers. Customers could be trading partners, redistributors or end customers. Sales made via the trading markets are realized when control is transferred to the purchaser. Many contracts with end customers do not specify a fixed purchase volume. In these cases, the performance obligation consists of, in particular, providing an energy supply that can be accessed at all times so that the revenue is recognized for the respective time period over the term of the contract. The progress made in the performance of the contract is usually measured after this period of time. The transaction price for the underlying contracts comprises a fixed basic fee and the charge for the volume of electricity or gas consumed. If fixed purchase volumes are agreed, however, the performance obligation consists of transferring the energy volumes, which is why the revenue is recognized when control is transferred. In the case of customer groups who pay according to rolling annual statements, the transaction price is calculated based on past consumption values while taking into account the

current temperature influences and time of year. Discounts or bonus payments are taken into account as variable considerations against revenue from the beginning of the contract. If individual contracts include the transfer of assets as an additional performance obligation, the revenue for these assets is recognized at the time of delivery and measured at the relative individual sales price. Monthly advance payments are generally agreed.

Distribution of electricity and gas: EnBW offers its customers use of the electricity and gas grids. EnBW recognizes the revenues when the services are rendered. Monthly invoices of the actual costs or monthly advance payments are agreed.

In addition, other revenue from contracts with customers includes the areas of services, district heating, contracting, the supply of water, waste management and telecommunications. The majority of the contracts include services for which customers pay while they are being rendered and the revenue is thus recognized over a period of time. The measure of progress is generally carried out on a straight-line basis together with the allocation of variable fees for certain performance elements.

The total amount of the expected revenues for performance obligations that have not been fulfilled, either partially or fully, as of 31 December 2023 is €32,101.2 million (previous year: €38,322.0 million). Most of these performance obligations will be fulfilled as expected within the next five years. Revenues for performance obligations totaling €18,728.7 million (previous year: €23,078.9 million) are expected to be fulfilled within the next financial year. Variable considerations are only taken into account in the figures if they can be estimated with reasonable certainty and are not subject to limits. Remaining performance obligations from customer contracts which originally had an expected maximum term of one year, or for which the value of already performed services is invoiced directly, are not included.

As of 31 December 2023, contract liabilities amounted to €1,177.0 million (previous year: €1,082.3 million). From the contract liabilities contained in the opening balance of €1,082.3 million (previous year: €986.5 million), €66.5 million (previous year: €67.3 million) was recognized as revenue within the reporting period. The contract liabilities mainly comprise construction cost subsidies and household connection costs. These are non-refundable prepayments that are carried as liabilities and reversed over a period of 20 to 45 years.

Please refer to note (26) "Accounting for financial instruments" for the development of receivables connected to customer contracts.

In the reporting period, revenues of €535.2 million (previous year: €239.3 million) were recognized for performance obligations that were fulfilled either fully or partially in preceding periods.

## (2) Other operating income

in € million	2023	2022
Income from derivatives	3,313.7	3,971.4
Income from the reversals of provisions	130.6	671.3
Income from reversals of impairment losses on non-financial assets	120.9	1,499.2
Rent and lease income	21.8	18.7
Income from disposals of assets	12.8	24.1
Miscellaneous	907.6	1,163.3
<b>Total</b>	<b>4,507.4</b>	<b>7,348.0</b>

Income from derivatives fell mainly due to valuation effects as a result of the volatile market environment and lower market prices.

The reversals of impairment losses included €47.7 million for one of the gas storage facilities in the Sustainable Generation Infrastructure segment. The recoverable amount is around €0.2 billion. This reversal of impairment losses was mainly due to improved earnings forecasts both in the medium and long term. In addition, a change to the expected service lives of the caverns, which were amended after a multi-year measurement cycle, also increased the value of these facilities. The increase in the discount rates weakened the described positive effects. The discount rates used in the valuation were between 6.9% and 7.7% after tax and between 9.8% and 11.0% before tax (previous year: between 6.6% and 6.9% after tax and between 9.5% and 9.8% before tax).

The reversals of impairment losses in the previous year included €1,254.2 million for one of the CGU for conventional power plants in the Sustainable Generation Infrastructure segment. The recoverable amount was around €-391 million. The reversals of impairment losses were mainly due to improved medium-term income forecasts as a result of the high gas and electricity prices at the time of the valuation. The discount rates used in the valuations were between 6.7% and 7.0% after tax and 9.6% and 9.9% before tax.

In addition, there was a reversal of impairment losses of €102.2 million for a second CGU for conventional power plants in the Sustainable Generation Infrastructure segment. The recoverable amount was around €713 million. The reversals of impairment losses were mainly due to improved medium-term income forecasts as a result of the high gas and electricity prices at the time of the valuation. The discount rates used in the valuations were between 6.5% and 6.7% after tax and 9.4% and 9.8% before tax.

All of the recoverable amounts were calculated on the basis of the fair value less costs to sell and correspond to Level 3 of the IFRS 13 fair value hierarchy.

There was a decrease in miscellaneous other operating income, which was primarily due to a settlement payment from the German federal government to a subsidiary in the previous year of €460.0 million as well as lower income from currency exchange rate gains of €40.7 million (previous year: €157.7 million). This was offset to some extent by higher income from CO<sub>2</sub> allowances and increased income from insurance payments. Miscellaneous other operating income also includes income from the reversal of accruals.

For information on the determination of fair value, please refer to the explanations of "Impairment losses/reversals of impairment losses" in the section "Significant accounting policies" and the section "Disclosures on climate change."

### (3) Cost of materials

in € million	2023	2022
Cost of materials and supplies and of purchased merchandise	31,599.9	46,983.4
Cost of purchased services	4,125.3	4,165.0
<b>Total</b>	<b>35,725.2</b>	<b>51,148.4</b>

Cost of materials and supplies and of purchased merchandise comprises, in particular, electricity and gas procurement costs including increases in provisions for onerous contracts for procurement agreements. It also includes the necessary additions to the provisions for the decommissioning of nuclear power plants. However, the accretion of the provisions is not included. Fuel costs for conventional power plants, costs for the procurement of CO<sub>2</sub> allowances and the net result from energy trading transactions for the rolling procurement of emission allowances are also disclosed under this item.

Cost of purchased services mainly contains expenses for use of the grids, services purchased for the operation and maintenance of the plants as well as concession fees. In addition, other expenses directly attributable to services rendered are disclosed under cost of purchased services.

#### (4) Personnel expenses

in € million	2023	2022
Wages and salaries	2,424.4	2,119.3
Social security	227.7	205.6
Expenses for post-employment benefits	243.1	266.9
<b>Total</b>	<b>2,895.2</b>	<b>2,591.8</b>

#### Employees as an annual average

Number	2023	2022
Smart Infrastructure for Customers	5,594	5,182
System Critical Infrastructure	11,291	11,211
Sustainable Generation Infrastructure	7,403	7,168
Other	3,611	2,936
<b>Employees</b>	<b>27,899</b>	<b>26,497</b>
Apprentices and trainees including DH students in the Group	1,147	1,154

The total number includes employees of joint operations of 7 employees (previous year: 6) based on the proportion attributable to EnBW.

#### (5) Other operating expenses

in € million	2023	2022
Expenses from derivatives	2,261.1	3,495.0
Administrative and selling costs and other overheads	1,146.4	700.5
Audit, legal and consulting fees	210.7	175.1
Rent and lease expenses	157.5	115.7
Other personnel expenses	130.4	89.2
Dues and levies	123.7	123.9
Advertising expenses	115.5	82.1
Insurance	103.0	96.5
Other taxes	30.3	55.7
Costs from disposals of assets	13.1	20.3
Miscellaneous	512.4	428.1
<b>Total</b>	<b>4,804.1</b>	<b>5,382.1</b>

The decrease in other operating expenses was mainly attributable to lower expenses from derivatives. Analogous to how income from derivatives develops, this was primarily due to valuation effects as a result of a volatile market environment and lower market prices. This was offset to some extent by higher administrative and selling costs and other overheads, especially as a result of increased expenses related to the expansion of our gas business, which were mainly related to the expansion of our LNG business. There were also negative effects indirectly related to the incidents at SENEK and expenses associated with the deconsolidation of bmp greengas.

Miscellaneous other operating expenses mainly increased as a result of higher costs for warranty provisions at our subsidiary SENEK in the three-digit million euro range. This was offset to some extent by lower expenses from currency exchange rate losses of €63.3 million (previous year: €182.0 million) and by lower expenses for CO<sub>2</sub> allowances. In addition, miscellaneous other operating expenses contain, among other things, expenses for commissions.

## (6) Amortization and depreciation

in € million	2023	2022
Amortization of intangible assets	308.6	527.1
Depreciation of property, plant and equipment	1,896.9	1,629.7
Depreciation of investment properties	0.9	5.5
Depreciation of right-of-use assets from leases	190.6	170.6
Reversals of investment cost subsidies <sup>1</sup>	0.0	-0.8
<b>Total</b>	<b>2,397.0</b>	<b>2,332.1</b>
of which scheduled depreciation	(1,686.2)	(1,615.3)
of which impairment losses	(710.8)	(716.8)

<sup>1</sup> Reversals of investment cost subsidies have been reported in note (2) "Other operating income" since the 2023 financial year.

Please refer to note (10) "Intangible assets" for information on the impairment of goodwill.

Impairment losses totaling €101.7 million (previous year: €336.1 million) were recognized on intangible assets and €609.0 million (previous year: €376.2 million) on property, plant and equipment.

In the reporting year, there were impairment losses of €338.6 million recognized on a CGU for conventional power plants in the Sustainable Generation Infrastructure segment. The recoverable amount is around €240.2 million. This impairment was mainly attributable to poorer medium-term earnings forecasts as a result of currently falling electricity prices. The discount rates used in the valuation were between 6.8% and 7.6% after tax and between 9.7% and 10.9% before tax (previous year: between 6.7% and 7.0% after tax and between 9.6% and 9.9% before tax).

Impairment losses of €213.7 million were also recognized on two offshore wind farms in the Sustainable Generation Infrastructure segment. The recoverable amount is around €2.3 billion. The main reason for the impairments is successively fewer operating years with EEG funding. The discount rates were between 5.2% and 6.7% after tax and between 7.4% and 9.7% before tax (previous year: between 5.1% and 6.8% after tax and between 7.3% and 9.9% before tax).

In the previous year, impairment losses were mainly recognized on two offshore wind farms in the Sustainable Generation Infrastructure segment in the amount of €414.2 million. The main reasons for the impairment were higher capital costs, the successively fewer remaining operating years with EEG funding and new findings with respect to offshore wind conditions. The recoverable amount was around €2.4 billion. The discount rates used in the valuation were between 5.1% and 6.8% after tax and 7.3% and 9.8% before tax.

All of the recoverable amounts were calculated on the basis of the fair value less costs to sell and correspond to Level 3 of the IFRS 13 fair value hierarchy.

For information on the determination of fair value, please refer to the explanations of "Impairment losses/reversals of impairment losses" in the section "Significant accounting policies" and the section "Disclosures on climate change."

## (7) Investment result

in € million	2023	2022
Share of profit/loss of entities accounted for using the equity method	88.9	62.5
Write-downs on entities accounted for using the equity method	-216.6	-122.1
Write-ups of entities accounted for using the equity method	13.1	83.4
<b>Net profit/loss from entities accounted for using the equity method</b>	<b>-114.6</b>	<b>23.8</b>
Result from investments	113.1	250.9
of which non-consolidated affiliated entities	(4.1)	(11.2)
Write-downs on investments	-95.7	-29.7
of which non-consolidated affiliated entities	(-78.0)	(-20.6)
Write-ups of investments	2.0	24.4
Result from the sale of equity investments	5.9	7.5
<b>Other profit/loss from investments</b>	<b>25.3</b>	<b>253.1</b>
<b>Investment result (+ income/- expense)</b>	<b>-89.3</b>	<b>276.9</b>

**Net profit/loss from entities accounted for using the equity method**

In the current financial year, there was a write-down of €59.9 million on the shares in an entity accounted for using the equity method in the Sustainable Generation Infrastructure segment. This write-down was mainly attributable to poorer medium-term earnings forecasts as a result of currently falling electricity prices.

There were also write-downs of €101.3 million related to a joint venture in Turkey, operated in US dollars, in the Sustainable Generation Infrastructure segment. This write-down was due to an increase in capital costs and changes to exchange rate assumptions. The recoverable amount is around €0.2 billion. The discount rates used in the valuations were between 13.9% and 14.5% after tax and between 18.5% and 19.3% before tax (previous year: between 10.6% and 11.7% after tax and between 13.3% and 14.6% before tax).

In the previous year, the write-downs at entities accounted for using the equity method included €84.6 million for a gas storage company in the Sustainable Generation Infrastructure segment. This write-down was attributable to a deterioration in the earnings potential as a result of the sanctions on Russia and the suspension of all fee payments. The recoverable amount was around €-42 million. The discount rate used in the valuation was 6.6% after tax and 9.4% before tax.

In the previous year, other write-ups of entities accounted for using the equity method of €57.7 million related to a conventional power plant in the Sustainable Generation Infrastructure segment. This write-up was mainly due to improved medium-term income forecasts as a result of the high gas and electricity prices at that point in time.

**Other profit/loss from investments**

Other profit/loss from investments contains expenses of €14.5 million (previous year: income of €0.7 million) from the market valuation of the “measured at fair value through profit or loss” measurement category.

There were total write-downs on investments in non-consolidated affiliated entities in the onshore sector in the Sustainable Generation Infrastructure segment of €40.4 million. These write-downs were due to project cancellations and delays. The recoverable amount is around €5 million. The discount rates used in the valuations were between 5.4% and 7.8% after tax and between 7.3% and 10.4% before tax (previous year: between 4.7% and 6.8% after tax and between 6.4% and 9.2% before tax).

In addition, there was a write-down on another investment in the photovoltaics sector in the System Critical Infrastructure segment of €35.8 million. This write-down on the balance sheet was attributable to changed market conditions in the photovoltaic sector in 2023. Increases in inflation and interest rates, regulatory uncertainty and unclear funding conditions meant that consumers were significantly more reticent with their investment decisions in comparison to the previous year. The outlook for market conditions in 2024 and subsequent years also falls below previous expectations. The recoverable amount is around €20 million. The discount rate was 6.9% after tax and 10.1% before tax (previous year: 6.6% after tax and 9.7% before tax).

In the previous year, the write-downs on investments mainly related to a write-down of €11.9 million on a non-consolidated affiliated entity in the Sustainable Generation Infrastructure segment. The main reason for this write-down was the cessation of operations at a subsidiary that had previously made a contribution to the value of the entity. The recoverable amount was around €20 million.

Write-ups on investments in the previous year mainly related to non-consolidated affiliated entities in the Sustainable Generation Infrastructure segment. The main reason for a write-up on investments in companies related to the project business in the area of Renewable Energies was an improved medium- to long-term income forecast as a result of high electricity prices in 2022. The discount rates used in the valuation were between 4.8% and 6.8% after tax and 6.4% and 9.2% before tax.



For information on the determination of fair value, please refer to the explanations of "Impairment losses/reversals of impairment losses" in the section "Significant accounting policies" and the section "Disclosures on climate change."

All of the recoverable amounts were calculated on the basis of the fair value less costs to sell and correspond to Level 3 of the IFRS 13 fair value hierarchy.

## (8) Financial result

in € million	2023	2022
Interest and similar income	351.5	126.5
Interest portion on the reversal of liabilities	178.0	615.3
Other finance income	330.7	297.5
<b>Finance income</b>	<b>860.2</b>	<b>1,039.3</b>
Borrowing costs	-484.0	-290.9
Other interest and similar expenses	-36.1	-15.9
Interest portion of increases in liabilities	-326.0	-99.6
Personnel provisions	(-198.1)	(-94.7)
Provisions relating to nuclear power	(-104.4)	(-0.5)
Other non-current provisions	(-22.0)	(-4.4)
Other liabilities	(-1.5)	(0.0)
Other finance costs	-425.5	-655.6
<b>Finance costs</b>	<b>-1,271.6</b>	<b>-1,062.0</b>
<b>Financial result (+ income/- costs)</b>	<b>-411.4</b>	<b>-22.7</b>

Interest and similar income mainly comprises interest income from interest-bearing securities and loans, as well as dividends and shares in profits. The income from the interest portion on the reversal of liabilities was primarily attributable to the increase in the discount rate for long-term provisions. In the reporting period, interest income of €27.4 million (previous year: €9.9 million) was offset against economically related interest expenses. In the reporting period, other finance income includes income from the "measured at fair value through profit or loss" measurement category of €235.1 million (previous year: €182.6 million).

Borrowing costs are composed as follows:

in € million	2023	2022
Expenses incurred for bank interest and bonds	349.1	192.7
Interest portion of lease liabilities	23.8	16.2
Other borrowing costs	111.1	82.0
<b>Borrowing costs</b>	<b>484.0</b>	<b>290.9</b>

The interest portion of increases in liabilities relates mainly to the annual accretion of the non-current provisions.

In the reporting period, other finance costs mainly included costs from the "measured at fair value through profit or loss" measurement category of €154.4 million (previous year: €337.3 million). In addition, they also contained market price losses on the sale of securities amounting to €99.3 million (previous year: €75.2 million).

The total interest income and expenses for financial assets and financial liabilities presented in the financial result breaks down as follows:

### Total interest income and expenses

in € million	2023	2022
Total interest income	189.6	74.3
Total interest expenses	-396.7	-241.6

The total interest income and expenses arose from financial instruments that are not measured at fair value through profit or loss. The main items here are interest received from loans and bank balances, which are measured at amortized cost, as well as interest and dividends received from financial assets allocated to the "measured at fair value in equity" measurement category. Total interest income comprised the interest income from the "measured at amortized cost" measurement

category of €129.7 million (previous year: €39.9 million) and the interest income from the “measured at fair value in equity” measurement category of €59.9 million (previous year: €34.4 million). In the reporting period, the interest expenses for the financial assets measured at amortized cost totaling €396.7 million (previous year: €241.6 million) were incurred particularly on bonds, bank liabilities and lease liabilities, as in the previous year.

## (9) Income tax

in € million	2023	2022
<b>Actual income tax</b>		
Domestic corporate income tax	402.1	317.1
Domestic trade tax	390.4	165.6
Foreign income taxes	102.5	108.2
<b>Total (- income/+ expense)</b>	<b>895.0</b>	<b>591.0</b>
<b>Deferred taxes<sup>1</sup></b>		
Germany	123.1	59.8
Abroad	-10.0	-99.4
<b>Total (- income/+ expense)</b>	<b>113.1</b>	<b>-39.5</b>
<b>Income tax (- income/+ expense)</b>	<b>1,008.1</b>	<b>551.5</b>

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

The actual income tax amounting to €895.0 million (previous year: €591.0 million) concerns income tax expenses from the current financial year of €937.3 million (previous year: €548.2 million) and income tax income for past periods of €42.3 million (previous year: expenses of €42.8 million).

Deferred tax expenses of €113.1 million (previous year: income of €39.5 million) consists of the deferred tax expense from the current financial year of €159.4 million (previous year: €115.1 million) and deferred tax income for past periods of €46.3 million (previous year: €154.6 million).

The change in the actual income tax income and deferred tax income for past periods was mainly due to tax audits and changes in the tax assessments. The balance from deferred taxes does not contain any income (previous year: €2.2 million) related to a change in tax rates.

As in the previous year, the corporate income tax rate was 15.0% plus a solidarity surcharge of 5.5% of the corporate income tax. The trade tax rate was 13.9% (previous year: 13.9%). This represents a tax rate on income of 29.7% (previous year: 29.7%). For the foreign entities, the tax rate applicable in the country in which they are based of between 19.0% and 25.8% (as in the previous year) is used to calculate income taxes. Deferred tax assets and liabilities are measured at the tax rates expected to apply when the asset is realized or the liability is settled.

Deferred taxes comprise the following:

in € million	2023	2022
Origination or reversal of temporary differences	165.1	-149.4
Origination of carryforwards of unused tax losses	-85.5	-26.7
Utilization of carryforwards of unused tax losses	18.5	136.6
Write-down of tax loss carryforwards recognized in previous years	15.0	0.0
<b>Deferred taxes (- income/+ expense)</b>	<b>113.1</b>	<b>-39.5</b>

The reconciliation from the expected income tax expense to the effective income tax expense is presented below:

in € million <sup>1</sup>	2023	in %	2022	in %
<b>Earnings before tax</b>	<b>2,840.7</b>		<b>2,395.3</b>	
Expected tax rate		29.7		29.7
<b>Expected income tax (- income/+ expense)</b>	<b>843.7</b>		<b>711.4</b>	
Tax effects				
Differences in foreign tax rates and tax rate differences	-57.7	-2.0	-48.9	-2.0
Tax-free income	-123.3	-4.3	-178.1	-7.4
Non-deductible expenses	123.0	4.3	87.3	3.6
Depreciation of losses on goodwill	5.4	0.2	55.5	2.3
Add-backs and reductions for trade tax purposes	23.0	0.8	14.6	0.6
Accounting for joint ventures and associates using the equity method	35.7	1.3	-4.8	-0.2
Adjustment/valuation/non-recognition of carryforwards of unused tax losses and temporary differences	251.7	8.9	28.7	1.2
Zero-rated disposals of investments	-3.7	-0.1	-2.4	-0.1
Taxes relating to other periods	-88.4	-3.1	-111.7	-4.7
Other	-1.3	-0.2	-0.1	-0.1
<b>Current income tax (- income/+ expense)</b>	<b>1,008.1</b>		<b>551.5</b>	
<b>Current tax rate</b>		<b>35.5</b>		<b>23.0</b>

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

The EnBW Group falls under the Global Anti-Base Erosion Model Rules of the OECD (Pillar Two model rules). The minimum tax rates relevant to the EnBW Group are valid initially for financial years that start after 31 December 2023.

The Pillar Two rules envisage the introduction of a top-up tax if the stipulated minimum tax rate is less than 15%. The EnBW Group would then be subject to a top-up tax equal to the difference between the effective tax rate according to the Pillar Two rules and the minimum tax rate of 15%. Based on the Country-by-Country Reporting (CbCR) for 2022 and projected figures for financial years beginning after 31 December 2023, all of the jurisdictions relevant to the EnBW Group, except for Switzerland which will impose a qualified national top-up tax, are presumed to have a minimum tax rate of 15%.

The EnBW Group is currently carrying out a comprehensive assessment of the impact of the Pillar Two rules for financial years starting after 31 December 2023. No significant impact is expected.

**(10) Intangible assets**

in € million	Concessions, industrial property rights and similar rights and assets	Internally generated intangible assets	Goodwill	Other	Total
<b>Cost</b>					
As of 01/01/2023	3,817.1	136.1	1,386.6	72.3	5,412.1
Increase/decrease due to changes in the consolidated companies	32.3	0.0	2.1	0.0	34.4
Additions	96.8	38.0	0.0	64.1	198.9
Reclassifications	23.7	1.7	0.0	-24.1	1.3
Currency adjustments	15.1	0.0	-6.8	0.0	8.3
Disposals	-26.5	-0.3	0.0	-0.5	-27.3
As of 31/12/2023	3,958.5	175.5	1,381.9	111.8	5,627.7
<b>Accumulated amortization</b>					
As of 01/01/2023	1,843.2	93.0	257.3	0.3	2,193.8
Decrease due to changes in the consolidated companies	-10.4	0.0	-12.8	0.0	-23.2
Additions	188.1	18.8	0.0	0.0	206.9
Currency adjustments	6.3	0.0	0.0	0.0	6.3
Disposals	-24.0	-0.1	0.0	0.0	-24.1
Impairment	74.3	0.9	18.3	8.2	101.7
Reversal of impairment losses	-0.1	0.0	0.0	0.0	-0.1
As of 31/12/2023	2,077.4	112.6	262.8	8.5	2,461.3
<b>Carrying amounts</b>					
As of 31/12/2023	1,881.1	62.9	1,119.1	103.3	3,166.4

in € million	Concessions, industrial property rights and similar rights and assets	Internally generated intangible assets	Goodwill	Other	Total
<b>Acquisition or production costs</b>					
As of 01/01/2022	3,643.2	106.3	1,364.2	54.4	5,168.1
Increase/decrease due to changes in the consolidated companies	3.6	0.0	13.9	0.0	17.5
Additions	131.4	24.4	0.0	45.5	201.3
Reclassifications	22.8	5.5	0.0	-26.9	1.4
Currency adjustments	21.9	0.0	8.5	0.0	30.4
Disposals	-5.8	-0.1	0.0	-0.7	-6.6
As of 31/12/2022	3,817.1	136.1	1,386.6	72.3	5,412.1
<b>Accumulated amortization</b>					
As of 01/01/2022	1,610.5	70.1	70.5	0.0	1,751.1
Decrease due to changes in the consolidated companies	-0.2	0.0	0.0	0.0	-0.2
Additions	168.1	22.9	0.0	0.0	191.0
Currency adjustments	11.1	0.0	0.0	0.0	11.1
Disposals	-4.7	0.0	0.0	0.0	-4.7
Impairment	148.9	0.0	186.8	0.3	336.0
Reversal of impairment losses <sup>1</sup>	-90.5	0.0	0.0	0.0	-90.5
As of 31/12/2022	1,843.2	93.0	257.3	0.3	2,193.8
<b>Carrying amounts</b>					
As of 31/12/2022	1,973.9	43.1	1,129.3	72.0	3,218.3

<sup>1</sup> The reversals of impairment losses primarily relate to one cash-generating unit for conventional power plants in the Sustainable Generation Infrastructure segment.

The carrying amount of the intangible assets includes concessions to operate power plants amounting to €1,261.6 million (previous year: €1,387.3 million) and customer relationships amounting to €74.5 million (previous year: €74.3 million).

In the 2023 financial year, a total of €38.8 million (previous year: €28.1 million) was spent on research and development. The criteria for recognition under IFRS were not satisfied.

The following table shows the main amounts for goodwill allocated to the business segments at CGU level:

	Goodwill in € million		Discount rates after tax in % <sup>1</sup>	
	2023	2022	2023	2022
<b>Smart Infrastructure for Customers</b>	<b>197.0</b>	<b>213.2</b>		
Plusnet subgroup	81.6	81.6	5.7	4.8
Senec subgroup	50.2	50.2	6.6	6.6
PRE	44.7	45.8	7.6	7.4
Other CGU	20.5	35.6	–	–
<b>System Critical Infrastructure</b>	<b>405.4</b>	<b>410.2</b>		
PRE	191.2	196.0	5.5	4.6
Netze BW GmbH	87.9	87.9	4.5–6.6	3.9–4.2
Stadtwerke Düsseldorf AG	51.4	51.4	4.4	3.8
ONTRAS Gastransport GmbH	45.3	45.3	4.5	3.7
Other CGU	29.5	29.5	–	–
<b>Sustainable Generation Infrastructure</b>	<b>516.6</b>	<b>505.9</b>		
Valeco subgroup	250.5	250.5	5.2–7.5	3.9–6.5
Energiedienst AG	83.7	83.7	5.1–7.2	3.9–6.6
Stadtwerke Düsseldorf AG	63.2	63.2	6.4–7.2	5.6–6.3
EnBW AG conventional generation	60.3	60.3	5.5–7.4	4.4–6.6
Other CGU	58.9	48.2	–	–
<b>Other/Consolidation</b>	<b>0.1</b>	<b>0.0</b>		
<b>Total</b>	<b>1,119.1</b>	<b>1,129.3</b>	<b>–</b>	<b>–</b>

<sup>1</sup> Discount rates as of the reporting date of 30 September of the respective financial year. The discount rate before tax was 6.4% – 10.6% (previous year: 5.5% – 9.2%).

The goodwill allocated to the CGUs accounted for less than 5.3% (previous year: 4.3%) of total goodwill in each case. Its aggregate total was €109.0 million (previous year: €113.3 million).

The goodwill presented in the table was tested for impairment at the level of the respective CGU on 30 September 2023. In the current financial year, additional impairment tests were also carried out on 31 December 2023, in some cases due to the sharp increase in capital costs.

In the 2023 financial year, there were impairment losses on goodwill of €18.3 million (previous year: €186.8 million). In the reporting year, the impairment losses related to goodwill at Energiedienst AG in the Smart Infrastructure for Customers segment (recoverable amount: €280.0 million). The reason for these impairment losses was increases in capital costs in this segment, which amounted to 7.1% after tax (previous year: 6.8%) and 10.1% before tax (previous year: 9.6%) when calculating the impairment losses on 31 December 2023.

In the previous financial year, there were impairment losses on goodwill of €174.0 million in the System Critical Infrastructure segment. The impairments mainly related to goodwill at ONTRAS Gastransport GmbH in the amount of €81.9 million (recoverable amount: €1,669.4 million), at Energiedienst AG in the amount of €35.9 million (recoverable amount: €407.1 million) and at ZEAG Energie AG in the amount of €31.1 million (recoverable amount: €175.2 million). The impairment losses were due to increased capital costs in the segment.

All of the recoverable amounts were calculated on the basis of the fair value less costs to sell and correspond to Level 3 of the IFRS 13 fair value hierarchy.

For information on the determination of fair value, please refer to the explanations of "Impairment losses/reversals of impairment losses" in the section "Significant accounting policies" and the section "Disclosures on climate change."

As part of the impairment tests, sensitivity analyses were carried out to investigate the impact of an increase in the discount rate.

The recoverable amount of goodwill for Stadtwerke Düsseldorf in the System Critical Infrastructure segment exceeded the carrying amount on 30 September 2023 by around €35 million (discount rate after tax: 4.4%). If the capital costs had risen in isolation by around 0.4%, the recoverable amount would have corresponded to the carrying amount.

## (11) Property, plant and equipment

in € million	Land and buildings	Power plants	Distribution plants	Other equipment	Fixed assets under construction	Total
<b>Cost</b>						
As of 01/01/2023	4,465.3	22,166.1	19,912.0	2,147.0	4,044.8	52,735.2
Increase/decrease due to changes in the consolidated companies	9.2	78.7	16.0	2.0	99.7	205.6
Additions	101.1	74.8	755.7	84.2	3,327.8	4,343.6
Reclassifications	67.5	238.5	344.0	66.1	-722.1	-6.0
Reclassification to assets held for sale	0.0	-0.4	0.0	0.0	0.0	-0.4
Currency adjustments	-2.8	17.0	-37.3	1.5	0.4	-21.2
Disposals	-4.7	-88.1	-134.6	-27.5	-11.5	-266.4
As of 31/12/2023	4,635.6	22,486.6	20,855.8	2,273.3	6,739.1	56,990.4
<b>Accumulated amortization</b>						
As of 01/01/2023	2,326.1	16,221.0	10,758.9	1,553.0	12.4	30,871.4
Decrease due to changes in the consolidated companies	0.0	0.0	0.0	-0.7	0.0	-0.7
Additions	85.8	584.5	511.4	116.4	0.0	1,298.1
Reclassifications	5.8	16.0	-3.5	-15.4	0.0	2.9
Reclassification to assets held for sale	0.0	0.0	0.0	0.0	0.0	0.0
Currency adjustments	-1.5	11.6	-20.0	1.1	0.0	-8.8
Disposals	-2.5	-41.7	-112.6	-22.5	0.0	-179.3
Impairment	99.5	452.5	22.9	12.4	11.6	598.9
Reversal of impairment losses <sup>1</sup>	-24.2	-74.9	-14.5	-7.2	0.0	-120.8
As of 31/12/2023	2,489.0	17,169.0	11,142.6	1,637.1	24.0	32,461.7
<b>Carrying amounts</b>						
As of 31/12/2023	2,146.6	5,317.6	9,713.2	636.2	6,715.1	24,528.7

<sup>1</sup> The reversals of impairment losses primarily relate to one of the cash-generating units for conventional power plants in the Sustainable Generation Infrastructure segment.

in € million	Land and buildings	Power plants	Distribution plants	Other equipment	Fixed assets under construction	Total
<b>Cost</b>						
As of 01/01/2022	4,366.1	21,963.2	19,058.0	2,064.2	2,766.5	50,218.0
Increase/decrease due to changes in the consolidated companies	0.4	9.0	0.7	0.3	6.9	17.3
Additions	64.9	185.6	626.0	74.8	1,756.3	2,707.6
Reclassifications	39.8	232.0	238.5	32.1	-474.6	67.8
Reclassification to assets held for sale	0.0	-63.8	0.0	0.0	0.0	-63.8
Currency adjustments	5.0	12.3	51.6	0.7	0.7	70.3
Disposals	-10.9	-172.2	-62.8	-25.1	-11.0	-282.0
As of 31/12/2022	4,465.3	22,166.1	19,912.0	2,147.0	4,044.8	52,735.2
<b>Accumulated amortization</b>						
As of 01/01/2022	2,561.5	16,278.7	10,326.9	1,464.1	11.7	30,642.9
Additions	63.3	603.6	479.1	109.1	0.0	1,255.1
Reclassifications	0.0	75.9	2.1	0.0	0.0	78.0
Reclassification to assets held for sale	0.0	-56.0	0.0	0.0	0.0	-56.0
Currency adjustments	2.4	10.9	25.7	0.6	0.0	39.6
Disposals	-4.7	-7.1	-37.3	-18.0	-1.6	-68.7
Impairment	1.4	365.5	3.2	2.2	2.3	374.6
Reversal of impairment losses <sup>1</sup>	-297.8	-1,050.5	-40.8	-5.0	0.0	-1,394.1
As of 31/12/2022	2,326.1	16,221.0	10,758.9	1,553.0	12.4	30,871.4
<b>Carrying amounts</b>						
As of 31/12/2022	2,139.2	5,945.1	9,153.1	594.0	4,032.4	21,863.8

<sup>1</sup> The reversals of impairment losses primarily relate to one of the cash-generating units for conventional power plants in the Sustainable Generation Infrastructure segment.

Items of property, plant and equipment amounting to €131.7 million (previous year: €164.6 million) serve as collateral for liabilities to banks, of which real estate liens account for €0.1 million (previous year: €0.1 million).

The Group's capital expenditure on intangible assets and property, plant and equipment totaling €4,403.8 million (previous year: €2,770.7 million) can be derived from the statement of changes in non-current assets as follows:

in € million	2023	2022
Additions to intangible assets, property, plant and equipment and right-of-use assets according to the statement of changes in non-current assets	4,790.0	3,136.1
Less non-cash-relevant additions to intangible assets and property, plant and equipment	-118.7	-44.2
Less additions to assets recognized as right-of-use assets under leases	-247.6	-227.2
Less additions to the provision recognized for the decommissioning and dismantling of property, plant and equipment	-19.9	-94.0
<b>Cash-relevant capital expenditure on intangible assets and property, plant and equipment</b>	<b>4,403.8</b>	<b>2,770.7</b>

**(12) Leases****Lessee disclosures**

The following table shows the development of the rights-of-use assets from leases:

in € million	Land and buildings	Power plants	Distribution plants	Other equipment	Total
<b>Right-of-use assets</b>					
As of 01/01/2023	416.6	188.2	722.7	133.1	1,460.6
Increase/decrease due to changes in the consolidated companies	11.3	0.0	0.0	0.0	11.3
Additions	105.0	0.0	95.7	46.8	247.5
Reclassifications	0.0	0.0	0.0	-0.1	-0.1
Currency adjustments	0.2	0.0	-1.8	-0.1	-1.7
Disposals	-8.2	-1.7	-9.7	-11.7	-31.3
As of 31/12/2023	524.9	186.5	806.9	168.0	1,686.3
<b>Accumulated amortization</b>					
As of 01/01/2023	117.9	118.6	318.0	64.8	619.3
Additions	52.4	13.4	87.8	26.9	180.5
Reclassifications	0.0	-2.8	0.0	-0.2	-3.0
Currency adjustments	0.0	0.0	-0.4	-0.1	-0.5
Disposals	-6.8	0.0	-5.1	-9.2	-21.1
Impairment	0.0	10.1	0.0	0.0	10.1
As of 31/12/2023	163.5	139.3	400.3	82.2	785.3
<b>Carrying amounts</b>					
As of 31/12/2023	361.4	47.2	406.6	85.8	901.0

in € million	Land and buildings	Power plants	Distribution plants	Other equipment	Total
<b>Right-of-use assets</b>					
As of 01/01/2022	357.2	202.9	593.4	112.7	1,266.2
Increase/decrease due to changes in the consolidated companies	0.3	0.0	0.0	-0.1	0.2
Additions	69.7	2.2	129.3	26.0	227.2
Currency adjustments	0.0	0.0	2.2	0.2	2.4
Disposals	-10.6	-16.9	-2.2	-5.7	-35.4
As of 31/12/2022	416.6	188.2	722.7	133.1	1,460.6
<b>Accumulated amortization</b>					
As of 01/01/2022	87.9	111.6	230.5	46.5	476.5
Decrease due to changes in the consolidated companies	-0.1	0.0	0.0	0.0	-0.1
Additions	38.1	18.4	89.0	23.6	169.1
Currency adjustments	0.1	0.0	0.4	0.1	0.6
Disposals	-6.6	0.0	-1.9	-5.3	-13.8
Impairment	0.0	1.6	0.0	0.0	1.6
Reversal of impairment losses	-1.5	-13.0	0.0	-0.1	-14.6
As of 31/12/2022	117.9	118.6	318.0	64.8	619.3
<b>Carrying amounts</b>					
As of 31/12/2022	298.7	69.6	404.7	68.3	841.3



The lease liabilities are due as follows:

in € million	31/12/2023		31/12/2022	
	Nominal value	Present value	Nominal value	Present value
Due within 1 year	193.4	174.1	170.8	157.7
Due in 1 to 5 years	450.9	393.9	417.9	378.0
Due in more than 5 years	539.4	418.4	456.8	376.8
<b>Total</b>	<b>1,183.7</b>	<b>986.4</b>	<b>1,045.5</b>	<b>912.5</b>

The effects on the income statement due to leases break down as follows:

in € million	2023	2022
Expenses from short-term leases	2.6	2.1
of which other operating expenses	(2.6)	(2.1)
Expenses from leases involving low-value assets	4.9	4.2
of which cost of materials	(0.0)	(0.1)
of which other operating expenses	(4.9)	(4.1)
Variable lease payments <sup>1</sup>	24.9	30.6
of which cost of materials <sup>1</sup>	(24.8)	(30.2)
of which other operating expenses	(0.1)	(0.4)
Depreciation of right-of-use assets	190.6	170.7
Interest portion of lease liability	23.8	16.2

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

The cash flow statement is impacted as follows:

in € million	2023	2022
Repayment portion of the lease liabilities	175.2	183.3
Interest portion of lease liabilities	23.8	16.2
Expenses from short-term leases, leases involving low-value assets and variable lease payments <sup>1</sup>	32.8	38.9
<b>Total</b>	<b>231.8</b>	<b>238.4</b>

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

The repayment and interest portions of the lease liabilities are recognized in cash flow from financing activities. The cash flow from operating activities contains the expenses from short-term leases, leases involving low-value assets and variable lease payments.

The financial commitments from short-term leases and leases involving low-value assets are included in note (27) "Contingent liabilities and other financial commitments."

In the EnBW Group, there are agreements for variable lease payments totaling €384.9 million (previous year: €502.9 million), which mainly relate to long-term electricity procurement agreements from solar and wind power plants. Alongside leases that have not yet begun, totaling €90.9 million (previous year: €90.9 million), which relate to electricity procurement agreements, there are other leases that have not yet begun, totaling €1,475.2 million, which relate mainly to energy industry lease relationships, the lease of transport capacities, vehicles and office space (previous year: €202.3 million for energy industry lease relationships, vehicles and office space). Furthermore, the EnBW Group has leases with extension and termination options totaling €281.8 million (previous year: €258.6 million), which were not taken into account initially in the rights-of-use assets and corresponding lease liabilities because they were assessed as being not reasonably certain.

#### Lessors disclosures

The finance lease receivables of €81.6 million (previous year: €43.8 million) arose from supply contracts for various forms of energy such as electricity, heat, cooling and compressed air (so-called contracting agreements), under which the economic ownership of the leased technical equipment and machinery is allocable to the lessee. The lease payments receivable are due as follows:

in € million	31/12/2023	31/12/2022
Due within 1 year	8.5	6.6
Due in 1 to 2 years	8.5	5.6
Due in 2 to 3 years	8.5	5.4
Due in 3 to 4 years	7.9	5.3
Due in 4 to 5 years	7.5	4.6
Due in more than 5 years	40.7	16.3
<b>Total</b>	<b>81.6</b>	<b>43.8</b>

The lease payments receivable can be reconciled with the net investment in the lease as follows:

in € million	31/12/2023	31/12/2022
Nominal value of lease payments	81.6	43.8
<b>Gross investment</b>	<b>81.6</b>	<b>43.8</b>
Finance income not yet realized	-27.9	-11.2
<b>Net investment</b>	<b>53.7</b>	<b>32.6</b>

The outstanding receivables from finance leases in the 2023 financial year include impairment losses of €0.5 million (previous year: €0.3 million). The loss rate (weighted average) is 1.0% (previous year: 0.8%). No lease receivables are overdue.

The finance income on net investment in finance leases was €4.1 million (previous year: €2.2 million).

The claims due to the EnBW Group from operating leases of €108.3 million (previous year: €134.3 million) are mainly attributable to contracting agreements and renting out commercial and residential real estate and usable areas. In the case of leases for real estate and usable areas, there are general termination risks that are classified overall as low due to the potential to rent them again. For contracting agreements, there is a reutilization risk, should the agreement be terminated, due to the high level of customization in some cases. There is also a reutilization risk in relation to the lease of photovoltaic power plants and associated storage systems for those plants that are not purchased by the customer at their residual value at the end of the contractual term, and which have to be dismantled as a result.

The lease payments receivable from operating leases are due as follows:

in € million	2023	2022
Due within 1 year	21.4	25.4
Due in 1 to 2 years	9.6	11.0
Due in 2 to 3 years	7.7	9.2
Due in 3 to 4 years	9.9	7.8
Due in 4 to 5 years	6.3	7.1
Due in more than 5 years	53.4	73.8
<b>Total</b>	<b>108.3</b>	<b>134.3</b>

For materiality reasons, operating leases are not reported separately under property, plant and equipment. Income from operating leases in the 2023 financial year was €27.1 million (previous year: €27.2 million).

### (13) Entities accounted for using the equity method

Both joint ventures and associates are accounted for using the equity method.

The following table shows a summary of the financial information for the entities accounted for using the equity method:

#### Financial data (EnBW's interest)

in € million	2023		2022	
	Associates	Joint ventures	Associates	Joint ventures
Carrying amount of entities accounted for using the equity method	598.2	795.2	648.0	485.9
Net profit/loss for the year from continuing operations	61.1	27.9	33.1	29.4
Other income	0.2	-4.9	1.7	10.9
<b>Total comprehensive income</b>	<b>61.3</b>	<b>23.0</b>	<b>34.8</b>	<b>40.3</b>

Elektrizitätswerk Rheinau AG and Fernwärme Ulm GmbH have a different reporting date and are consolidated with the figures from their financial statements for the year ending 30 September 2023.

### (14) Other financial assets

in € million	Shares in affiliated entities	Other investments <sup>1</sup>	Non-current securities	Investment properties	Loans	Total
<b>Cost</b>						
As of 01/01/2023	368.1	2,749.7	3,297.9	56.4	418.5	<b>6,890.6</b>
Increase/decrease due to changes in the consolidated companies	-26.1	-3.5	0.0	0.0	-140.9	<b>-170.5</b>
Additions	74.7	308.5	2,344.1	0.1	138.0	<b>2,865.4</b>
Reclassifications	3.6	-3.4	-96.2	-1.0	-9.2	<b>-106.2</b>
Currency adjustments	0.0	1.9	0.0	0.0	0.3	<b>2.2</b>
Disposals	-2.4	-384.0	-1,960.0	0.0	-112.8	<b>-2,459.2</b>
As of 31/12/2023	417.9	2,669.2	3,585.8	55.5	293.9	<b>7,022.3</b>
<b>Accumulated amortization</b>						
As of 01/01/2023	100.5	100.1	0.0	16.3	113.7	<b>330.6</b>
Decrease due to changes in the consolidated companies	-0.8	0.8	0.0	0.0	0.0	<b>0.0</b>
Additions	0.0	0.0	0.0	0.9	36.0	<b>36.9</b>
Impairment	78.0	17.7	0.0	0.0	41.7	<b>137.4</b>
Reclassifications	0.0	0.2	0.0	0.0	-0.2	<b>0.0</b>
Disposals	-1.8	-0.8	0.0	0.0	-93.0	<b>-95.6</b>
Reversal of impairment losses	-1.8	-0.2	0.0	0.0	-13.3	<b>-15.3</b>
As of 31/12/2023	174.1	117.8	0.0	17.2	84.9	<b>394.0</b>
<b>Carrying amounts</b>						
As of 31/12/2023	243.8	2,551.4	3,585.8	38.3	209.0	<b>6,628.3</b>

<sup>1</sup> The carrying amounts include €2,245.6 million accounted for by investments held as financial assets.

in € million	Shares in affiliated entities	Other investments <sup>1</sup>	Non-current securities	Investment properties	Loans	Total
<b>Cost</b>						
As of 01/01/2022	267.5	2,511.9	3,946.1	56.3	141.6	6,923.4
Increase/decrease due to changes in the consolidated companies	54.2	-18.9	0.0	0.0	-4.1	31.2
Additions	46.6	478.8	2,096.7	0.0	190.4	2,812.5
Reclassifications	0.0	0.0	-77.1	0.2	92.9	16.0
Currency adjustments	0.0	2.0	0.0	0.0	0.2	2.2
Disposals	-0.2	-224.1	-2,667.8	-0.1	-2.5	-2,894.7
As of 31/12/2022	368.1	2,749.7	3,297.9	56.4	418.5	6,890.6
<b>Accumulated amortization</b>						
As of 01/01/2022	71.6	91.5	0.0	10.7	5.2	179.0
Decrease due to changes in the consolidated companies	31.4	0.0	0.0	0.0	0.0	31.4
Additions	0.0	0.0	0.0	0.9	1.5	2.4
Impairment	20.6	9.1	0.0	4.6	108.7	143.0
Reclassifications	0.0	0.9	0.0	0.2	-0.4	0.7
Disposals	-0.1	0.0	0.0	-0.1	-0.3	-0.5
Reversal of impairment losses	-23.0	-1.4	0.0	0.0	-1.0	-25.4
As of 31/12/2022	100.5	100.1	0.0	16.3	113.7	330.6
<b>Carrying amounts</b>						
As of 31/12/2022	267.6	2,649.6	3,297.9	40.1	304.8	6,560.0

<sup>1</sup> The carrying amounts include €2,345.3 million accounted for by investments held as financial assets.

The investments in affiliated entities are entities that are not included in the consolidated financial statements due to immateriality.

The non-current securities are mainly fixed-income securities as well as listed shares. To a large extent, the non-current securities are held in special funds. For consolidation purposes, the individual securities in the special funds are shown separately in the consolidated balance sheet by type of investment. The non-current securities, loans and investments, which are held as financial assets, are available to cover the pension and nuclear provisions in the amount of €5,829.5 million (previous year: €5,642.1 million). Of the loans, €206.2 million (previous year: €303.5 million) is allocated to capital employed.

The loans consist of loans to affiliated entities amounting to €163.1 million (previous year: €258.4 million), loans to entities accounted for using the equity method of €19.7 million (previous year: €21.6 million), loans to investments held as financial assets of €0.8 million (previous year: €1.3 million) and to operative investments allocated to capital employed of €12.7 million (previous year: €15.9 million), other loans allocated to capital employed of €10.7 million (previous year: €7.5 million) and loans of €2.0 million (previous year: €0.0 million).

**(15) Trade receivables**

in € million	31/12/2023			31/12/2022		
	Current	Non-current	Total	Current	Non-current	Total
Trade receivables	4,575.6	370.1	4,945.7	5,591.3	329.4	5,920.7
of which receivables from affiliated entities	(43.9)	(0.0)	(43.9)	(56.6)	(0.0)	(56.6)
of which receivables from other investees and investors	(90.0)	(0.0)	(90.0)	(78.4)	(0.0)	(78.4)
of which receivables from entities accounted for using the equity method	(33.1)	(0.0)	(33.1)	(28.9)	(0.0)	(28.9)

Further details on loss allowances and default risks can be found in note (26) "Accounting for financial instruments."

Non-current trade receivables principally include receivables relating to electricity supplies, whose term to maturity does not match the customary business cycle.

**(16) Other assets**

in € million	31/12/2023			31/12/2022		
	Current	Non-current	Total	Current	Non-current	Total
Income tax refund claims	135.3	0.0	135.3	192.9	0.0	192.9
Other tax refund claims	435.4	0.2	435.6	297.7	0.1	297.8
Interest from tax refunds	2.8	0.0	2.8	5.6	0.0	5.6
Derivatives	6,310.1	1,179.9	7,490.0	10,734.7	2,662.5	13,397.2
of which without hedges	(6,133.7)	(1,139.6)	(7,273.3)	(10,530.2)	(2,362.4)	(12,892.6)
of which cash flow hedge	(176.4)	(30.0)	(206.4)	(202.0)	(279.5)	(481.5)
of which fair value hedge	(0.0)	(10.3)	(10.3)	(2.5)	(20.6)	(23.1)
Finance lease receivables	4.5	48.7	53.2	4.4	27.9	32.3
Payments on account	92.4	7.9	100.3	147.7	11.5	159.2
Prepaid expenses	248.3	99.5	347.8	386.9	97.3	484.2
of which Costs for obtaining contracts <sup>1</sup>	(11.2)	(13.9)	(25.1)	(11.2)	(7.9)	(19.1)
Miscellaneous assets	1,525.3	961.8	2,487.1	3,491.1	158.3	3,649.4
<b>Total</b>	<b>8,754.1</b>	<b>2,298.0</b>	<b>11,052.1</b>	<b>15,261.0</b>	<b>2,957.6</b>	<b>18,218.6</b>

<sup>1</sup> According to IFRS 15.

Income tax refund claims mainly relate to tax overpayments in previous years. These arise as a consequence of a completed tax audit.

As a result of the high volatility and slight fall in prices on the energy trading markets, EnBW recorded a fall in derivatives.

Payments on account contain prepayments for electricity procurement agreements amounting to €19.0 million (previous year: €16.0 million).

Miscellaneous assets contain collateral for exchange-based and over-the-counter trading business amounting to €808.6 million (previous year: €2,700.8 million) as well as variation margins of €148.0 million (previous year: €4.6 million). A market interest rate is applied to the collateral provided for exchange-based trading business. This collateral will be used by the stock exchanges in the event that the obligations resulting from stock market transactions are not met. In addition, miscellaneous assets contain the surplus cover from benefit entitlements of €113.9 million (previous year: €106.0 million).

## (17) Inventories

in € million	31/12/2023	31/12/2022
Materials and supplies	1,182.1	976.4
Work in progress	219.9	198.3
Finished goods and merchandise	1,362.3	2,634.4
Payments on account	39.7	26.6
<b>Total</b>	<b>2,804.0</b>	<b>3,835.7</b>

The decrease in finished goods and merchandise is mainly due to an easing of prices on the energy trading markets for gas in comparison to the previous year. It was also attributable to a lesser extent to a write-down of inventories related to battery storage systems at our subsidiary SENEK.

Materials and supplies are primarily influenced by the operation of the conventional power plants. The increase was primarily due to emission allowances.

In the reporting year, impairment losses of €157.5 million (previous year: €10.2 million) were recognized on inventories. There were reversals of impairment losses of €0.0 million (previous year: €8.5 million).

Expenses recognized for inventories are mainly included in the cost of materials.

A total of €1,276.0 million (previous year: €2,461.9 million) of the inventories are measured on the basis of the fair value (Level 2) less costs to sell, which almost exclusively referred to gas inventories. The valuation is based on directly or indirectly observable market prices.

## (18) Financial assets

in € million	31/12/2023	31/12/2022
Securities and financial investments	2,551.5	945.2
Other current financial assets	526.6	403.1
<b>Total</b>	<b>3,078.1</b>	<b>1,348.3</b>

Securities and financial investments mainly comprise fixed deposits of €2.4 billion (previous year: €0.6 billion). Other current financial assets in the 2023 financial year and the previous year mainly relate to loans. In the reporting year, this item also includes receivables from minority shareholders for capital transactions. €90.2 million (previous year: €75.7 million) of the current financial assets are held to cover the pension and nuclear provisions, while €2,987.7 million (previous year restated: €1,272.6 million) is allocated to the operative business. This includes loans of €46.1 million (previous year: €47.3 million) and in the previous year included EEG funds of €625.0 million, which are allocated to capital employed.

## (19) Cash and cash equivalents

Cash and cash equivalents relate primarily to bank deposits, largely in the form of time and day-to-day deposits whose original term is less than three months and that are only subject to an immaterial risk of fluctuation in value. Cash and cash equivalents of €193.4 million (previous year: €1,667.3 million) are subject to restrictions on disposal. This includes €134.0 million (previous year: €1,665.0 million) in EEG funds that may only be used for EEG payments and €57.0 million (previous year: €0.0 million) in KWKG funds, which similarly to the EEG funds must now be held in a separate bank account since the new Energy Financing Act (EnFG) came into force on 1 January 2023.

Cash and cash equivalents of €171.7 million (previous year: €185.0 million) are available to cover pension and nuclear provisions. Cash and cash equivalents of €5,823.5 million (previous year: €6,290.6 million) are allocated to the operative business. This includes the above-mentioned EEG and KWKG funds, which are allocated to capital employed.

## (20) Equity

The development of equity and the total comprehensive income are presented separately in the statement of changes in equity. The components of total comprehensive income are presented in the statement of comprehensive income.

### Subscribed capital

The share capital of EnBW AG amounts to €708,108,042.24 as of 31 December 2023 (previous year: €708,108,042.24) and is divided into 276,604,704 (previous year: 276,604,704) no-par-value bearer shares, all of which have been fully paid in. The no-par-value shares each represent an imputed share of €2.56 per share (previous year: €2.56 per share) of the subscribed capital.

### Capital reserve

The capital reserve contains the amounts received from the issue of shares of EnBW AG which exceed the imputed value of the shares.

### Revenue reserves

The revenue reserves primarily contain the pro rata revenue reserves of the parent company and the other companies included in the consolidation after the date of acquisition.

We will propose to the Annual General Meeting that a dividend of €1.50 (previous year: €1.10) per share be distributed from the retained earnings of EnBW AG. As of 31 December 2023, a total of 270,855,027 shares were entitled to dividends, as in the previous year. If the Annual General Meeting approves this proposal, the total amount distributed by EnBW AG for the 2023 financial year will be €406.3 million (previous year: €297.9 million).

### Treasury shares

As of 31 December 2023, EnBW AG holds 5,749,677 treasury shares, as in the previous year. The acquisition cost of the treasury shares amounting to €204.1 million (previous year: €204.1 million) was deducted from the carrying amount of the equity. The amount of share capital attributable to them remains unchanged at €14,719,173.12. This corresponds to 2.1% of the subscribed capital, as in the previous year. The treasury shares were acquired on 28 and 29 December 1998 based on the authorization issued on 25 August 1998 by the Annual General Meeting pursuant to section 71 (1) no. 8 AktG. The acquisition was carried out with a view to planned cooperations with domestic and foreign energy suppliers, as well as industrial customers, that were to be underpinned by mutual capital participations.

The company has no rights or dividend entitlements from directly held treasury shares; they are not entitled to dividends. In accordance with the rulings of IFRS, the treasury shares are not recognized as securities, but are offset in one sum against equity in the balance sheet.

### Other comprehensive income

Other comprehensive income comprises changes in the market value of financial assets in the category "measured at fair value in equity," changes in the market value of cash flow hedges, amounts recognized directly in equity for accounting for entities using the equity method, currency translation differences from the translation of financial statements of foreign entities and the revaluation of pensions and similar obligations.

For details on the changes recognized directly in equity on financial assets in the category "measured at fair value in equity" and on cash flow hedges, please refer to note (26) "Accounting for financial instruments."

## Presentation of the components of other comprehensive income:

2023 in € million	Revaluation of pensions and similar obligations	Currency translation differences	Cash flow hedge	Financial assets at fair value in equity	Entities accounted for using the equity method	Shares of the shareholders of EnBW AG	Non-controlling interests	Total
Unrealized changes in market value in the current period	-532.5	3.3	196.9	107.6	-2.0	-226.7	-188.9	-415.6
Reclassification adjustments included in the income statement	0.0	0.0	-1,221.1	92.9	0.0	-1,128.2	0.0	-1,128.2
<b>Total other comprehensive income before tax</b>	<b>-532.5</b>	<b>3.3</b>	<b>-1,024.2</b>	<b>200.5</b>	<b>-2.0</b>	<b>-1,354.9</b>	<b>-188.9</b>	<b>-1,543.8</b>
Income tax	153.2	2.5	271.2	-59.0	0.0	367.9	37.9	405.8
<b>Total other comprehensive income</b>	<b>-379.3</b>	<b>5.8</b>	<b>-753.0</b>	<b>141.5</b>	<b>-2.0</b>	<b>-987.0</b>	<b>-151.0</b>	<b>-1,138.0</b>

2022 in € million <sup>1</sup>	Revaluation of pensions and similar obligations	Currency translation differences	Cash flow hedge	Financial assets at fair value in equity	Entities accounted for using the equity method	Shares of the shareholders of EnBW AG	Non-controlling interests	Total
Unrealized changes in market value in the current period	2,364.7	54.5	1,390.5	-287.7	2.7	3,524.7	107.3	3,632.0
Reclassification adjustments included in the income statement	0.0	0.0	855.1	55.2	0.0	910.3	-145.9	764.4
<b>Total other comprehensive income before tax</b>	<b>2,364.7</b>	<b>54.5</b>	<b>2,245.6</b>	<b>-232.5</b>	<b>2.7</b>	<b>4,435.0</b>	<b>-38.6</b>	<b>4,396.4</b>
Income tax	-604.9	-2.8	-672.9	68.6	0.0	-1,212.0	16.5	-1,195.5
<b>Total other comprehensive income</b>	<b>1,759.8</b>	<b>51.7</b>	<b>1,572.7</b>	<b>-163.9</b>	<b>2.7</b>	<b>3,223.0</b>	<b>-22.1</b>	<b>3,200.9</b>

<sup>1</sup> The figures for the previous year have been restated. A separate line item has been added to the statement of changes in equity under total comprehensive income to disclose basis adjustments in inventories in the cash flow hedge. This led to a reduction in total other comprehensive income for the previous year of €437.9 million (of which €622.9 million before tax and €-185.0 million in income tax).

## Presentation of the tax effects relating to unrealized expenses and income in equity:

in € million <sup>1</sup>	2023			2022		
	Before tax	Tax expenses/ income	After tax	Before tax	Tax expenses/ income	After tax
Revaluation of pensions and similar obligations	-534.3	151.4	-382.9	2,388.9	-610.0	1,778.9
Currency translation differences	-28.8	2.5	-26.3	66.2	-2.8	63.4
Cash flow hedge	41.9	-34.8	7.1	1,461.9	-437.1	1,024.8
Financial assets measured at fair value in equity	107.6	-32.0	75.6	-287.7	85.4	-202.3
Entities accounted for using the equity method	-2.0	0.0	-2.0	2.7	0.0	2.7
<b>Total other comprehensive income</b>	<b>-415.6</b>	<b>87.1</b>	<b>-328.5</b>	<b>3,632.0</b>	<b>-964.5</b>	<b>2,667.5</b>

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



Presentation of the tax effects of reclassification adjustments included in the income statement and the cost of hedged items:

in € million <sup>1</sup>	2023			2022		
	Before tax	Tax expenses/ income	After tax	Before tax	Tax expenses/ income	After tax
Cash flow hedge	-1,221.1	345.7	-875.4	709.2	-214.2	495.0
Financial assets measured at fair value in equity	92.9	-27.0	65.9	55.2	-16.8	38.4
<b>Total other comprehensive income</b>	<b>-1,128.2</b>	<b>318.7</b>	<b>-809.5</b>	<b>764.4</b>	<b>-231.0</b>	<b>533.4</b>

<sup>1</sup> The figures for the previous year have been restated. A separate line item has been added to the statement of changes in equity under total comprehensive income to disclose basis adjustments in inventories in the cash flow hedge. This led to a reduction in total other comprehensive income for the previous year of €437.9 million (of which €622.9 million before tax and €-185.0 million in income tax).

### Non-controlling interests

Non-controlling interests are shares in Group companies held by third parties. They relate in particular to Energiedienst Holding AG, VNG AG, Stadtwerke Düsseldorf AG and Pražská energetika a.s., each with their subsidiaries, EnBW Hohe See GmbH & Co. KG, EnBW Albatros GmbH & Co. KG, EnBW Baltic 2 GmbH & Co. KG, EnBW WindInvest GmbH & Co. KG, EnBW SunInvest GmbH & Co. KG with its subsidiaries and, in the reporting year, EnBW He Dreiht GmbH & Co. KG and EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG with its subsidiary TransnetBW GmbH.

Financial information for subsidiaries where there is a significant influence without a controlling interest:

in € million	2023			
	Capital share in % of non-controlling interests	Annual net profit from non-controlling interests	Dividends from non-controlling interests	Carrying amount of non-controlling interests
Energiedienst Holding AG	33.3	38.1	10.4	502.5
VNG AG	20.2	76.3	0.0	460.5
Stadtwerke Düsseldorf AG	45.1	87.0	54.4	430.9
Pražská energetika a.s.	30.2	67.9	21.6	255.1
EnBW Hohe See GmbH & Co. KG	49.9	37.5	108.2	909.4
EnBW Albatros GmbH & Co. KG	49.9	19.2	28.3	245.4
EnBW Baltic 2 GmbH & Co. KG	49.9	1.6	60.3	334.3
EnBW WindInvest GmbH & Co. KG	49.9	4.6	12.1	100.8
EnBW SunInvest GmbH & Co. KG	49.9	6.7	45.0	162.4
EnBW He Dreiht GmbH & Co. KG	49.9	1.4	0.0	469.1
EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG	49.9	0.0	0.0	2,587.6

### Balance sheet data

in € million	2023							
	Non-current assets	Current assets	Non-current liabilities	Of which non-current financial liabilities	Current liabilities	Of which current financial liabilities	Funds from operations (FFO)	Cash flow from operating activities
Energiedienst Holding AG	1,698.4	570.2	363.5	(31.1)	411.5	(13.1)	152.7	74.5
VNG AG	3,760.6	5,202.0	2,023.2	(425.8)	4,569.3	(489.9)	513.7	-828.3
Stadtwerke Düsseldorf AG	1,451.3	1,062.6	765.8	(407.5)	850.3	(12.4)	171.5	83.8
Pražská energetika a.s.	1,313.2	448.3	270.6	(20.2)	652.6	(107.1)	205.6	171.5
EnBW Hohe See GmbH & Co. KG	1,768.5	356.0	183.6	(0.0)	11.1	(0.0)	281.3	290.5
EnBW Albatros GmbH & Co. KG	502.7	83.5	69.5	(0.0)	1.9	(0.0)	64.0	72.5
EnBW Baltic 2 GmbH & Co. KG	682.4	170.7	117.6	(0.0)	11.2	(0.0)	137.9	162.7
EnBW WindInvest GmbH & Co. KG	175.6	24.2	34.0	(0.0)	2.7	(0.0)	19.7	24.8
EnBW SunInvest GmbH & Co. KG	303.5	42.9	25.9	(0.0)	2.5	(0.0)	26.7	51.6
EnBW He Dreiht GmbH & Co. KG	944.4	116.5	4.4	(0.0)	102.9	(0.0)	12.0	85.3
EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG	4,757.3	1,659.8	265.6	(0.0)	963.1	(0.0)	850.1	-1,017.2

## Earnings data

in € million

2023

	Revenue	Adjusted EBITDA	Net profit	Other income	Total comprehensive income
Energiedienst Holding AG	1,840.8	163.7	114.3	9.9	124.2
VNG AG	10,400.7	519.8	378.3	1.6	379.9
Stadtwerke Düsseldorf AG	2,696.3	262.3	193.1	-112.8	80.3
Pražská energetika a.s.	2,146.8	272.0	225.1	-245.5	-20.4
EnBW Hohe See GmbH & Co. KG	341.2	310.8	75.2	0.0	75.2
EnBW Albatros GmbH & Co. KG	77.9	72.3	38.5	0.0	38.5
EnBW Baltic 2 GmbH & Co. KG	180.6	152.3	3.2	0.0	3.2
EnBW WindInvest GmbH & Co. KG	28.9	24.0	9.2	0.0	9.2
EnBW SunInvest GmbH & Co. KG	42.5	35.6	13.4	0.0	13.4
EnBW He Dreiht GmbH & Co. KG	0.0	0.0	9.9	0.0	9.9
EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG	3,674.9	649.6	733.1	-54.2	678.9

in € million

2022

	Capital share in % of non-controlling interests	Annual net profit/loss from non-controlling interests	Dividends from non-controlling interests	Carrying amount of non-controlling interests
Energiedienst Holding AG	33.3	49.6	9.6	476.3
VNG AG	20.2	-94.2	0.0	389.0
Stadtwerke Düsseldorf AG	45.1	99.3	45.4	449.2
Pražská energetika a.s.	30.2	36.2	20.6	306.4
EnBW Hohe See GmbH & Co. KG	49.9	-60.4	88.3	1,026.7
EnBW Albatros GmbH & Co. KG	49.9	12.3	23.1	268.8
EnBW Baltic 2 GmbH & Co. KG	49.9	62.0	0.0	426.7
EnBW WindInvest GmbH & Co. KG	49.9	13.7	0.7	113.5
EnBW SunInvest GmbH & Co. KG	49.9	7.5	0.0	205.5

## Balance sheet data

in € million<sup>1</sup>

2022

	Non-current assets	Current assets	Non-current liabilities	Of which non-current financial liabilities	Current liabilities	Of which current financial liabilities	Funds from operations (FFO)	Cash flow from operating activities
Energiedienst Holding AG	1,621.1	461.8	381.7	(29.3)	308.5	(8.0)	99.4	-51.4
VNG AG	5,134.1	9,218.8	3,543.0	(427.8)	8,804.7	(6.8)	-153.1	142.0
Stadtwerke Düsseldorf AG	1,742.3	1,314.5	951.0	(418.2)	1,150.2	(12.4)	245.0	393.6
Pražská energetika a.s.	1,343.8	571.8	406.1	(128.5)	468.9	(2.8)	194.9	217.1
EnBW Hohe See GmbH & Co. KG	1,992.7	394.9	201.1	(0.0)	26.5	(0.0)	322.7	294.7
EnBW Albatros GmbH & Co. KG	534.4	104.5	72.3	(0.0)	5.7	(0.0)	85.0	77.9
EnBW Baltic 2 GmbH & Co. KG	829.3	220.7	126.6	(0.0)	18.2	(0.0)	183.5	161.6
EnBW WindInvest GmbH & Co. KG	190.4	42.5	35.7	(0.0)	8.6	(0.0)	42.9	34.9
EnBW SunInvest GmbH & Co. KG	324.6	134.3	30.1	(0.0)	21.3	(0.0)	107.9	-20.5

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

## Earnings data

in € million

2022

	Revenue	Adjusted EBITDA	Annual net profit/loss	Other income	Total comprehensive income
Energiedienst Holding AG	1,380.4	95.2	148.8	39.6	188.4
VNG AG	20,109.0	-161.9	-365.3	9.3	-356.0
Stadtwerke Düsseldorf AG	4,640.4	518.5	220.4	-85.1	135.3
Pražská energetika a.s.	1,824.2	223.5	120.0	9.7	129.7
EnBW Hohe See GmbH & Co. KG	401.3	355.6	-121.1	0.0	-121.1
EnBW Albatros GmbH & Co. KG	101.3	92.7	24.7	0.0	24.7
EnBW Baltic 2 GmbH & Co. KG	220.6	188.5	124.3	0.0	124.3
EnBW WindInvest GmbH & Co. KG	49.8	43.4	27.5	0.0	27.5
EnBW SunInvest GmbH & Co. KG	123.9	117.1	97.0	0.0	97.0

## (21) Provisions

Provisions disclosed separately according to maturity in the balance sheet are combined in the notes to the financial statements.

in € million

31/12/2023

31/12/2022

	Current	Non-current	Total	Current	Non-current	Total
Provisions for pensions and similar obligations	220.6	5,810.0	6,030.6	209.5	5,216.5	5,426.0
Provisions relating to nuclear power	580.1	4,188.3	4,768.4	629.6	3,984.7	4,614.3
Other provisions	1,728.0	1,412.6	3,140.6	2,507.7	1,282.6	3,790.3
Other dismantling obligations	(6.9)	(730.9)	(737.8)	(12.5)	(767.7)	(780.2)
Provisions for onerous contracts	(95.2)	(227.0)	(322.2)	(478.3)	(49.4)	(527.7)
Other electricity and gas provisions	(1,017.1)	(55.0)	(1,072.1)	(1,726.9)	(48.2)	(1,775.1)
Personnel provisions	(106.5)	(171.5)	(278.0)	(107.3)	(165.7)	(273.0)
Miscellaneous provisions	(502.3)	(228.2)	(730.5)	(182.7)	(251.6)	(434.3)
<b>Total</b>	<b>2,528.7</b>	<b>11,410.9</b>	<b>13,939.6</b>	<b>3,346.8</b>	<b>10,483.8</b>	<b>13,830.6</b>

## Provisions for pensions and similar obligations

The provisions for pensions and similar obligations are recorded on the basis of actuarial valuations for the existing commitments for future and current post-employment benefits to current and former employees with a pension entitlement, as well as their surviving dependents. A substantial majority of the employees of the EnBW Group are entitled to pension payments from defined benefit pension plans. There are different post-employment provision schemes, which reflect how long the respective employees have served the company. In the case of employees who have already retired, the schemes in question are mainly final salary-based systems, in which the pension paid is calculated on the basis of the length of service, the rate of increase and the last pensionable income. As of 1 January 2005, this system was decoupled from the adjustments to the statutory pension insurance system as part of a reorganization. The amount of the provisions for pensions and similar obligations accounted for by these final salary-based systems as of 31 December 2023 was €5,164.9 million (previous year: €4,728.4 million). The bulk of the active employees are covered by ongoing salary-based schemes and/or a pension component system in the form of an average salary plan, in which the pension paid consists of annual pension components. For employees who joined the company from 1998 onwards, the pension obligation is based solely on a pension component system. The related provisions amounted to €713.3 million (previous year: €556.0 million). In addition, the employees are granted energy-price reductions for the period in which they receive their pensions. Other commitments amounted to €38.7 million (previous year: €35.6 million). These mainly comprise fixed-sum commitments.

The pensioners and those with prospective pension entitlements are distributed as follows among the different post-employment provision schemes:

Number of employees	31/12/2023		31/12/2022	
	Staff with prospective pension entitlements	Pensioners	Staff with prospective pension entitlements	Pensioners
Closed systems dependent on final salary	5,712	12,782	6,137	12,868
Pension component systems	14,423	746	13,309	665
Other commitments	920	633	874	643

The obligations are measured above all on the basis of the length of service and remuneration of the employees. In addition, the company pension scheme includes defined benefit obligations under multi-employer plans using the same measurement basis. The contributions payable to the supplemental pension plan are made as a certain percentage of the respective employee's remuneration that is subject to the supplemental pension plan.

The amount of provisions earmarked for the defined benefit obligations corresponds to the present value of the expected future obligations. The provisions are calculated using actuarial methods. Plan assets were created and will be used exclusively to cover pension obligations. They are deducted from the pension obligations. They exist in the form of contractual trust arrangements (CTA's) in the EnBW Group. A CTA is a legally structured trustee arrangement for the capital cover of direct pension obligations with separated and spun-off assets.

The objective of asset management in this area is to cover the non-current provisions for pensions and similar obligations, as well as the Group's nuclear provisions, within an economically sensible period by means of appropriate financial investments. The investment goals indicated are to be achieved with a minimum of risk. As of 31 December 2023, the dedicated financial assets for pension and nuclear provisions totaled approximately €6.2 billion (previous year: €6.0 billion) and were allocated to a total of nine asset classes. In addition to direct investments, financial investments were bundled within two master funds and the infrastructure funds consolidated in a SICAV (société d'investissement à capital variable, investment company with variable capital).

The following premises are taken into account when investments are made:

- Risk-optimized performance in line with the market is targeted.
- The risk was minimized by, for example, the implementation of an intervention line concept, the establishment of issuer limits and minimum ratings for bonds, adherence to a broad diversification of asset classes and further appropriate measures.
- The impact on the balance sheet and the income statement are to be minimized.
- Reducing costs and simplifying administration are also major priorities.
- Sustainability aspects are taken into account in the investment decisions.

The anticipated development of the cash flows of the post-employment provision schemes is as follows:

in € million	2023	2024- 2028 <sup>1</sup>	2029- 2033 <sup>1</sup>	2034- 2038 <sup>1</sup>	2039- 2043 <sup>1</sup>	2044- 2048 <sup>1</sup>	2049- 2053 <sup>1</sup>	2054- 2058 <sup>1</sup>
Closed systems dependent on final salary	211.5	229.3	262.0	272.6	255.4	225.7	183.3	137.6
Pension component systems	3.0	6.1	15.3	27.5	41.7	61.0	84.3	106.8
Other commitments	1.9	2.2	2.4	2.3	1.9	1.5	1.1	0.8
<b>Total</b>	<b>216.4</b>	<b>237.6</b>	<b>279.7</b>	<b>302.5</b>	<b>299.0</b>	<b>288.2</b>	<b>268.7</b>	<b>245.3</b>

<sup>1</sup> Average values for five years.

The calculations are based on a duration of 15.0 years (previous year: 14.4 years).

Changes in the underlying parameters for calculating the provisions for pensions and similar obligations would have the following impact on their amounts:

in € million	Pension component systems	Closed pension systems dependent on final salary	Pension component systems	Closed pension systems dependent on final salary
Discount rate +/- 0.5%	-113.0/132.8	-358.7/400.8	-95.0/109.3	-358.5/400.9
Salary trend +/- 0.5%	15.4/-14.4	73.5/-66.7	19.9/-18.6	121.1/-110.7
Pension trend +/- 0.5%	7.4/-7.8	337.9/-302.3	5.1/-4.7	327.8/-306.7
Life expectancy +/- 1 year	23.3/-23.5	218.7/-208.2	24.0/-24.1	236.7/-229.9

The parameters for the sensitivity analysis were chosen from the point of view of materiality. Their impact on the defined benefit obligation (DBO) was determined separately in each case to prevent interactions. The parameter variation is based on past experience and the long-term planning premises applied within the Group.

The material parameters (average values) for calculating the defined benefit obligations at the Group's domestic companies are shown below:

in %	31/12/2023	31/12/2022
Actuarial interest rate	3.15	3.70
Future expected wage and salary increases	2.85	3.10
Future expected pension increase	2.20	2.35

The calculations are based on the 2018 G mortality tables devised by Prof. Dr. Klaus Heubeck.

The expenses for pensions and similar obligations are comprised as follows:

in € million	2023	2022
Current service cost	66.8	111.3
Past service costs	0.5	0.7
Interest income from plan assets	-27.4	-9.9
Interest costs	220.1	103.6
<b>Recording in the income statement</b>	<b>260.0</b>	<b>205.7</b>
Income from plan assets excluding interest income	-19.9	97.0
Actuarial gains (-)/losses (+) from changes in financial assumptions	571.3	-2,567.0
Actuarial gains (-)/losses (+) from experience-based restatements	-17.0	80.9
<b>Recording in the statement of comprehensive income</b>	<b>534.4</b>	<b>-2,389.1</b>
<b>Total</b>	<b>794.4</b>	<b>-2,183.4</b>

The development of the pension provisions, categorized by the present value of the defined benefit obligation and the fair value of the plan assets, is as follows:

in € million	31/12/2023	31/12/2022
Defined benefit obligation at the beginning of the financial year	6,140.4	8,642.3
Current service cost	66.8	111.3
Interest costs	220.1	103.6
Benefits paid	-297.7	-285.3
Actuarial gains (-)/losses (+)	554.3	-2,486.2
Actuarial gains (-)/losses (+) from changes in financial assumptions	(571.3)	(-2,567.1)
Actuarial gains (-)/losses (+) from experience-based restatements	(-17.0)	(80.9)
Past service costs	0.5	0.7
Changes in the consolidated companies and currency adjustments	15.0	-8.6
Reclassifications	31.7	62.6
<b>Present value of the defined benefit obligation at the end of the financial year</b>	<b>6,731.1</b>	<b>6,140.4</b>
Fair value of plan assets at the beginning of the financial year	820.4	991.3
Interest income	27.4	9.9
Appropriations to (+)/transfers from (-) plan assets <sup>1</sup>	12.4	6.7
Benefits paid	-81.2	-82.5
Income from plan assets excluding interest income	19.9	-97.0
Changes in the consolidated companies, currency adjustments and reclassifications	15.3	-8.0
<b>Fair value of plan assets at the end of the financial year</b>	<b>814.2</b>	<b>820.4</b>
Surplus cover from benefit entitlements	113.9	106.0
<b>Provisions for pensions and similar obligations</b>	<b>6,030.8</b>	<b>5,426.0</b>

<sup>1</sup> Applies almost exclusively to the employer's contributions.

Payments into the plan assets in the amount of €12.0 million (previous year: €10.3 million) are planned in the subsequent period.

The plan assets consist of the following asset classes:

in %	31/12/2023	31/12/2022
Shares	13.9	15.3
Share-based investment funds	6.7	12.1
Fixed-income funds	54.3	51.3
Fixed-income securities	17.3	13.4
Land and buildings	4.5	3.5
Current financial assets	0.4	0.5
Other	2.9	3.9
	<b>100.0</b>	<b>100.0</b>

The plan assets are invested almost entirely within the EU. The plan assets do not include any shares of EnBW Group companies or any owner-occupied property. The investment strategy takes into consideration the maturity structure and volume of benefit obligations. The plan assets mainly have market price listings on active markets.

### Multi-employer plans

Multi-employer plans, which are defined benefit plans, are accounted for as defined contribution plans because the information required to allocate the obligations and plan assets to the respective participating employer and the corresponding expenses is not provided by the supplemental pension plans. The expenses from defined benefit obligations via multi-employer plans amounted to €17.2 million (previous year: €11.7 million). Appropriations of a similar magnitude are anticipated for the subsequent year. Potential future increases in contributions from obligations that are not fully funded will not have a significant effect on the EnBW Group.

The employer's contributions to statutory pension insurance in 2023 amounted to €150.9 million (previous year: €135.4 million).

### Provisions relating to nuclear power

The provisions relating to nuclear power as of 31 December 2023 were formed for the conditioning and proper packaging of radioactive waste, as well as for the decommissioning and dismantling of the nuclear power plants.

The evaluation of the provisions is carried out mainly on the basis of estimates, which for decommissioning and disposal costs are primarily derived from sector-specific appraisals. The provisions are recognized at the discounted settlement amount at the time they originated.

in € million	31/12/2023	31/12/2022
Remaining operation and post-operation	1,795.4	1,920.3
Dismantling including preparation	1,413.1	1,106.4
Treatment of residual material, packaging of radioactive waste	1,258.6	1,263.8
Other	301.3	323.9
<b>Total</b>	<b>4,768.4</b>	<b>4,614.4</b>

Provisions relating to nuclear power are reported in accordance with section 5 (2) of the Ordinance on the Transparency of Dismantling Provisions and are discounted at a risk-free interest rate of on average 2.70% (previous year: 2.13%). A corresponding rate of increase of costs of 2.5% (previous year: 2.6%) is applied. This results in a net interest (spread) of around 0.2% (previous year: -0.5%), which generally corresponds to the real interest rate. The change in this parameter led overall to a decrease in the nuclear power provisions of €116.5 million (previous year: decrease of €504.2 million).

A reduction or increase of 0.1 percentage points in the real interest rate would increase the present value of the provisions by €33.5 million (previous year: €31.6 million) or reduce it by €33.1 million (previous year: €31.3 million).

The nominal amount of the provisions (without taking into account the effects of the discount rate and rate of increase of costs) as of 31 December 2023 was €4,834.1 million (previous year: €4,368.9 million).

Due to a change in the assumptions concerning the future development of costs, the balance sheet item corresponding to provisions for power plants that are currently in operation was increased in the previous year by €52.9 million.

Decommissioning and dismantling costs are calculated on the basis of the scenario that assumes that the plants will be removed immediately. The provisions are partially offset by receivables amounting to €414.5 million (previous year: €372.9 million), which relate to dismantling obligations for nuclear power plants assumed by a contractual partner in connection with electricity supplies.

### Other provisions

The other dismantling obligations mainly relate to wind and hydroelectric power plants, gas storage facilities and grids.

The provisions for onerous contracts concern future obligations from onerous procurement and sales agreements. The obligations mainly relate to the purchase of electricity and gas.

Other electricity and gas provisions primarily relate to obligations from emission allowances.

Personnel provisions primarily concern obligations from phased retirement plans, long-service awards and restructuring measures.

The rise in miscellaneous provisions was primarily due to additions to warranty provisions associated with our subsidiary SENEK.

The majority of other non-current provisions have a term of more than five years.

The provisions developed as follows in the reporting year:

#### Statement of changes in provisions

in € million	As of 01/01/2023	Increases	Reversals	Accretion	Changes recognized in equity	Changes in con- solidated com- panies, currency adjust- ments, reclassifi- cations	Utilization	As of 31/12/2023
Provisions relating to nuclear power <sup>1</sup>	4,614.6	734.1	172.4	104.4	0.0	-26.6	485.6	4,768.5
Other provisions	3,790.1	1,822.3	136.2	27.3	-25.6	-173.7	2,163.6	3,140.6
Other dismantling obligations	(780.2)	(0.9)	(41.0)	(12.3)	(-25.6)	(48.1)	(37.1)	(737.8)
Provisions for onerous contracts	(527.7)	(268.1)	(3.0)	(0.3)	(0.0)	(-180.6)	(290.3)	(322.2)
Other electricity and gas provisions	(1,774.9)	(987.5)	(59.2)	(8.1)	(0.0)	(0.2)	(1,639.4)	(1,072.1)
Personnel provisions	(273.1)	(142.9)	(6.0)	(5.4)	(0.0)	(-35.7)	(101.7)	(278.0)
Miscellaneous provisions	(434.2)	(422.9)	(27.0)	(1.2)	(0.0)	(-5.7)	(95.1)	(730.5)
<b>Total</b>	<b>8,404.7</b>	<b>2,556.4</b>	<b>308.6</b>	<b>131.7</b>	<b>-25.6</b>	<b>-200.3</b>	<b>2,649.2</b>	<b>7,909.1</b>

<sup>1</sup> Utilization breaks down into decommissioning and dismantling totaling €399.5 million, disposal of spent fuel rods totaling €84.1 million and waste totaling €2.0 million.

## (22) Deferred taxes

The deferred taxes on measurement differences compared to the tax accounts break down as follows:

in € million	31/12/2023		31/12/2022	
	Deferred tax assets <sup>1</sup>	Deferred tax liabilities <sup>1</sup>	Deferred tax assets <sup>1</sup>	Deferred tax liabilities <sup>1</sup>
Intangible assets	72.4	290.6	49.1	284.3
Property, plant and equipment	181.0	1,686.7	200.5	1,868.8
Financial assets	154.7	127.5	203.3	108.3
Other assets	188.8	19.4	233.2	22.5
Derivative financial instruments	19.2	361.3	1.7	835.4
<b>Non-current assets</b>	<b>616.1</b>	<b>2,485.5</b>	<b>687.8</b>	<b>3,119.3</b>
Inventories	235.6	32.7	134.9	18.5
Financial assets	3.1	17.0	9.4	85.4
Other assets	1,158.9	2,793.9	4,244.0	6,391.4
<b>Current assets</b>	<b>1,397.6</b>	<b>2,843.6</b>	<b>4,388.3</b>	<b>6,495.3</b>
Provisions	1,108.1	216.1	1,039.8	207.8
Liabilities and subsidies	557.6	332.6	955.7	227.8
<b>Non-current liabilities</b>	<b>1,665.7</b>	<b>548.7</b>	<b>1,995.5</b>	<b>435.6</b>
Provisions	134.5	46.6	232.1	37.1
Liabilities and subsidies	2,610.7	1,209.2	5,614.6	3,753.8
<b>Current liabilities</b>	<b>2,745.2</b>	<b>1,255.8</b>	<b>5,846.7</b>	<b>3,790.9</b>
Carryforwards of unused tax losses	96.1	0.0	44.1	0.0
Interest carryforwards	3.2	0.0	0.0	0.0
<b>Deferred taxes before netting</b>	<b>6,524.0</b>	<b>7,133.7</b>	<b>12,962.4</b>	<b>13,841.1</b>
Netting	-6,298.0	-6,298.0	-12,883.0	-12,883.0
<b>Deferred taxes after netting</b>	<b>226.0</b>	<b>835.6</b>	<b>79.4</b>	<b>958.1</b>

<sup>1</sup> Deferred tax assets and liabilities prior to netting.

In the 2023 financial year, €6,298.0 million (previous year: €12,883.0 million) in deferred tax assets was netted against deferred tax liabilities. Deferred taxes are netted with each other per consolidated tax group or entity if the conditions to do so have been satisfied.

In the measurement differences compared to the tax accounts, a negative balance from deferred taxes resulting from consolidation of €2.2 million (previous year: €28.9 million) is taken into account.



In addition, deferred tax assets on measurement differences compared to the tax accounts contain €9.9 million (previous year: €68.9 million) in non-current financial assets, €499.1 million (previous year: €347.7 million) in non-current provisions and €250.7 million (previous year: €160.4 million) in current liabilities and subsidies that were offset against equity.

The deferred tax liabilities on measurement differences compared to the tax accounts contain no deferred tax liabilities with respect to non-current financial assets (as in the previous year) and €493.7 million (previous year: €703.9 million) with respect to current liabilities and subsidies that were offset against equity.

Deferred tax assets totaling €266.0 million (previous year: €126.9 million deferred tax liabilities) were offset directly against equity under other comprehensive income with no impact on profit or loss as of 31 December 2023.

The deferred tax assets contain an amount of €61.2 million (previous year: €95.2 million) that was formed in connection with risks related to the audit.

In order to evaluate the deferred tax assets from deductible temporary differences in assets and carryforwards of unused tax losses, a tax planning forecast was derived based on the company's multi-year plans and corporate strategy.

During this process, it was possible to prove with sufficient certainty that for EnBW and the main Group companies, there would be adequate taxable income available in the planning horizon used as the basis for the tax planning forecast for the full capitalization of deferred tax assets both from deductible temporary differences in assets and from carryforwards of unused tax losses.

As of 31 December 2023, a previous value adjustment and previous non-recognition of deferred tax assets from deductible temporary differences in assets and carryforwards of unused tax losses totaling €12.3 million (previous year: €6.6 million) were reversed.

Deferred tax assets from deductible temporary differences in assets and carryforwards of unused tax losses were only capitalized if there was sufficient certainty that there would be adequate taxable income available in the respective planning horizon. This meant that a total of €264.0 million (previous year: €0.0 million) in deferred tax assets from deductible temporary differences in assets and carryforwards of unused tax losses were adjusted or not recognized.

Carryforwards of unused tax losses are composed as follows:

in € million	31/12/2023		31/12/2022	
	Corporate income tax	Trade tax	Corporate income tax	Trade tax
Unlimited ability to carry forward the previously unused tax losses for which no deferred tax assets have been recognized in the balance sheet	765.5	726.0	380.8	412.3
Deferred taxes on the non-valued carryforwards of unused tax losses that would theoretically have to be formed	121.2	98.6	60.3	57.2
Unlimited ability to carry forward the existing unused tax losses for which deferred tax assets were formed <sup>1</sup>	275.5	353.3	141.3	129.8

<sup>1</sup> Mainly concerns German companies.

Carryforwards of unused tax losses reduced the actual tax burden by €18.5 million (previous year: €136.6 million).

As of the reporting date, deferred tax assets of €24.3 million (previous year: €23.8 million) were recognized for Group companies that suffered losses in the reporting period or the previous period.

The deferred taxes on carryforwards of unused tax losses break down as follows:

in € million	31/12/2023	31/12/2022
Corporate income tax (or comparable foreign tax)	45.5	24.0
Trade tax	50.6	20.1
<b>Total</b>	<b>96.1</b>	<b>44.1</b>

The presentation of the development of deferred taxes on carryforwards of unused tax losses is as follows:

in € million	31/12/2023	31/12/2022
Opening balance	44.1	152.7
Utilization of tax losses	-18.5	-136.6
Write-down of tax loss carryforwards recognized in previous years (removal)	-15.0	0.0
Origination of tax losses (addition)	85.5	26.7
Change in consolidated companies	0.0	1.3
<b>Closing balance</b>	<b>96.1</b>	<b>44.1</b>

In the reporting year, there were deferred taxes on interest amounts carried forward of €3.2 million (previous year: €0.0 million).

No deferred tax liabilities were recognized on temporary differences of €18.4 million (previous year: €16.7 million) because any retained profits from subsidiaries based on the current planning will remain invested on a permanent basis or because it is not likely that these temporary differences will reverse in the foreseeable future.

## (23) Liabilities and subsidies

### Financial liabilities

Financial liabilities break down as of 31 December 2023 compared to the previous year as follows:

in € million <sup>1</sup>	31/12/2023			31/12/2022		
	Current	Non-current	Total	Current	Non-current	Total
Subordinated bonds	499.5	1,991.7	2,491.2	0.0	2,488.7	2,488.7
Bonds	0.0	9,544.2	9,544.2	101.5	6,381.1	6,482.6
Commercial papers	0.0	0.0	0.0	712.5	0.0	712.5
Liabilities to banks	947.0	2,210.4	3,157.4	128.9	1,840.7	1,969.6
Other financial liabilities	17.7	1,257.3	1,275.0	21.1	1,216.9	1,238.0
<b>Financial liabilities</b>	<b>1,464.2</b>	<b>15,003.6</b>	<b>16,467.8</b>	<b>964.0</b>	<b>11,927.4</b>	<b>12,891.4</b>

<sup>1</sup> Please refer to note (26) "Accounting for financial instruments" for more details on the credit and liquidity risk, fair values and undiscounted cash flows by year.

Of the non-current financial liabilities, €6,701.6 million (previous year: €5,907.2 million) have a term of between one year and five years, and €8,302.0 million (previous year: €6,020.2 million) have a term of more than five years.

## Overview of the subordinated bonds

Issuer	Issue volume			Maturity
EnBW AG <sup>1</sup>	€500 million	€498.16 million	2.125%	31/08/2081
Green bond				
EnBW AG <sup>2</sup>	€500 million	€498.3 million	1.625%	05/08/2079
EnBW AG <sup>3</sup>	€500 million	€499.5 million	1.125%	05/11/2079
EnBW AG <sup>4</sup>	€500 million	€497.4 million	1.875%	29/06/2080
EnBW AG <sup>5</sup>	€500 million	€497.8 million	1.375%	31/08/2081
		<b>€2,491.2 million</b>		

1 Option for EnBW to redeem in the three-month period before 31 August 2032, then on every coupon date.

2 Option for EnBW to redeem in the three-month period before 5 August 2027, then on every coupon date.

3 Option for EnBW to redeem in the three-month period before 5 November 2024, then on every coupon date.

4 Option for EnBW to redeem in the three-month period before 29 June 2026, then on every coupon date.

5 Option for EnBW to redeem in the three-month period before 31 August 2028, then on every coupon date.

All outstanding subordinated bonds include early redemption rights for EnBW and are subordinate to all other financial liabilities, although they have equal ranking with each other. EnBW has the option of suspending interest payments. However, they must be subsequently paid under certain circumstances, for example, if EnBW pays dividends.

## Overview of the senior bonds of EnBW

Issuer	Issue volume	Carrying amounts	Coupon	Maturity
Public bonds				
EnBW International Finance B.V.	€500 million	€498,5 million <sup>1</sup>	4.875%	16/01/2025
EnBW International Finance B.V.	€500 million	€499.0 million	0.625%	17/04/2025
EnBW International Finance B.V.	€500 million	€499.5 million	2.500%	04/06/2026
EnBW International Finance B.V.	CHF 165 million	€177.8 million	2.250%	15/06/2026
EnBW International Finance B.V.	€500 million	€499.0 million	0.125%	01/03/2028
EnBW International Finance B.V.	€500 million	€498.0 million	3.500%	24/07/2028
EnBW International Finance B.V.	CHF 245 million	€265.5 million	2.625%	15/06/2029
EnBW International Finance B.V.	€500 million	€498.6 million	0.250%	19/10/2030
EnBW International Finance B.V.	€500 million	€497.0 million	0.500%	01/03/2033
EnBW International Finance B.V.	€750 million	€745.6 million	4.000%	24/01/2035
EnBW International Finance B.V.	€600 million	€591.3 million	6.125%	07/07/2039
Green bond				
EnBW International Finance B.V.	€500 million	€497.8 million	3.625%	22/11/2026
EnBW International Finance B.V.	€500 million	€498.9 million	4.049%	22/11/2029
EnBW International Finance B.V.	€650 million	€647.2 million	3.850%	23/05/2030
EnBW International Finance B.V.	€500 million	€497.5 million	1.875%	31/10/2033
EnBW International Finance B.V.	€850 million	€845.3 million	4.300%	23/05/2034
Private placements				
EnBW International Finance B.V.	€100 million	€98.8 million	2.875%	13/06/2034
EnBW International Finance B.V.	JPY 20 billion	€127.9 million	5.460% <sup>2</sup>	16/12/2038
EnBW International Finance B.V.	€100 million	€99.3 million	3.080%	16/06/2039
EnBW International Finance B.V.	€75 million	€74.8 million	2.080%	21/01/2041
EnBW International Finance B.V.	€50 million	€49.6 million	2.900%	01/08/2044
		<b>€8,706.9 million<sup>3</sup></b>		

1 Adjusted for valuation effects from interest-induced hedging transactions.

2 After the swap into euros.

3 We also have a US private placement of bonds with a carrying amount of €837.2 million as of 31/12/2023.

In November 2023, EnBW International Finance B.V. issued two green bonds with a total volume of €1.5 billion and terms of six and a half and ten and a half years. They have been given coupons of 3.85% and 4.30%, respectively. In January 2023, EnBW International Finance B.V. had already issued two conventional bonds with a total volume of €1.25 billion and terms of five and a half and

twelve years. They have been given coupons of 3.50% and 4.0%, respectively. In June 2023, EnBW International Finance B.V. issued two further bonds with a total volume of CHF 410 million and terms of three and six years. They have been given coupons of 2.25% and 2.625%, respectively.

### Commercial paper program

Under the commercial paper program set up by EnBW and EnBW International Finance B.V. for short-term financing purposes, €0.0 million was unused as of 31 December 2023 (previous year: €712.5 million).

### Liabilities to banks

Liabilities to banks increased in the 2023 financial year. This was primarily due to new loans taken out by EnBW and short-term money market loans taken out by subsidiaries. This was offset to some extent by scheduled repayments made by EnBW and its subsidiaries. The majority of the outstanding liabilities to banks are bilateral loan agreements.

The bank loan of €600 million agreed with the European Investment Bank in December 2022 to finance the He Dreiht offshore wind farm was fully drawn in 2023.

In May 2023, EnBW concluded a loan of €500 million with a bank consortium that is guaranteed by the credit agency EIFO. A total of €250 million of this loan was drawn in 2023 and also used to finance the EnBW He Dreiht offshore wind farm.

On 24 June 2020, EnBW concluded a sustainability-linked syndicated credit line with a bank consortium that has a volume of €1.5 billion. The bank consortium agreed the second extension option for an additional year in June 2021. The term for the syndicated credit line ends on 24 June 2027. The credit line remained undrawn as of 31 December 2023.

In addition, the Group had other committed credit lines of €3.9 billion (previous year: €4.6 billion), of which €0.6 billion (previous year: €0.2 billion) had been drawn as of 31 December 2023. The credit line of €660 million concluded with KfW by VNG in the previous year expired in 2023. Furthermore, there are uncommitted credit lines totaling around €1.7 billion (previous year: €1.3 billion) that can be drawn in agreement with our banks. As of 31 December 2023, €0.1 billion (previous year: €0.0 billion) of these credit lines had been drawn. The credit lines are not subject to any restrictions as regards their utilization.

Liabilities to banks are collateralized with real estate liens in the amount of €0.1 million (previous year: €0.1 million). Liabilities to banks to the amount of €184.9 million are collateralized with other types of securities (previous year: €218.4 million). These are mainly allocable to the Valeco Group.

### Other financial liabilities

The item "other financial liabilities" primarily includes promissory notes, other loans and other contractual obligations.

### Other liabilities and subsidies

Other liabilities and subsidies disclosed separately according to maturity in the balance sheet are combined in the notes to the financial statements.

in € million	31/12/2023	31/12/2022
Non-current liabilities	3,445.0	4,679.3
Current liabilities	14,158.9	24,358.0
<b>Liabilities</b>	<b>17,603.9</b>	<b>29,037.3</b>
Non-current subsidies	17.4	16.0
Current subsidies	1.3	1.2
<b>Subsidies</b>	<b>18.7</b>	<b>17.2</b>
Non-current liabilities and subsidies	3,462.4	4,695.3
Current liabilities and subsidies	14,160.2	24,359.2
<b>Liabilities and subsidies</b>	<b>17,622.6</b>	<b>29,054.5</b>

Other liabilities as of 31 December 2023 break down as follows compared to the previous year:

in € million <sup>1</sup>	31/12/2023			31/12/2022		
	Current	Non-current	Total	Current	Non-current	Total
Trade payables	5,049.9	1.1	5,051.0	8,443.3	0.6	8,443.9
of which liabilities to affiliated entities	(37.0)	(0.0)	(37.0)	(32.0)	(0.0)	(33.0)
of which liabilities to other investees and investors	(313.5)	(0.0)	(313.5)	(166.4)	(0.0)	(166.4)
of which liabilities to entities accounted for using the equity method	(108.4)	(0.0)	(108.4)	(158.6)	(0.0)	(158.6)
Other deferred income	165.2	239.8	405.0	280.8	227.1	507.9
Liabilities from derivatives	5,672.7	1,188.4	6,861.1	8,674.9	2,457.0	11,131.9
of which without hedges	(5,337.2)	(1,024.8)	(6,362.0)	(8,487.3)	(2,348.8)	(10,836.1)
of which cash flow hedge	(335.5)	(163.6)	(499.1)	(187.6)	(108.1)	(295.7)
Income tax liabilities	341.5	105.7	447.2	380.4	121.3	501.7
of which liabilities for audit risks	(0.7)	(105.7)	(106.4)	(0.3)	(121.3)	(121.6)
Contract liabilities	220.3	956.8	1,177.1	102.8	979.5	1,082.3
Miscellaneous liabilities	2,709.3	953.3	3,662.6	6,475.8	893.8	7,369.6
of which lease liabilities	(174.1)	(812.3)	(986.4)	(157.7)	(754.8)	(912.5)
of which from other taxes	(186.0)	(0.0)	(186.0)	(331.5)	(0.0)	(331.5)
of which relating to social security	(19.8)	(0.0)	(19.8)	(16.2)	(0.0)	(16.2)
<b>Other liabilities</b>	<b>14,158.9</b>	<b>3,445.1</b>	<b>17,604.0</b>	<b>24,358.0</b>	<b>4,679.3</b>	<b>29,037.3</b>

<sup>1</sup> Please refer to note (26) "Accounting for financial instruments" for more details on the credit and liquidity risk, fair values and undiscounted cash flows by year.

Of the non-current other liabilities (excluding deferred income and contract liabilities), €1,650.7 million (previous year: €2,969.1 million) has a remaining term of between one year and five years, and €597.7 million (previous year: €503.6 million) has a remaining term of more than five years.

Trade payables include obligations for outstanding invoices amounting to €1,148.7 million (previous year: €908.1 million).

Contract liabilities primarily comprise advance payments received for construction cost subsidies and household connection costs. In addition, they include advance payments received for other contracts within the scope of application of IFRS 15.

Other liabilities include construction cost subsidies and other subsidies from private sources totaling €1,020.0 million (previous year: €991.8 million).

Miscellaneous liabilities mainly concern collateral for over-the-counter trading business (OTC margins) amounting to €876.1 million (previous year: €3,095.2 million), as well as variation margins of €243.5 million (previous year: €1,488.8 million), interest obligations from bonds amounting to €135.3 million (previous year: €88.1 million) and non-controlling interests in fully consolidated partnerships recorded as liabilities to the amount of €116.4 million (previous year: €111.8 million).

Subsidies break down as of 31 December 2023 compared to the previous year as follows:

in € million	31/12/2023	31/12/2022
Investment cost subsidies	9.5	8.8
Other subsidies from public authorities	9.2	8.4
<b>Total</b>	<b>18.7</b>	<b>17.2</b>

## (24) Assets held for sale

### Assets held for sale

in € million	31/12/2023	31/12/2022
Property, plant and equipment	0.0	7.8
<b>Total</b>	<b>0.0</b>	<b>7.8</b>

In the reporting year, there were no assets classified as held for sale.

In the previous year, the property, plant and equipment held for sale mainly referred to generation plants held for sale due to concessions that are set to expire. This is allocated to the Sustainable Generation Infrastructure segment in the segment reporting. In the previous year, there were no liabilities associated with assets classified as held for sale.

## Other disclosures

### (25) Earnings per share

Earnings per share is determined by dividing the profit or loss attributable to the shareholders of EnBW AG by the average number of shares outstanding. This indicator may be diluted by potential shares on account of share options or convertible bonds. As EnBW does not have any potential shares, the basic earnings per share is identical to the diluted earnings per share.

Earnings per share		2023	2022
Earnings from continuing operations	in € million	1,832.6	1,843.9
of which profit/loss shares attributable to the shareholders of EnBW AG	in € million	(1,537.6)	(1,738.0)
Group net profit	in € million	1,832.6	1,843.9
of which profit/loss shares attributable to the shareholders of EnBW AG	in € million	(1,537.6)	(1,738.0)
Number of shares outstanding (weighted average)	thousands	270,855	270,855
Earnings per share from continuing operations <sup>1</sup>	in €	5.68	6.42
Earnings per share from Group net profit <sup>1</sup>	in €	5.68	6.42
Dividend per share for the 2022 financial year of EnBW AG	in €	–	1.10
Proposed dividend per share for the EnBW AG 2023 financial year	in €	1.50	–

<sup>1</sup> In relation to the profit/loss attributable to the shareholders of EnBW AG.

### (26) Accounting for financial instruments

Financial instruments include primary financial instruments and derivatives. On the assets side, primary financial instruments consist of financial assets, trade receivables, other assets, and cash and cash equivalents. On the liabilities side, they consist of financial liabilities, trade payables and other liabilities.

#### Fair value and carrying amounts of financial instruments by measurement category

The table below shows the fair values and carrying amounts of the financial assets and financial liabilities contained in the individual balance sheet items. If not indicated separately, the fair value is measured recurrently.

31/12/2023

Hierarchy of input data

in € million	Fair value	Level 1	Level 2	Level 3	Measured at amortized cost	Not in IFRS 7's field of application	Carrying amount
Financial assets	9,088.4	2,908.7	829.3	2,204.3	3,146.1	618.2	9,706.6
Measured at fair value through profit or loss	(3,921.3)	(1,228.0)	(489.0)	(2,204.3)			(3,921.3)
Measured at fair value in equity	(2,021.0)	(1,680.7)	(340.3)				(2,021.0)
Measured at amortized cost	(3,146.1)				(3,146.1)		(3,146.1)
Trade receivables	4,945.7				4,945.7		4,945.7
Other assets	9,701.1		7,480.4	9.6	2,211.1	1,351.0	11,052.1
Measured at fair value through profit or loss	(7,273.3)		(7,263.7)	(9.6)			(7,273.3)
Measured at amortized cost	(2,157.9)				(2,157.9)		(2,157.9)
Derivatives designated as hedging instruments	(216.7)		(216.7)				(216.7)
Lease receivables	(53.2)				(53.2)		(53.2)
Cash and cash equivalents	5,995.1				5,995.1		5,995.1
<b>Total assets</b>	<b>29,730.3</b>	<b>2,908.7</b>	<b>8,309.7</b>	<b>2,213.9</b>	<b>16,298.0</b>	<b>1,969.2</b>	<b>31,699.5</b>
Financial liabilities <sup>1</sup>	16,290.2				16,467.7		16,467.7
Trade payables	2,020.8				2,020.8	3,029.1	5,049.9
Other liabilities and subsidies	9,477.2		6,861.1		2,616.1	3,095.9	12,573.1
Held for trading	(6,362.0)		(6,362.0)				(6,362.0)
Measured at amortized cost	(1,629.7)				(1,629.7)		(1,629.7)
Derivatives designated as hedging instruments	(499.1)		(499.1)				(499.1)
Lease liabilities	(986.4)				(986.4)		(986.4)
<b>Total liabilities</b>	<b>27,788.2</b>	<b>0.0</b>	<b>6,861.1</b>	<b>0.0</b>	<b>21,104.6</b>	<b>6,125.0</b>	<b>34,090.7</b>

<sup>1</sup> The fair value of bonds and of liabilities to banks is allocated to hierarchical Level 1 in the amount of €11,621.3 million and to hierarchical Level 2 in the amount of €4,688.9 million. A total of €299.0 million of the bonds are held in fair value hedging relationships.



31/12/2022

Hierarchy of input data

in € million	Fair value	Level 1	Level 2	Level 3	Measured at amortized cost	Not in IFRS 7's field of application	Carrying amount
Financial assets	7,268.1	2,698.1	932.4	2,304.7	1,332.9	640.3	7,908.4
Measured at fair value through profit or loss	(4,160.6)	(1,251.7)	(604.2)	(2,304.7)			(4,160.6)
Measured at fair value in equity	(1,774.6)	(1,446.4)	(328.2)				(1,774.6)
Measured at amortized cost	(1,332.9)				(1,332.9)		(1,332.9)
Trade receivables <sup>1</sup>	5,920.7				5,920.7		5,920.7
Other assets	16,253.0	0.1	13,397.1		2,855.8	1,965.6	18,218.6
Measured at fair value through profit or loss	(12,892.6)		(12,892.6)				(12,892.6)
Measured at amortized cost	(2,823.5)				(2,823.5)		(2,823.5)
Derivatives designated as hedging instruments	(504.6)	(0.1)	(504.5)				(504.6)
Lease receivables	(32.3)				(32.3)		(32.3)
Cash and cash equivalents	6,475.6				6,475.6		6,475.6
Assets held for sale <sup>2</sup>						7.8	7.8
<b>Total assets</b>	<b>35,917.4</b>	<b>2,698.2</b>	<b>14,329.5</b>	<b>2,304.7</b>	<b>16,585.0</b>	<b>2,613.7</b>	<b>38,531.1</b>
Financial liabilities <sup>3</sup>	12,001.3				12,891.2		12,891.2
Trade payables	3,380.5				3,380.5	5,062.8	8,443.3
Other liabilities and subsidies	17,123.9		11,131.8		5,992.1	3,487.2	20,611.1
Held for trading	(10,836.1)		(10,836.1)				(10,836.1)
Measured at amortized cost	(5,079.6)				(5,079.6)		(5,079.6)
Derivatives designated as hedging instruments	(295.7)		(295.7)				(295.7)
Lease liabilities	(912.5)				(912.5)		(912.5)
<b>Total liabilities</b>	<b>32,505.7</b>	<b>0.0</b>	<b>11,131.8</b>	<b>0.0</b>	<b>22,263.8</b>	<b>8,550.0</b>	<b>41,945.6</b>

<sup>1</sup> Due to the impact of the war between Russia and Ukraine, the amount of expected credit losses on trade receivables was increased moderately on the basis of internal forecasts.

<sup>2</sup> This refers mainly to a non-recurring measurement of the fair value due to the application of IFRS 5.

<sup>3</sup> The fair value of bonds and liabilities to banks must be allocated to hierarchical Level 1 (€7,820.5 million) and hierarchical Level 2 (€4,180.8 million), respectively. A total of €301.7 million of the bonds are involved in fair value hedging relationships.

The calculation of fair values is explained further in the section entitled accounting policies. The individual levels of the valuation hierarchy are as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: Methods for which all input parameters that have a significant effect on the recorded fair value are observable, either directly or indirectly
- Level 3: Methods that use input parameters which have a material impact on the recorded fair value and are not based on observable market data

At the end of each reporting period it is determined whether there is any reason to reclassify between the levels of the valuation hierarchy. A reclassification is carried out if the valuation method for measuring fair value is changed and the input factors with significance for the valuation will result in allocation to a different level. Due to the fact that prices quoted by brokers are used, securities with a fair value of €6.4 million (previous year: €200.5 million) were reclassified from Level 1 to Level 2 and securities with a fair value of €29.9 million (previous year: €19.7 million) were reclassified from Level 2 to Level 1 in the 2023 financial year.

The fair value of the assets in the “measured at fair value through profit or loss” measurement category amounts to €11,194.6 million (previous year: €17,053.2 million), of which €1,228.0 million (previous year: €1,251.7 million) is allocated to the first hierarchical level, €7,752.7 million (previous year: €13,496.8 million) to the second hierarchical level and €2,213.9 million (previous year: €2,304.7 million) to the third hierarchical level. The assets in the “measured at fair value in equity” measurement category have a fair value of €2,021.0 million (previous year: €1,774.6 million), of which €1,680.7 million (previous year: €1,446.4 million) is allocated to the first hierarchical level and €340.3 million (previous year: €328.2 million) to the second hierarchical level. Assets in the “measured at amortized cost” measurement category amount to €16,298.0 million (previous year: €16,585.0 million).

The fair values of investments in private equity companies are provided by the respective investment companies. The fair value depends on the changes in market value of the respective asset. The most up-to-date fair value available is taken as the basis in each case.

The following table shows the development of the financial instruments to be accounted for at fair value in accordance with Level 3:

in € million	As of 01/01/2023	Changes in consolidated companies, currency adjustments, other	Changes recognized through profit or loss	Changes recognized in equity	Additions	Disposals	As of 31/12/2023
Financial assets	2,304.7	-1.4	-79.7	3.5	199.7	-213.0	2,213.8

Unrealized changes recognized through profit or loss for financial assets of €-79.7 million (previous year: €108.3 million) were recognized in the financial result and relate to financial instruments held in the financial year. In the financial year, there were realized changes recognized through profit or loss recognized in the investment result and financial result of €76.2 million (previous year: €238.8 million), of which €82.3 million (previous year: €238.4 million) is accounted for by financial instruments still held on the reporting date.

The premises for determining the price risks associated with the financial instruments measured at fair value in accordance with Level 3 were 1.0% for investments in real estate and infrastructure funds (previous year: 1.0%) and 10.0% for other financial instruments (previous year: 10.0%). In the risk scenario in question, the net profit/loss for the year would improve by €100.2 million (previous year: €102.9 million). A decrease of the same amount would have an opposite effect.

Financial liabilities as of 31 December 2023 include bonds with a fair value of €11,920.3 million (previous year: €8,834.7 million) and liabilities to banks with a fair value of €3,122.0 million (previous year: €1,928.6 million).

#### Disclosures – offsetting financial assets and financial liabilities

The derivative financial instruments are part of standard market netting agreements. Master netting agreements exist with our business partners that were created with banks, in particular, on the basis of ISDA (International Swaps and Derivatives Association) agreements. Transactions concluded as part of commodity transactions are generally subject to EFET (European Federation of Energy Traders) agreements. The netting agreements are included in the calculations of fair value.

The following table contains the financial instruments netted in the balance sheet and those which, irrespective of that, are subject to a legally enforceable netting agreement. These financial instruments are contained in the non-netted amounts. In addition, the non-netted amounts also contain collateral to be furnished in advance for on-exchange transactions.

31/12/2023

in € million	Non-netted amounts					
	Gross amounts	Netting	Net amounts accounted for	Master netting agreement	Financial collateral received/paid	Net amount
Trade receivables	4,078.4	-2,701.4	1,377.0	0.0	0.0	1,377.0
Other assets	25,109.9	-17,586.7	7,523.2	-421.4	-1,563.7	5,538.1
Measured at fair value through profit or loss	(23,890.8)	(-16,664.2)	(7,226.6)	(-374.9)	(-1,563.7)	(5,288.0)
Measured at amortized cost	(565.7)	(-418.1)	(147.6)	(0.0)	(0.0)	(147.6)
Derivatives designated as hedging instruments	(653.4)	(-504.4)	(149.0)	(-46.5)	(0.0)	(102.5)
Trade payables	2,965.6	-2,701.4	264.2	0.0	0.0	264.2
Other liabilities and subsidies	24,358.1	-17,586.7	6,771.4	-421.4	-392.8	5,957.2
Held for trading	(22,887.3)	(-16,525.3)	(6,362.0)	(-374.9)	(-390.2)	(5,596.9)
Measured at amortized cost	(856.8)	(-613.6)	(243.2)	(0.0)	(0.0)	(243.2)
Derivatives designated as hedging instruments	(614.0)	(-447.8)	(166.2)	(-46.5)	(-2.6)	(117.1)

31/12/2022

in € million	Non-netted amounts					
	Gross amounts	Netting	Net amounts accounted for	Master netting agreement	Financial collateral received/paid	Net amount
Trade receivables	9,005.2	-7,033.2	1,972.0	0.0	0.0	1,972.0
Other assets	76,730.0	-66,783.9	9,946.1	-464.8	-5,824.6	3,656.7
Measured at fair value through profit or loss <sup>1</sup>	(74,609.3)	(-65,009.9)	(9,599.4)	(-453.3)	(-5,824.6)	(3,321.5)
Measured at amortized cost	(612.5)	(-608.0)	(4.5)	(0.0)	(0.0)	(4.5)
Derivatives designated as hedging instruments	(1,508.2)	(-1,166.0)	(342.2)	(-11.5)	(0.0)	(330.7)
Trade payables	8,019.1	-7,033.2	985.9	0.0	0.0	985.9
Other liabilities and subsidies	75,531.9	-66,783.9	8,748.0	-464.8	-2,463.9	5,819.3
Held for trading <sup>1</sup>	(71,322.2)	(-64,269.4)	(7,052.8)	(-453.3)	(-2,460.2)	(4,139.3)
Measured at amortized cost	(2,987.9)	(-1,500.5)	(1,487.4)	(0.0)	(0.0)	(1,487.4)
Derivatives designated as hedging instruments	(1,221.8)	(-1,014.0)	(207.8)	(-11.5)	(-3.8)	(192.5)

<sup>1</sup> The figures for the previous year have been restated for technical reasons. In addition, securities that must be classified as cash and cash equivalents are now disclosed under securities to improve the presentation.

The following net gains/losses were recognized in the income statement:

#### Net gains or losses by measurement category

in € million	2023	2022
Financial assets and liabilities measured at fair value through profit or loss	1,529.9	798.9
Financial assets measured at fair value in equity	-126.5	-39.3
Financial assets measured at amortized cost	-327.1	-270.2
Financial liabilities measured at amortized cost	-51.2	-56.6

Please refer to note (8) "Financial result" for information on the total interest income and expenses arising from the financial assets and liabilities measured at fair value in equity and at amortized cost.

The presentation of net gains and losses does not include derivatives that are designated as hedging instruments. Stand-alone derivatives are included in the "financial assets and liabilities measured at fair value through profit or loss" category.

The net gain posted in the "financial assets and liabilities measured at fair value through profit or loss" measurement category includes results from marking to market, dividends and the sale of financial instruments, as well as results related to interest and currency effects as in the previous year.

In the reporting year, the net loss in the "financial assets measured at fair value in equity" measurement category was mainly due to effects arising from the sale of financial instruments, currency effects and impairment losses/reversals of impairment losses as in the previous year.

The net loss in the “financial assets measured at amortized cost” measurement category was mainly due to loss allowances and negative currency effects as in the previous year.

In the reporting year, the net loss in the “financial liabilities measured at amortized cost” measurement category was mainly due to dividends and currency effects as in the previous year.

The loss allowances on the financial assets in the reporting year are presented under “Default risk” in this note.

In the 2023 financial year, results from changes in the market value of financial assets measured at fair value in equity were recognized in equity with a positive impact of €75.6 million (previous year: negative impact of €202.3 million). Of the changes in market values posted with no impact on income, €65.9 million (previous year: €47.8 million) was transferred with a negative impact on earnings to the income statement.

### Derivative financial instruments and hedging

**Derivatives:** Both physical and financial options and forward transactions are entered into to hedge risks in the commodity area, while forward transactions are used almost exclusively in the foreign exchange area. In the area of financing, swap transactions are concluded to minimize risks.

All derivatives held for trading are accounted for as assets or liabilities. They are measured at fair value.

Changes in the fair value of derivatives which are neither intended solely for own use nor qualify as cash flow hedging transactions are recorded in the income statement.

Hedge accounting in accordance with IFRS 9 is applied in the finance area mainly for interest rate hedges for non-current liabilities. In the commodity area, fluctuations of future cash flows from planned procurement and sales transactions are hedged. The economic relationship between a hedged item and the hedging instrument is determined by the currency, amount or quantity and timing of the relevant cash flows, depending on the risk being hedged. Risks are hedged in their entirety and a 1:1 hedging relationship is used. In order to evaluate the expected effectiveness of the hedge, the hypothetical derivative method and the “dollar offset method” are used. Ineffectiveness in the hedging relationship may occur due to discounting effects.

**Cash flow hedges** have been entered into particularly in the commodity area to cover price risks from future sales and procurement transactions, to limit the currency risk from liabilities denominated in foreign currency and to limit the risk of interest rate fluctuation of floating-rate liabilities.

The change in the fair value of the hedging transactions used, particularly forward contracts and futures, is, insofar as they are effective, recorded directly in other comprehensive income until termination of the hedge. The ineffective portion of the gain or loss on the hedging instrument is immediately recognized in profit or loss.

#### Date of the reclassification of the result that was directly recognized in equity to the 2023 income statement

in € million	Fair value	2024	2025 – 2028	> 2028
Currency-related cash flow hedges	-82.5	-6.4	-31.4	-44.7
Commodity cash flow hedges	-168.3	-294.4	126.1	0.0
Interest-related cash flow hedges	14.7	5.5	2.2	7.0

**Date of the reclassification of the result that was directly recognized in equity to the 2022 income statement**

in € million	Fair value	2023	2024 – 2027	> 2027
Currency-related cash flow hedges	-33.4	-31.9	10.8	-12.3
Commodity cash flow hedges	287.4	139.3	166.8	-18.7
Interest-related cash flow hedges	32.8	6.4	14.0	12.4

As of 31 December 2023, unrealized gains from derivatives amounted to €745.1 million (previous year: €1,880.0 million). In the reporting period, the effective portion of the cash flow hedges was recognized directly in equity with a positive impact of €42.1 million (previous year: €1,461.7 million). From the ineffective portion of the cash flow hedges in the 2023 financial year, there was income of €4.2 million (previous year: €4.6 million expenses) as well as income from reclassifications from other comprehensive income in the amount of €1,221.1 million (previous year: €709.2 million expenses) to the income statement. The reclassifications were made to revenue (increase of €821.1 million, previous year: decrease of €1,378.6 million), cost of materials (increase of €499.7 million, previous year: decrease of €623.8 million), other operating income (increase of €928.9 million, previous year: €52.0 million) and the financial result (decrease of €29.2 million, previous year: €6.5 million). An amount of €44.1 million (previous year: €622.9 million) was reclassified from other comprehensive income to inventories. This led to an increase in acquisition costs in the reporting year and to a decrease in the previous year.

As of 31 December 2023, existing hedged items that are covered by cash flow hedges with terms of up to around 14 years (previous year: up to 15 years) are included in the area of foreign currencies. In the commodity area, the terms of planned hedged items are generally up to four years, as in the previous year.

For optimization purposes, hedging relationships are regularly redesignated as is customary in the industry.

**Hedges of a net investment in a foreign operation** are used to hedge foreign currency risks from investments with a foreign functional currency. As of 31 December 2023, the item “financial liabilities” contained bonds of US\$148 million to hedge the foreign currency risk of the net investment in the joint venture in Turkey. It also contains bonds of GBP 168 million and CHF 100 million that are held to hedge the foreign currency risk of investments in joint ventures and subsidiaries. Gains and losses from the translation of bonds in foreign currencies are recognized under other comprehensive income and netted against any gains or losses from the currency translation at the foreign operation.

There is an economic relationship between the hedged item and the hedging instrument because there is a translation risk associated with the net investment that corresponds to the foreign currency risk associated with the respective bond. The underlying risk associated with the hedging instrument is identical to the hedged risk component. Therefore, the Group has defined a hedge ratio of 1 : 1 for this hedging relationship. A hedge will be ineffective if the value of the hedged item falls below the value of the bond in the foreign currency.

**Fair value hedges** are entered into above all to hedge fixed-income liabilities against market price risks. Interest rate swaps are used as hedging instruments. With a fair value hedge, both the hedged item and the hedging transaction are measured with respect to the hedged risk at fair value through profit or loss. The change in the fair value of hedging instruments of €2.7 million was recognized in the income statement with a negative impact on earnings in the reporting year (previous year: €31.6 million). For hedged liabilities, the fluctuation in market values arising from the hedged risk is also recognized in profit or loss. In the reporting year, fluctuations in market values totaling €2.7 million that resulted from the hedged items were measured through profit or loss with a negative impact on earnings (previous year: positive impact of €34.9 million).

Contracts that have been concluded to meet the company's expected usage requirements are not recorded in the balance sheet pursuant to the provisions of IFRS 9.

Regular way purchases or sales (spot purchases/sales) of primary financial instruments are generally recognized as of the settlement date at fair value taking into account the transaction costs. Derivative financial assets are recognized as of the trading date. Derivative and primary financial instruments are recognized in the balance sheet when EnBW becomes party to the contract.

Purchases and sales of fuels are made in euros or US dollars.

Counterparty risks are assessed taking into account the period for which the current replacement and selling risk has been calculated. Moreover, these risks are analyzed with reference to the current rating by the rating agencies Moody's and Standard & Poor's. An internal rating procedure is used for trading partners that do not have such an external rating.

The counterparty risk is based on replacement and selling risks resulting from the market value of the item in question with the individual trading partner as of the reporting date. Netting options agreed in master agreements concluded with the trading partner are also taken into account when determining the counterparty risk. If there is a netting agreement, positive and negative market values are netted for each trading partner. Otherwise, only positive market values are taken into consideration.

The following tables present the amounts that relate to items designated as hedging instruments. The nominal volume of the derivatives presented below has not been netted. It represents the sum of all purchase and sale amounts underlying the transactions. The amount of the nominal volume allows conclusions to be drawn about the extent to which derivatives have been used. However, it does not reflect the risk to the Group as the derivative transactions are counterbalanced by hedged items that have counter risks. Collateral is deposited or has been provided for derivatives that are traded on the stock exchange.

31/12/2023	Nominal amount of the hedging instrument	Carrying amount of the hedging instrument		Balance sheet items containing the hedging instrument	Change in the fair value for the reporting period
		Assets	Liabilities		
in € million					
Cash flow hedges	11,324.5	206.4	499.1		-513.6
Commodity price risks	8,931.6	179.2	403.7	Other assets/ Other liabilities	-447.5
Currency risk <sup>1</sup>	1,986.4	9.3	92.2	Other assets/ Other liabilities	-49.0
Interest rate risk <sup>2</sup>	406.5	17.9	3.2	Other liabilities	-17.1
Fair value hedges	300.0	10.3	0.0		2.7
Interest rate risk <sup>3</sup>	300.0	10.3	0.0	Other assets	2.7
Hedges of a net investment in a foreign operation <sup>4</sup>	435.2	0.0	435.2	Financial liabilities	-2.6

<sup>1</sup> The hedging instruments have a term of up to 5 years (€1,858.5 million) and more than 5 years (€127.9 million).

<sup>2</sup> The hedging instruments have a term of up to 5 years (€402.6 million) and more than 5 years (€3.9 million).

<sup>3</sup> The hedging instruments have a term of up to 5 years.

<sup>4</sup> The nominal volume of the hedging instruments in foreign currencies is US\$148 million, GBP 168 million, and CHF 100 million, of which US\$84.2 million and GBP 148.4 million have a term of more than 5 years.

31/12/2022	Nominal amount of the hedging instrument	Carrying amount of the hedging instrument		Balance sheet items containing the hedging instrument	Change in the fair value for the reporting period
in € million		Assets	Liabilities		
Cash flow hedges	13,023.4	481.5	295.7		1,979.1
Commodity price risks	9,897.7	415.9	229.4	Other assets/ Other liabilities	1,934.8
Currency risk <sup>1</sup>	2,558.9	32.1	65.6	Other assets/ Other liabilities	11.2
Interest rate risk <sup>2</sup>	566.8	33.5	0.7	Other liabilities	33.1
Fair value hedges	308.9	23.1	0.0		-31.6
Commodity price risks	8.9	5.0	0.0	Other assets	5.0
Interest rate risk <sup>3</sup>	300.0	18.1	0.0	Other assets	-36.6
Hedges of net investments in foreign operations <sup>4</sup>	138.8	0.0	138.8	Financial liabilities	9.3

<sup>1</sup> The hedging instruments have a term of up to 5 years (€2,416.7 million) and more than 5 years (€142.2 million).

<sup>2</sup> The hedging instruments have a term of up to 5 years (€432.8 million) and more than 5 years (€134.0 million).

<sup>3</sup> The hedging instruments have a term of up to 5 years.

<sup>4</sup> The hedging instruments have a nominal value of US\$148 million, of which US\$55.0 million has a term of up to 5 years and US\$93.0 million a term of more than 5 years.

The following tables present the amounts that relate to items designated as hedged items:

31/12/2023	Carrying amount of the hedged item	Change in value of the hedged item that is contained in the carrying amount of the recognized transaction	Balance sheet items containing the hedged item	Change in the fair value for the reporting period	Cash flow hedge reserve
in € million	Liabilities	Liabilities			
Cash flow hedges <sup>1</sup>	–	–		517.7	745.0
Commodity price risks	–	–		449.1	743.4
Currency risk	–	–		51.5	-32.5
Interest rate risk	–	–		17.1	34.1
Fair value hedges	304.3	4.3		-2.7	–
Interest rate risk	304.3	4.3	Financial liabilities	-2.7	–
Hedges of net investments in foreign operations	–	–		2.6	6.5

<sup>1</sup> The hedged items are expected transactions and fixed obligations.

31/12/2022	Carrying amount of the hedged item	Change in value of the hedged item that is contained in the carrying amount of the recognized transaction	Balance sheet items containing the 'hedged item	Change in the fair value for the reporting period	Cash flow hedge reserve
in € million	Liabilities	Liabilities			
<b>Cash flow hedges <sup>1</sup></b>	<b>-</b>	<b>-</b>		<b>-1,961.9</b>	<b>1,880.1</b>
Commodity price risks	-	-		-1,914.5	1,843.5
Currency risk	-	-		-14.3	-6.5
Interest rate risk	-	-		-33.1	43.1
<b>Fair value hedges</b>	<b>305.7</b>	<b>1.7</b>		<b>29.9</b>	<b>-</b>
Commodity price risks	4.0		Inventories	-5.0	
Interest rate risk	301.7	1.7	Financial liabilities	34.9	-
<b>Hedges of net investments in foreign operations</b>	<b>-</b>	<b>-</b>		<b>-9.3</b>	<b>9.3</b>

<sup>1</sup> The hedged items are expected transactions and fixed obligations.

In the reporting year, the amounts associated with items designated as hedging instruments were as follows:

2023	Hedging gains or losses in the reporting period recognized under other comprehensive income	Ineffectiveness of the hedging relationship recognized in profit or loss	Items on the statement of comprehensive income that contain the recognized ineffectiveness	Reclassification adjustments included in the income statement <sup>1</sup>	Items on the statement of comprehensive income affected by the reclassification
in € million					
<b>Cash flow hedges</b>	<b>42.1</b>	<b>4.2</b>		<b>1,221.1</b>	
Commodity price risks	118.3	-2.4	Other operating expenses	1,250.4	Cost of materials/revenue/other operating expenses
Interest rate risk	-15.5	0.0		0.0	Financial result
Currency risk	-60.7	6.6	Other operating income	-29.3	Financial result
<b>Hedges of a net investment in a foreign operation</b>	<b>-2.6</b>				

<sup>1</sup> Detailed information on the reclassifications with an effect on profit or loss can be found in the information on cash flow hedges.

2022	Hedging gains or losses in the reporting period recognized under other comprehensive income	Ineffectiveness of the hedging relationship recognized in profit or loss	Items on the statement of comprehensive income that contain the recognized ineffectiveness	Reclassification adjustments included in the income statement <sup>1</sup>	Items on the statement of comprehensive income affected by the reclassification
in € million					
<b>Cash flow hedges</b>	<b>1,390.2</b>	<b>-4.6</b>		<b>-232.4</b>	
Commodity price risks	1,300.0	1.7	Other operating income	-225.9	Cost of materials/revenue/other operating expenses
Interest rate risk	26.9	0.0		0.2	Financial result
Currency risk	63.3	-6.3	Other operating expenses	-6.7	Financial result
<b>Hedges of a net investment in a foreign operation</b>	<b>9.3</b>				

<sup>1</sup> Detailed information on the reclassifications with an effect on profit or loss can be found in the information on cash flow hedges.

Derivatives used for hedging purposes can be reconciled to other comprehensive income (cash flow hedges) as follows:



in € million <sup>1</sup>	31/12/2023	31/12/2022	Change
Derivatives used in cash flow hedges with a positive fair value	433.4	755.9	-322.5
Derivatives used in cash flow hedges with a negative fair value	669.6	469.3	200.3
	-236.2	286.6	-522.8
Deferred tax on change recognized directly in equity in derivatives used in cash flow hedges	-254.9	-552.4	297.5
Hedge ineffectiveness	-4.0	4.6	-8.6
Cascading effects	58.9	649.2	-590.3
Effects realized from hedging transactions <sup>2</sup>	912.3	965.8	-53.5
Non-controlling interests	87.7	-82.8	170.5
<b>Cash flow hedge (recognized in equity)</b>	<b>563.8</b>	<b>1,271.0</b>	<b>-707.2</b>

1 Before offsetting financial assets and financial liabilities according to IAS 32.

2 Of which €880.3 million (previous year: €900.6 million) will be reclassified to the income statement in the period 2024–2030 (previous year: 2024 – 2030).

The cascading effects concern the changes in market value of the futures that are part of hedges accumulated until the time of cascading.

In cascading, annual and quarterly futures are settled by other futures instead of in cash.

#### Counterparty risk Moody`s, S&P and/or internal rating

in € million	31/12/2023		31/12/2022	
	< 1 year	1 – 5 years	< 1 year	1 – 5 years
up to A1	418.5	73.6	870.5	293.7
up to A3	98.4	30.6	237.0	126.8
Baa1	366.7	378.4	1,014.0	725.0
up to Baa3	405.4	127.5	1,163.3	575.9
below Baa3	47.0	13.0	25.3	9.2
<b>Total</b>	<b>1,336.0</b>	<b>623.1</b>	<b>3,310.1</b>	<b>1,730.6</b>

#### Risk management system

As an energy supply company, EnBW is exposed to financial price risks in the currency, interest and commodity areas in the course of its operating activities, investments and financing transactions. In addition, there are credit and liquidity risks. It is company policy to eliminate or limit these risks through systematic risk management.

Exchange rate fluctuations between the euro and other currencies, fluctuation in interest rates on international money and capital markets, as well as fluctuating prices on the markets for electricity, coal, gas and emission allowances are the main price risks for EnBW. The hedging policy used to limit these risks is set forth by the Board of Management and is documented in intercompany guidelines. It also provides for the use of derivatives.

The derivatives used to hedge against financial risks are subject to the assessment criteria defined in the risk management guidelines. These include value-at-risk ratios and position limits and loss limits. The segregation of duties between trading and back-office processing and control is a further key element of our risk management.

The corresponding financial transactions are only concluded with counterparties with excellent credit ratings. Using suitable hedging instruments, it is possible to make use of market opportunities while hedging the risk position.

The risks arising from financial instruments as well as the methods used to assess and manage them have not changed significantly since the previous year.

### Default risk

EnBW is exposed to default risks that result from counterparties not fulfilling contractual agreements. EnBW manages its default risks by generally demanding a high credit rating of its counterparties and limiting the default risk with counterparties. The credit ratings of counterparties are continually monitored by EnBW's system for managing credit ratings. Commodity and energy transactions are generally made under master agreements such as EFET, ISDA or IETA.

These master agreements are generally only entered into following careful scrutiny of the counterparty's creditworthiness. Exceptions to this business policy can be made only if it is in the justified interest of the company, e.g., in order to penetrate new markets. In terms of the customer structure, the receivables from individual counterparties are not large enough to give rise to a significant concentration of risk.

Financial investments are only made with counterparties and within the investment limits defined in the treasury guidelines. Compliance with these guidelines is constantly monitored by the internal control system (ICS).

The loss allowances for financial assets measured at fair value in equity and financial assets measured at amortized cost developed as follows:

in € million<sup>1</sup>

	Financial assets measured at fair value in equity		Financial assets measured at fair value in equity		
	Carrying amount	Expected 12-month credit loss	Carrying amount	Expected 12-month credit loss	Expected credit loss over the term – impaired creditworthiness
<b>As of 01/01/2022</b>	<b>2,248.1</b>	<b>-9.4</b>	<b>7,395.3</b>	<b>-1.4</b>	<b>-35.7</b>
Net revaluation of the loss allowances	–	3.0	–	0.0	-111.8
Newly acquired financial assets	–	-1.8	–	-0.6	-0.4
Repaid financial assets	–	0.4	–	0.5	0.4
Reclassification in expected credit loss over the term – impaired creditworthiness	–	–	–	0.4	-4.7
<b>As of 31/12/2022</b>	<b>1,774.6</b>	<b>-7.8</b>	<b>8,608.2</b>	<b>-1.1</b>	<b>-152.2</b>
Net revaluation of the loss allowances	–	-0.3	–	-0.2	-94.5
Newly acquired financial assets	–	-4.0	–	-0.1	-0.1
Repaid financial assets	–	2.4	–	0.4	106.2
Reclassification in expected credit loss over the term – no impaired creditworthiness	–	–	–	-0.1	–
<b>As of 31/12/2023</b>	<b>2,021.0</b>	<b>-9.7</b>	<b>10,294.4</b>	<b>-1.1</b>	<b>-140.6</b>

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

The loss allowances for trade receivables developed as follows in the financial year:

Trade receivables		31/12/2023			31/12/2022	
in € million	Carrying amount	Loss allowance	Loss rate (weighted average)	Carrying amount	Loss allowance	Loss rate (weighted average)
Not past due	4,612.0	-42.2	0.9%	5,689.9	-33.0	0.6%
Past due	333.6	-420.3		230.8	-222.0	
Due within 3 months	(147.6)	(-38.1)	20.5%	(136.7)	(-31.9)	18.9%
Due in between 3 and 6 months	(46.3)	(-38.3)	45.3%	(39.4)	(-39.1)	49.8%
Due in between 6 months and 1 year	(53.2)	(-47.9)	47.4%	(30.0)	(-31.2)	51.0%
Due in more than 1 year	(86.6)	(-296.0)	77.4%	(24.6)	(-119.8)	82.9%

In the financial year, income from the recovery of trade receivables that had been written off was €8.4 million (previous year: €10.1 million). Expenses for trade receivables and other assets that had been written off stood at €38.0 million in the financial year (previous year restated: €34.6 million), of which €4.3 million (previous year: €5.6 million) are still subject to active enforcement proceedings.

The maximum default risk for financial assets (including derivatives with positive market value) is equivalent to the carrying amounts recognized in the balance sheet. As of the reporting date of 31 December 2023, the maximum default risk amounts to €29.7 billion (previous year: €35.9 billion). The maximum default risk for financial guarantees corresponds to the undiscounted cash flows for financial guarantees stated for the liquidity risk.

#### Liquidity risk

Liquidity risks arise for EnBW from the obligation to repay liabilities fully and punctually. The objective of EnBW's cash and liquidity management is to secure the company's solvency at all times.

Cash management determines any cash requirements and inflows on a central basis. By offsetting cash requirements and cash inflows, the number of banking transactions is reduced to a minimum. The netting is carried out by cash pooling. Cash management has implemented standardized processes and systems to manage bank accounts and internal clearing accounts, and to perform automated payment transactions.

For liquidity management purposes, a finance plan based on cash flows is prepared centrally. As they arise, finance needs are covered by suitable financial instruments as part of the liquidity management. In addition to liquidity that is available on a daily basis, EnBW maintains further liquidity reserves of €5.4 billion (previous year: €6.1 billion) which are available at short notice. The amount of liquidity reserves is based on strategic liquidity planning, taking into account defined worst-case parameters. The liquidity reserve is made up of contractually agreed, syndicated and free credit lines with various terms to maturity. In view of the liquidity available and existing credit lines, EnBW does not consider there to be any concentration of risk.

The tables below show future undiscounted cash flows from financial liabilities and derivative financial instruments that affect the future liquidity situation of the EnBW Group.

The analysis includes all contractual obligations that are disclosed in the balance sheet as of the reporting date 31 December 2023. Interest and redemption payments are taken into consideration for debt instruments issued and liabilities to banks.

The interest payments on fixed-income financial instruments are based on the contractually agreed interest rates. For financial instruments subject to floating interest, the interest rates last fixed prior to 31 December 2023 were used.

Foreign currency financial instruments are translated at the respective spot price as of 31 December 2023.

For further details on financial liabilities, please refer to note (23) "Liabilities and subsidies."

Where derivatives are concerned, positive or negative market values are generally included, provided they give rise to a net cash outflow. Undiscounted cash flows are determined on the basis of the following conditions:

- Swap transactions are only included in the liquidity analysis if they give rise to a net cash outflow.
- Forward exchange transactions are taken into account if they give rise to a cash outflow.
- In the case of forward transactions, all calls are taken into account. The future cash flows are equivalent to the quantities measured at the contractually agreed price.
- Futures transactions are not included in the liquidity analysis because they are settled by daily variation margins.

#### Undiscounted cash flows as of 31/12/2023

in € million	Total	2024	2025	2025	2026	Cash flows > 2027
Non-derivative financial liabilities						
Debt instruments issued	14,964.7	854.4	1,504.1	1,989.4	817.0	9,799.8
Liabilities to banks	3,997.3	1,004.4	418.7	485.2	421.8	1,667.2
Other financial liabilities	1,551.6	59.8	503.3	57.9	385.5	545.1
Trade payables	2,020.8	2,020.8				
Lease liabilities	1,183.7	193.4	143.9	121.9	103.1	621.4
Other financial obligations	1,247.7	1,100.2	2.5	28.0	8.4	108.5
Derivatives	27,421.2	17,244.2	6,459.6	2,059.7	1,091.0	566.8
Financial guarantees <sup>1</sup>	149.4	149.4				
<b>Total</b>	<b>52,536.4</b>	<b>22,626.6</b>	<b>9,032.1</b>	<b>4,742.0</b>	<b>2,826.8</b>	<b>13,308.8</b>

<sup>1</sup> This includes guarantees to joint ventures of €32.7 million and to associates of €1.0 million.

#### Undiscounted cash flows as of 31/12/2022

in € million	Total	2023	2024	2025	2025	Cash flows > 2026
Non-derivative financial liabilities						
Debt instruments issued	11,078.0	339.7	735.9	1,393.2	1,692.2	6,917.0
Liabilities to banks	2,118.8	158.4	407.5	302.0	410.0	840.9
Other financial liabilities	1,397.1	53.0	32.1	496.7	28.0	787.2
Trade payables	3,550.1	3,550.1				
Lease liabilities	1,045.5	170.8	149.2	107.0	89.0	529.5
Other financial obligations	3,502.3	3,362.1	1.1	0.8	34.4	103.9
Derivatives	31,855.3	21,039.6	6,658.0	2,365.4	750.6	1,041.7
Financial guarantees <sup>1</sup>	248.7	248.7				
<b>Total</b>	<b>54,795.8</b>	<b>28,922.4</b>	<b>7,983.8</b>	<b>4,665.1</b>	<b>3,004.2</b>	<b>10,220.2</b>

<sup>1</sup> This includes guarantees to joint ventures of €125.9 million and to associates of €5.0 million.

The liquidity risk for derivatives only refers to those contracts that give rise to a cash outflow. To better illustrate the liquidity risk from derivatives, the netting agreements concluded as part of our risk management activities are also taken into account when determining the liquidity risk. The cash outflows from derivatives are offset by cash inflows from corresponding sales transactions.

#### Market price risks

Market price risks can arise from foreign exchange and interest rate risks as well as from commodity and other price risks for shares, share-based investment funds, interest-bearing securities and investments in private equity companies. The price risks are reduced through the implementation of a comprehensive hedging concept and the associated closing of risk positions.

The main foreign currency risks of EnBW result from procurement and hedging of prices for its fuel requirements, gas and oil trading business and liabilities denominated in foreign currency. Other currency risks arise from shares, share-based investment funds, fixed-income securities and investments in private equity companies. The currency risk is hedged with the help of appropriate standardized financial instruments – in the reporting period, forward exchange contracts in particular – on the basis of continuously monitored exchange rate forecasts. Foreign exchange risks are hedged centrally. EnBW principally has exposure to currency risks from US dollars and Swiss francs. The deviation used to derive information on the currency sensitivity is determined on the basis of an annual analysis of the average deviation in the exchange rates.

The net assets tied up at foreign Group entities outside the eurozone, and their related translation risks, are hedged against exchange rate fluctuations only in exceptional cases.

The effects of changes in exchange rates on the net profit/loss for the year and on equity are analyzed below. The analysis was made assuming that all other parameters, such as interest rates, remain unchanged. The analysis includes financial instruments of €3,405.0 million (previous year: €5,058.3 million) whose exchange rate exposure might affect equity or the net profit/loss for the year. The information presented in the table shows only the effects on the net profit/loss for the year and on equity in the case of an increase in the exchange rates, a reduction of the same amount would have the opposite effect.

These mainly comprise investments in securities (bonds, shares), private equity investments, hedging instruments from cash flow hedges, stand-alone derivatives, and receivables and liabilities denominated in foreign currency.

#### Currency risk

in € million

			31/12/2023	31/12/2022
Euros against all currencies	Appreciation (previous year: appreciation)	Profit for the year	-83.6	-240.4
	Appreciation (previous year: appreciation)	Equity	-22.2	-103.7
of which euro/US dollar	+5% (previous year: +10%)	Profit for the year	(-89.5)	(-248.3)
	-5% (previous year: -10%)	Equity	(-22.2)	(-103.7)
of which euro/Swiss franc	-5% (previous year: -6%)	Profit for the year	(-7.6)	(-6.1)

EnBW uses a multitude of interest-sensitive financial instruments in order to meet the requirements of operational and strategic liquidity management. Interest rate risks only stem from floating-rate instruments.

Interest-induced changes in the market value of interest-bearing securities in the “measured at fair value through profit or loss” and “measured at fair value in equity” measurement categories are presented under other price risks for shares, share-based investment funds, interest-bearing securities and investments in private equity companies.

On the assets side, there is interest exposure from bank balances and on the liabilities side from floating-rate liabilities to banks. In addition, there are interest rate risks from derivatives in the form of swap transactions. EnBW mainly has interest rate risks in the eurozone. The analysis includes financial assets of €5,309.3 million (previous year: €5,215.6 million) and financial liabilities of €2,266.8 million (previous year: €2,259.6 million), whose interest rate exposure might affect equity or the net profit/loss for the year.

The effects of changes in interest rates on the net profit/loss for the year and on equity on the reporting date are analyzed below. The situation on the reporting date for the period is decisive for the quantitative information; the effects for one year on the current reporting period are presented. The analysis was made assuming that all other parameters, such as exchange rates, remain

unchanged. The analysis includes only financial instruments whose interest rate exposure might affect equity or the net profit/loss for the year. For analysis purposes, the average change in yield over the last ten years was used.

#### Interest rate risk

in € million

		31/12/2023	31/12/2022
Increase in interest rate +40 basis points (previous year: +50 basis points)	Profit for the year	12.2	14.7
of which cash at banks with a floating interest rate	Profit for the year	(19.5)	(24.4)
of which floating-rate securities	Profit for the year	(1.8)	(1.6)
of which interest rate derivatives	Profit for the year	(-1.2)	(-1.5)
of which primary financial debt with a floating interest rate	Profit for the year	(-7.9)	(-9.8)
Decrease in interest rate -40 basis points (previous year: -50 basis points)	Profit for the year	-12.2	-14.7
of which cash at banks with a floating interest rate	Profit for the year	(-19.5)	(-24.4)
of which floating-rate securities	Profit for the year	(-1.8)	(-1.6)
of which interest rate derivatives	Profit for the year	(1.2)	(1.5)
of which primary financial debt with a floating interest rate	Profit for the year	(7.9)	(9.8)

In the context of our energy trading activities, EnBW enters into energy trading contracts for the purpose of price risk management, optimization of power stations, load equalization and optimization of margins. Trading for own account is only permitted within narrow, clearly defined boundaries.

The price risks mostly arise from the procurement and sale of electricity, the procurement of coal, gas and oil as fuels, and the procurement of emission allowances. Furthermore, EnBW is exposed to price risks from speculative items entered into in own-account trading. The price risks are hedged using appropriate financial instruments on the basis of continuously monitored forecasts of market prices. The hedging instruments used in the reporting period were forwards, futures, swaps and options.

The sensitivity of the measurement of derivatives to the price of electricity, coal, oil, gas and emission allowances is analyzed below. The analysis was made assuming that all other parameters remain unchanged. It includes only derivatives whose changes in market value affect equity or the net profit/loss for the year. These are derivatives that are accounted for as stand-alone derivatives as well as derivatives used as hedging instruments in cash flow hedges. For all commodities, typical volatilities were determined and rounded on the basis of the front year. These volatilities give the percentage rate by which the market price is shifted on the evaluation date. For all commodities, the resulting changes in market prices are multiplied by the sensitivities and aggregated for each commodity.

The analysis does not include any derivatives that are intended for the purpose of receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements (own use), and hence are not required to be accounted for in accordance with IFRS 9. Our generation and distribution positions are not included in the analysis either.

The sensitivities presented below therefore do not represent the actual economic risks to which the EnBW Group is exposed but rather serve solely to satisfy the disclosure requirements of IFRS 7.

The information presented in the table shows only the negative effects on the net profit/loss for the year and on equity for the given change in prices. An opposite change in prices would have positive effects of the same amount on the net profit/loss for the year and on equity.

**Price risks**

in € million			31/12/2023	31/12/2022
Electricity	-50% (previous year: +80%)	Profit for the year	-176.5	-924.4
	+50% (previous year: +80%)	Equity	-725.6	-1,750.9
Coal	+50% (previous year: +90%)	Profit for the year	-98.6	-809.3
	-50% (previous year: -90%)	Equity	-102.9	-855.5
Oil	-20% (previous year: -30%)	Profit for the year	-27.4	-24.6
	-20% (previous year: -30%)	Equity	-2.6	-4.5
Gas	-55% (previous year: +90%)	Profit for the year	-418.4	-34.8
	-55% (previous year: -90%)	Equity	-223.3	-530.7
Emission allowances	+30% (previous year: -50%)	Profit for the year	-372.3	-314.0
	-30% (previous year: -50%)	Equity	-963.1	-1,373.3

EnBW has investments in shares, share-based investment funds, fixed-income securities and investments in private equity companies that pose price risks for the company, which include, among other things, currency risk. When selecting securities, the company always attaches particular importance to high marketability and a good credit rating. As of the reporting date of 31 December 2023, shares, share-based investment funds, fixed-income securities and investments in private equity companies totaling €5,313.5 million (previous year: €5,415.7 million) were exposed to market risk.

The effects of price risks from shares, share-based investment funds, interest-bearing securities and investments in private equity companies (real estate, infrastructure and private equity funds) on the net profit/loss for the year and on equity are analyzed below. The analysis was made assuming that all other parameters, such as interest, remain unchanged. The analysis includes financial instruments whose price risks might affect equity or the net profit/loss for the year. The analysis of the market price risk of shares, share-based investment funds and investments in private equity funds was carried out based on historical volatility. A standard deviation was assumed as a realistic scenario. The market risk of fixed-income securities was analyzed by modified duration. Taking into account the changes in interest rates assumed (see interest rate risk) in relation to the fair value of fixed-income securities, results are determined in absolute figures. The premises on which the sensitivity analysis is based are 10% for shares, share-based investment funds and investments in private equity funds (previous year: 10%) and 1% for interest-bearing securities and investments in real estate and infrastructure funds (previous year: 1%).

In the risk scenario in question, the net profit/loss for the year would improve by €151.3 million (previous year: €153.1 million). The hypothetical change in profit/loss for the year is primarily due to shares, share-based investment funds and investments in private equity companies. In the risk scenario in question, the equity would increase by €16.6 million (previous year: €15.2 million). Of the hypothetical change in equity, €16.6 million (previous year: €15.2 million) is accounted for by fixed-income securities. The information presented shows only the effects on the net profit/loss for the year and on equity in the case of an increase in the values of shares, share-based investment funds, interest-bearing securities and investments in private equity companies, a reduction of the same amount would have the opposite effect.

**(27) Contingent liabilities and other financial commitments**

The disclosures on contingent liabilities and other financial commitments relate to nominal values.

**Contingent liabilities**

After the amended German Atomic Power Act (AtG) and the amended Directive on the Coverage Provisions in the Nuclear Power Industry (AtDeckV) came into force on 27 April 2002, German nuclear power plant operators are required to provide evidence of coverage provision up to a maximum amount of €2.5 billion per case of damage for risks related to nuclear power. Of this provision, €255.6 million is covered by uniform third-party liability insurance. Nuklear Haftpflicht GbR now only provides solidarity coverage in respect of claims relating to officially prescribed evacuation measures ranging from €0.5 million to €15.0 million. In proportion to their shares in the nuclear power plants, Group companies have undertaken to provide the operating companies responsible for the nuclear

power plants with sufficient liquidity to enable them to meet their obligations arising from their membership of Nuklear Haftpflicht GbR at any time.

In order to fulfill the subsequent coverage provision amounting to €2,244.4 million per case of damage, EnBW and the other parent companies of the German nuclear power station operators reached a solidarity agreement on 11 July, 27 July, 21 August and 28 August 2001, which was extended with agreements on 17 November, 29 November, 2 December and 6 December 2021, to provide a liable nuclear power station operator with sufficient funding – after exhausting its own possibilities and those of the Group parent companies – to meet its payment obligations in the event of a claim for damages. According to the agreement, EnBW AG has to bear a 17.796% share of the liability coverage, plus 5% costs to settle any claims for damages, for the period from 1 January 2022 until 31 December 2029 in accordance with Annex 2 of the solidarity agreement. Sufficient provisions have been made to ensure this liquidity and are taken into account in the liquidity plan.

Following the full ratification of the Paris Convention on Nuclear Liability, the German Atomic Power Act of 28 August 2008 and the Directive on the Coverage Provisions in the Nuclear Power Industry of 21 January 2022 were amended to update the liability legislation in Germany. In particular, the minimum coverage provisions for decommissioned power plants without fuel rods was increased to €70 million and two or more nuclear power plants with the same owner on one site can now be treated as a single power plant according to liability law. The minimum coverage provision for plants that handle radioactive residual material and radioactive waste was also increased to €70 million.

As a result of the reform of the liability legislation, the coverage provision for the “Neckarwestheim, Block I and Block II” nuclear power plant was set at €2.5 billion in the notice of assessment of 5 September 2022, the coverage provision for the “Philippsburg, Block 1 and Block 2” nuclear power plant was set at €80 million in the notice of assessment of 27 June 2023 and the coverage provision for the “Obrigheim” nuclear power plant (KWO) was set at €70 million in the notice of assessment of 18 January 2023. KWO has not been included in the above-mentioned solidarity agreement since 31 December 2018. In addition, the coverage provision for the residual material treatment plant at the Neckarwestheim site (RBZ-N) was set at €70 million in the notice of assessment of 27 July 2022 and the coverage provision for the residual material treatment plant at the Philippsburg site (RBZ-P) was set at €70 million in the notice of assessment of 28 July 2022.

In addition, there are other contingent liabilities at the EnBW Group amounting to €609.1 million (previous year: €421.5 million). This amount includes sureties of €338.1 million (previous year: €336.9 million). The sureties include commitments to joint ventures of €107.0 million (previous year: €50.8 million). The amount also includes €267.4 million (previous year: €57.4 million) for pending litigations where no provisions were made because the counterparty is unlikely to win the case. Furthermore, various court cases, investigations by authorities or proceedings and other claims are pending against EnBW. The chances of these being successful are, however, remote and they are therefore not reported under contingent liabilities.

#### **Other financial commitments**

The EnBW Group has long-term purchase commitments for natural gas including LNG and regasification, coal and other fossil fuels, as well as for electricity. The total volume of these commitments amounts to €26.3 billion (previous year: €33.3 billion), of which €7.5 billion (previous year: €13.4 billion) is due within one year. Long-term commitments include purchase obligations in the electricity sector to associates of €149.6 million (previous year: €232.0 million).



Miscellaneous other financial commitments break down as follows:

in € million <sup>1</sup>	31/12/2023	Of which due in			31/12/2022
		< 1 year	1 – 5 years	> 5 years	
Financial commitments from rent and lease agreements	385.0	52.5	202.9	129.6	261.9
Purchase commitments	1,477.5	1,049.1	403.0	25.4	2,008.7
Investment obligations for intangible assets	13.6	12.5	1.1	0.0	16.7
Investment obligations for property, plant and equipment	5,889.4	2,190.0	3,526.1	173.3	5,133.5
Financial commitment related to the acquisition of associates, affiliated entities, joint ventures and investments	1,394.4	538.9	839.4	16.1	1,552.9
Other financial commitments	601.1	239.6	216.8	144.7	341.2
<b>Total</b>	<b>9,761.0</b>	<b>4,082.6</b>	<b>5,189.3</b>	<b>489.1</b>	<b>9,314.9</b>

<sup>1</sup> This includes commitments to joint ventures of €1,010.2 million (previous year: €1,039.0 million) and to associates of €156.7 million (previous year: €2.7 million).

Commitments to joint ventures primarily result from the regulations of the shareholder agreement that obligate shareholders to provide the necessary financial funds to finance the operating activities of the company according to their shareholding in the joint venture. These commitments are calculated based on underlying assumptions. Due to the uncertainty inherent in these estimates, the possibility of a significant adjustment to the amount of the commitments in the next financial year cannot be ruled out.

## (28) Significant restrictions

As a result of regulatory and legal requirements, the ability of the Group to transfer assets within the Group is limited to some extent.

In accordance with the German Energy Industry Act (EnWG), independent transmission operators must possess the financial, technical, material and human resources required to operate the transmission grid. For this purpose, the independent transmission operators must be the owner, either directly or through shareholdings, of all of the assets required to operate the transmission grid. As of 31 December 2023, the EnBW Group held a total of €6,315.5 million (previous year: €5,080.0 million) in assets restricted due to these legal regulations.

## (29) Audit fees

The fees of the Group auditor EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, which are recorded as an expense, break down as follows:

in € million	2023	2022
Statutory audit <sup>1</sup>	7.4	4.5
Other attestation services	1.4	0.7
Tax advisory services	0.0	0.0
Other services	0.2	0.3
<b>Total</b>	<b>9.0</b>	<b>5.5</b>

<sup>1</sup> Of which €1.5 million for audit services in 2022 that were billed in 2023.

EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft audited the annual and consolidated financial statements of EnBW AG and also audited the financial statements of the subsidiaries of EnBW AG. In addition, non-statutory attestation services were provided relating to financial information non-statutory audits of systems and functions of corporate management and monitoring. Other attestation services mainly comprised audits specific to the sector of the economy that are prescribed by law, attestation services relating to the risk management system, capital market transactions (comfort letters) and other legally prescribed, contractually agreed or voluntarily commissioned attestation services.

In addition, EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft advised EnBW AG on matters relating to the grids and also on other economic matters.

### (30) Exemptions pursuant to section 264 (3) or section 264b HGB

The following German subsidiaries made use of some or all of the exemption provisions of section 264 (3) HGB or section 264b HGB in the 2023 financial year:

#### Exemptions pursuant to section 264 (3) HGB

- BroadNet Deutschland GmbH, Cologne
- EnBW Betriebs- und Servicegesellschaft mbH, Karlsruhe
- EnBW Central and Eastern Europe Holding GmbH, Stuttgart
- EnBW France GmbH, Stuttgart
- EnBW Netze BW Beteiligungsgesellschaft mbH, Stuttgart
- EnBW New Ventures GmbH, Karlsruhe
- EnBW Offshore 1 GmbH, Stuttgart
- EnBW Offshore 2 GmbH, Stuttgart
- EnBW Offshore 3 GmbH, Stuttgart
- EnBW Offshore 4 GmbH, Stuttgart
- EnBW Perspektiven GmbH, Karlsruhe
- EnBW REG Beteiligungsgesellschaft mbH, Stuttgart
- EnBW Renewables International GmbH, Stuttgart
- EnBW Rückbauservice GmbH, Stuttgart
- EnBW Smart Meter GmbH, Karlsruhe (formerly symbiotic services GmbH, Karlsruhe)
- EnBW Telekommunikation GmbH, Karlsruhe
- EnBW Urbane Infrastruktur GmbH, Karlsruhe
- EnPulse Ventures GmbH, Stuttgart
- Gesellschaft für nukleares Reststoffrecycling mbH, Neckarwestheim
- MSE Mobile Schlammentwässerungs GmbH, Karlsbad-Ittersbach
- Neckarwerke Stuttgart GmbH, Stuttgart
- Netze BW Wasser GmbH, Stuttgart
- NWS Finanzierung GmbH, Karlsruhe
- NWS REG Beteiligungsgesellschaft mbH, Stuttgart
- RBS wave GmbH, Stuttgart
- TPLUS GmbH, Karlsruhe
- u-plus Umweltservice GmbH, Karlsruhe
- Ventelo GmbH, Cologne

#### Exemptions pursuant to section 264b HGB

- Der neue Stöckach GmbH & Co. KG, Obrigheim
- EnBW City GmbH & Co. KG, Obrigheim
- EnBW He Dreht GmbH & Co. KG, Biberach an der Riß, (formerly EnBW He Dreht GmbH, Varel)
- EnBW mobility+ AG & Co. KG, Karlsruhe
- EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG, Karlsruhe
- Facilma Grundbesitzmanagement und -service GmbH & Co. Besitz KG, Obrigheim
- NWS Grundstücksmanagement GmbH & Co. KG, Obrigheim
- Plusnet Infrastruktur GmbH & Co. KG, Cologne

### (31) Declaration of compliance with the German Corporate Governance Code

The Board of Management and Supervisory Board of EnBW Energie Baden-Württemberg AG issued the declaration of compliance with the German Corporate Governance Code required by section 161 AktG on 7 December 2023 and made it permanently available to shareholders on the Internet at [www.enbw.com/declaration-of-compliance](http://www.enbw.com/declaration-of-compliance).

### (32) Share deals and shareholdings of key management personnel

The company did not receive any notices in the 2023 financial year about transactions involving EnBW shares, EnBW bonds, emissions allowances or any associated financial instruments concerning persons in managerial positions or those persons closely related to them in accordance with article 19 (1) EU Market Abuse Regulation 596/2014 (MAR).

### (33) Notes to the cash flow statement

The cash flow statement is split up into cash flows from operating, investing and financing activities.

#### Adjustment of the figures for the previous year

In the 2023 financial year, the following adjustments were made to the line items in the cash flow statement for purposes of clarification:

Description of line item before adjustment	Description of line item after adjustment
<b>1. Operating activities</b>	
Change in provisions	Change in provisions excluding obligations from emission allowances
Change in assets and liabilities from operating activities	Change in assets and liabilities from operating activities
Inventories	Net balance of inventories and obligations from emission allowances
Net balance of trade receivables and payables	Net balance of trade receivables and payables, services not yet invoiced and payments on account that have been made and received
<b>2. Investing activities</b>	
Cash paid for investments in other financial assets	Cash payments for securities, financial investments and other financial assets
Cash received from the sale of other financial assets	Cash received for securities, financial investments and other financial assets
Net foreign exchange difference	Net foreign exchange difference and other changes in cash and cash equivalents
Change in cash and cash equivalents due to risk provisions	

The netting of the changes in inventories with the changes in obligations from emission allowances within the item “Change in assets and liabilities from operating activities” is due to the fact that the emission allowances have already been used at the time of the emissions, even if these allowances have not yet been returned to the government or have not yet been acquired.

In addition, changes to the presentation of the cash flow statement in these financial statements led to a restatement of the figures for the 2022 financial year as follows:

For further explanations on the cash flow statement, please refer to the details given in the management report on the financial position of the EnBW Group.

in € million	2022 before adjustment	Change	2022 after adjustment
<b>1. Operating activities</b>			
Net balance of trade receivables and payables, services not yet invoiced and payments on account that have been made and received	(2,470.9)	(121.3)	(2,592.2)
Net balance of other assets and liabilities	(-1,071.0)	(-121.3)	(-1,192.3)
<b>Cash flow from operating activities</b>	<b>1,804.8</b>	<b>0.0</b>	<b>1,804.8</b>
<b>2. Investing activities</b>			
Cash payments for securities, financial investments and other financial assets	-2,450.5	-2,367.1	-4,817.6
Cash received for securities, financial investments and other financial assets	1,788.3	2,559.5	4,347.8
Change in securities and financial investments	192.4	-192.4	0.0
<b>Cash flow from investing activities</b>	<b>-2,734.9</b>	<b>0.0</b>	<b>-2,734.9</b>
<b>3. Financing activities</b>			
Increase in financial liabilities	12,898.1	5,002.3	17,900.4
Repayment of financial liabilities	-11,219.8	-5,002.3	-16,222.1
<b>Cash flow from financing activities</b>	<b>734.6</b>	<b>0.0</b>	<b>734.6</b>

#### Payments on account made and received, and contract assets and liabilities

From the 2023 reporting year onwards, the change in payments on account made and received, and in contract assets and liabilities is no longer reported in the change in the net balance of other assets and liabilities. For a more appropriate presentation, this change is now presented in the change in the net balance of trade receivables and payables. This change in presentation did not have any impact on either the change in assets and liabilities from operating activities overall or the cash flow from operating activities.

#### Cash payments and receipts from securities and other financial investments

Cash payments and receipts from securities and other financial investments that were disclosed net in the line item "Change in securities and financial investments" up to the reporting date of 31 December 2022 will be disclosed gross from the 2023 financial year onwards. There is no impact on the cash flow from investment activities as a result.

#### Cash receipts and payments relating to time deposits

The line items "Increase in financial liabilities" and "Repayment of financial liabilities" contained a net disclosure of the cash receipts and payments relating to time deposits up to the reporting date of 31 December 2022. The netting option according to IAS 7 is no longer being utilized for this as of the 2023 financial year in order to improve the presentation. This change had no impact on the cash flow from financing activities.

#### Additional disclosures

The balance of the cash flow statement represents the change in cash and cash equivalents during the 2023 financial year amounting to €-478.0 million (previous year: €-195.5 million). Cash and cash equivalents primarily relate to bank deposits, largely in the form of time and day-to-day deposits whose term from the acquisition date is less than three months and that are only subject to an immaterial risk of fluctuation in value. In the 2023 financial year, the cash flow from operating activities amounted to €899.7 million (previous year: €1,804.8 million).

The income tax paid in the reporting year totaled €906.7 million (previous year: €227.9 million).

Other non-cash-relevant expenses and income break down as follows:

in € million	2023	2022
Income from the reversal of construction cost subsidies	-76.0	-70.3
Impairment losses	276.6	122.4
Reversal of impairment losses on property, plant and equipment and intangible assets	-120.9	-1,499.2
Expense from the reversal of capitalized costs for obtaining contracts	17.0	15.3
Write-ups/write-downs on inventories and valuations of associated derivatives	600.9	-35.6
Result from the non-operating valuation effects from derivatives	-108.2	226.6
Other	37.3	-7.5
<b>Total</b>	<b>626.7</b>	<b>-1,248.3</b>

In the 2023 financial year, dividends of €671.3 million (previous year: €510.8 million) were declared, of which €373.4 million (previous year: €212.9 million) were to the benefit of third-party shareholders of Group companies. In the reporting year, €417.1 million (previous year: €399.4 million) of the declared dividends were distributed. €254.2 million (previous year: €111.4 million) of the dividends were offset against other dividends and €97.3 million (previous year: €134.0 million) of the dividends were offset against capital reductions in non-controlling interests with short-term receivables from foreign companies. The latter was due to advance payments made in the previous year as a result of contractual arrangements.

Capital expenditure on intangible assets and property, plant and equipment includes €198.8 million (previous year: €157.1 million) for intangible assets and €4,205.0 million (previous year: €2,613.6 million) for property, plant and equipment.

The acquisition of subsidiaries, entities accounted for using the equity method and interests in joint operations item includes €33.2 million (previous year: €0.0 million) for fully consolidated companies and €182.5 million (previous year: €110.4 million) for entities accounted for using the equity method. In the reporting period, cash payments mainly related to capital increases at entities accounted for using the equity method. They also included the total acquisition costs for insignificant associates.

In the comparative period, cash payments mainly related to the foundation of Morven Offshore Wind Holdings Ltd. and its subsidiary and the acquisition of shares in Smatrics GmbH & Co. KG. The purchase prices paid in cash for the acquisitions of entities was €16.4 million. The companies will be accounted for using the equity method in the consolidated financial statements. In addition, capital increases at entities accounted for using the equity method were also included in the previous year.

The considerations for the acquisition of fully consolidated companies and the acquired assets and liabilities break down as follows:

in € million	2023	2022
Fee	65.6	0.0
of which settled with cash and cash equivalents	(61.7)	(0.0)
of which not yet settled	(3.9)	(0.0)
Acquired cash and cash equivalents	28.5	0.0
Acquired assets and liabilities	26.6	0.0
Non-current assets	(97.2)	(0.0)
Current assets	(43.5)	(0.0)
Non-current liabilities	(82.1)	(0.0)
Current liabilities	(32.0)	(0.0)

In the reporting year, there were no cash receipts from the sale of fully consolidated companies, entities accounted for using the equity method or interests in joint operations included in the cash flow from investing activities (previous year: €24.3 million). In the comparative period, the cash receipts resulted mainly from the sale of Stadtwerke Hilden GmbH. The company was accounted for using the equity method in the consolidated financial statements. No cash and cash equivalents were relinquished as a result of the sale of shares. Capital reductions at entities accounted for using the equity method were also included in the previous year.

Net investment in the section “The EnBW Group” of the management report can be reconciled as follows:

in € million <sup>1</sup>	2023	2022
Cash flow from investing activities	-5,797.0	-2,734.9
Interest and dividends received	-529.8	-427.0
Net investments held as financial assets	-24.8	167.0
Net investment in securities, financial investments and other assets	1,664.0	76.1
Acquired/relinquished cash	-28.5	0.0
Cash received/paid from alterations of capital in non-controlling interests	606.7	0.2
Alterations of capital in non-controlling interests without cash outflows in the current period	-97.3	-134.0
Cash received/paid for changes in ownership interest without loss of control	1,487.4	301.7
Cash received/paid from participation models	-20.5	-16.8
<b>Cash paid for net investments</b>	<b>-2,739.8</b>	<b>-2,767.7</b>

<sup>1</sup> The figures for the previous year have been restated due to the aggregation of line items.

The dedicated financial assets contribution of €104.9 million (previous year: €-92.2 million) is reported separately for the representation of the retained cash flow in the liquidity analysis in the section “The EnBW Group” of the management report.

The total amount of interest paid in the reporting period breaks down as follows:

in € million	2023	2022
Interest paid for investing activities (capitalized borrowing costs)	-83.2	-26.1
Interest paid for financing activities	-421.2	-318.8
<b>Total amount of interest paid in the reporting period</b>	<b>-504.4</b>	<b>-344.9</b>

Liabilities included in the cash flow from financing activities item in the cash flow statement can be reconciled as follows:

in € million	As of 01/01/2023	Cash-relevant changes	Non-cash-relevant changes							As of 31/12/2023
			of which interest payments	Changes in the group of con- solidated companies	Currency effects	Market valuation	Addition to leases	Accrued interest	Other changes	
Subordinated bonds	2,488.7	0.0	0.0	0.0	0.0			0.0	2.5	2,491.2
Bonds	6,482.6	3,057.2	0.0	0.0	6.5	-2.7		0.0	0.4	9,544.0
Commercial papers	712.5	-712.5	0.0	0.0	0.0			0.0	0.0	0.0
Liabilities to banks	1,969.6	1,162.8	-32.5	3.5	-32.1			53.5	0.1	3,157.4
Other financial liabilities	1,238.0	51.3	0.0	-0.7	-0.1			0.7	-14.1	1,275.1
Financial liabilities	12,891.4	3,558.8	-32.5	2.8	-25.7	-2.7	0.0	54.2	-11.1	16,467.7
Other liabilities (interest on bonds)	88.2	-246.1	-246.1	0.0	0.0			293.4	0.0	135.5
Other liabilities (leases)	912.5	-199.0	-23.8	11.3	-1.5		247.5	0.0	15.5	986.3
Other liabilities (derivatives from financing activities)	13.1	-0.5	-0.5	0.0	-0.0	75.1		0.5	-13.3	74.8
Financial and other liabilities	13,905.2	3,113.2	-302.9	14.1	-27.2	72.4	247.5	348.1	-8.9	17,664.3
Other assets (derivatives from financing activities)	-62.2	17.3	17.3	0.0	0.4	15.4		-12.5	13.3	-28.2
Net liabilities from financing activities	13,843.0	3,130.5	-285.6	14.1	-26.8	87.9	247.5	335.6	4.4	17,636.1

in € million <sup>1</sup>	As of 01/01/2022	Cash-relevant changes	Non-cash-relevant changes							As of 31/12/2022
			of which interest payments	Changes in the group of con- solidated companies	Currency effects	Market valuation	Addition to leases	Accrued interest	Other changes	
Subordinated bonds	3,475.6	-1,001.0	[0.0]	0.0	11.3			0.0	2.8	2,488.7
Bonds	4,685.2	1,858.4	[0.0]	0.0	-26.2			0.0	-34.8	6,482.6
Commercial papers	240.0	472.5	[0.0]	0.0	0.0			0.0	0.0	712.5
Liabilities to banks	2,067.3	-125.8	[-6.2]	2.6	10.8			14.4	0.3	1,969.6
Other financial liabilities	782.0	466.4	[-1.6]	0.0	1.6			1.0	-13.0	1,238.0
<b>Financial liabilities</b>	<b>11,250.1</b>	<b>1,670.5</b>	<b>[-7.8]</b>	<b>2.6</b>	<b>-2.5</b>	<b>0.0</b>	<b>0.0</b>	<b>15.4</b>	<b>-44.7</b>	<b>12,891.4</b>
Other liabilities (interest on bonds)	104.8	-176.9	[-176.9]	0.0	0.1			160.2	0.0	88.2
Other liabilities (leases)	884.8	-199.5	[-16.2]	0.4	2.0		210.3	0.0	14.4	912.5
Other liabilities (derivatives from financing activities)	64.5	-0.1	[-0.1]	0.0	0.0	-52.1		0.8	0.0	13.1
<b>Financial and other liabilities</b>	<b>12,304.2</b>	<b>1,294.0</b>	<b>[-201.0]</b>	<b>3.0</b>	<b>-0.4</b>	<b>-52.1</b>	<b>210.3</b>	<b>176.4</b>	<b>-30.3</b>	<b>13,905.2</b>
Other assets (derivatives from financing activities)	-66.0	18.1	[18.1]	0.0	-0.3	0.6		-14.7	0.0	-62.2
<b>Net liabilities from financing activities</b>	<b>12,238.2</b>	<b>1,312.0</b>	<b>[-183.0]</b>	<b>3.0</b>	<b>-0.6</b>	<b>-51.5</b>		<b>161.7</b>	<b>-30.3</b>	<b>13,843.0</b>

<sup>1</sup> The figure for the previous year has been amended. The reason is the inclusion of derivatives from financing activities because these result in cash flows within the financing activities.

For further explanations, please refer to the details given in the management report on the liquidity analysis of the EnBW Group.

### (34) Additional disclosures on capital management

Capital management at EnBW covers both the management of the net debt of €11,703.1 million (previous year: €10,847.0 million) and the management of liabilities and financial assets. Financial assets include non-current securities and loans, as well as current financial assets and cash and cash equivalents. On the liabilities side, capital management covers financial liabilities, as well as provisions for pensions and those relating to nuclear power.

EnBW has been managing its financial profile since 2021 using the key performance indicator debt repayment potential, which describes the retained cash flow in relation to net debt. A target value of at least 15% should enable the company to exploit growth opportunities while maintaining the creditworthiness of the company at the same time. This target value is based on the rating requirements and is reviewed on a regular basis to guarantee a solid investment-grade rating. EnBW ensures the timely coverage of the pension and nuclear obligations using an asset liability management model. EnBW uses this cash flow-based model to determine the anticipated effects over the next 30 years, based on appraisals of the pension provisions, as well as appraisals of the nuclear provisions. This model forms the basis for the management of financial assets that are held to cover the pension and nuclear obligations. It allows simulations of various alternative return and provision scenarios. In order to give proper consideration to the growing importance of climate risks, the fund managers at EnBW use sustainability principles, including the UN Principles for Responsible Investment (UN PRI), when selecting each individual investment. Climate risks especially are generally taken into account in the respective investment processes. At the same time, compliance with the regulations in the Sustainable Finance Disclosure Regulation (SFDR) when making investments will significantly increase transparency in the future.

The impact that the utilization of the pension and nuclear obligations may have on the operating business is limited to €300.0 million (plus an inflation supplement) a year using an ongoing contribution from the financial assets. If the provisions are fully covered by the financial assets, no further funds will be taken from operating cash flow as part of the model.

EnBW uses a rolling planning horizon of twelve months for managing liquidity. As part of operational liquidity management, EnBW compares the cumulative liquidity needs with the available sources of liquidity for different time periods (one day, seven days and three months), calculates the utilization rate in each case and uses this information to take the relevant financing decisions.

EnBW has a well-balanced maturity profile for its financial liabilities. The financial policy focuses on ensuring the solvency of the company, limiting financial risks and optimizing capital costs. As of 31 December 2023, the creditworthiness of EnBW was rated by the rating agencies Moody's and Standard & Poor's with Baa1 / stable and A- / stable, respectively.

### (35) Segment reporting

2023 in € million	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Generation Infrastructure	Other/ Consolidation	Total
<b>Revenue</b>					
External revenue	17,249.2	6,327.9	20,832.4	21.2	44,430.7
Internal revenue	1,137.1	1,757.5	8,117.2	-11,011.8	0.0
Total revenue	18,386.3	8,085.4	28,949.6	-10,990.6	44,430.7
<b>Earnings indicators</b>					
Adjusted EBITDA	239.5	1,772.0	4,647.6	-293.9	6,365.2
EBITDA	-80.3	1,872.3	3,991.4	-45.1	5,738.3
Adjusted EBIT	52.1	1,097.8	3,887.7	-358.7	4,678.9
EBIT	-316.8	1,192.2	2,576.1	-110.2	3,341.3
Income from reversals of impairment losses	0.0	0.0	120.9	0.0	120.9
Scheduled amortization and depreciation	-187.4	-674.2	-759.9	-64.8	-1,686.3
Impairment losses	-49.0	-5.9	-655.4	-0.4	-710.7
Net profit/loss from entities accounted for using the equity method	20.9	-30.6	-104.8	0.0	-114.5
Significant non-cash-relevant items	-125.0	49.8	306.3	-18.3	212.8
<b>Assets and liabilities</b>					
Capital employed	1,510.6	14,696.1	11,761.0	954.7	28,922.4
of which carrying amount of entities accounted for using the equity method	(129.3)	(397.7)	(866.4)	(0.0)	(1,393.4)
Capital expenditure on intangible assets and property, plant and equipment	357.7	2,568.0	1,435.3	42.8	4,403.8



2022 in € million <sup>1</sup>	Smart Infrastructure for Customers	System Critical Infrastructure	Sustainable Generation Infrastructure	Other/ Consolidation	Total
<b>Revenue</b>					
External revenue	18,754.5	6,697.4	30,543.2	7.5	56,002.6
Internal revenue	1,436.4	2,326.7	6,688.6	-10,451.6	0.0
Total revenue	20,190.9	9,024.1	37,231.8	-10,444.1	56,002.6
<b>Earnings indicators</b>					
Adjusted EBITDA	498.4	1,057.8	2,616.2	-205.3	3,967.1
EBITDA	221.0	1,169.6	3,087.7	-5.1	4,473.2
Adjusted EBIT	329.2	411.5	1,868.3	-257.1	2,351.9
EBIT	34.5	346.0	1,822.4	-61.7	2,141.2
Income from reversals of impairment losses	0.0	3.6	1,495.6	0.0	1,499.2
Scheduled amortization and depreciation	-169.2	-646.4	-747.9	-51.7	-1,615.2
Impairment losses	-17.3	-177.3	-517.4	-4.8	-716.8
Net profit/loss from entities accounted for using the equity method	8.7	3.8	11.4	0.0	23.9
Significant non-cash-relevant items	-106.9	-61.8	-309.3	-21.6	-499.6
<b>Assets and liabilities</b>					
Capital employed	1,863.9	12,427.0	10,217.9	469.6	24,978.4
of which carrying amount of entities accounted for using the equity method	(125.1)	(430.0)	(578.8)	(0.0)	(1,134.0)
Capital expenditure on intangible assets and property, plant and equipment	303.0	1,858.5	625.0	28.4	2,814.9

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

Detailed descriptions of the segments are given in the section "The EnBW Group" of the management report.

One of the Polish subsidiaries was restructured at the beginning of 2023 in order to comply with the Polish energy industry regulations. The composition of our segments has changed as a result. Please refer to the section "Revenue" for further information. In addition, there was a change in the presentation of valuation effects arising from certain hedging transactions which we use to hedge against price fluctuations for underlying assets such as our power plants. In contrast to the underlying assets, these hedging transactions have to be recognized at their fair value in accordance with IFRS 9. This results in temporary earnings effects that are reversed over the course of time. As the one-sided recognition of the market value of these hedging transactions does not properly reflect the economic reality, we now recognize these effects in the non-operating result starting from the 2023 financial year. The figures for the comparative periods have been restated in each case.

Our three segments encompass the following activities: The Smart Infrastructure for Customers segment comprises the sale of electricity and gas, the provision and expansion of quick-charging infrastructure and digital solutions for electromobility, activities in the telecommunications sector and other household-related solutions such as photovoltaics and home storage systems. The System Critical Infrastructure segment encompasses the value-added stages of transmission and distribution of electricity and gas. Our activities in this segment are designed to guarantee the security of supply and system stability. In addition, the provision of grid-related services and the supply of water is reported in the System Critical Infrastructure segment. The Sustainable Generation Infrastructure segment comprises the areas of Renewable Energies and Thermal Generation and Trading. Renewable Energies includes project development, project planning and the construction and operation of power plants based on renewable energies. Thermal Generation and Trading encompasses conventional electricity generation and the trading of electricity, gas, CO<sub>2</sub> allowances and fuels. In order to guarantee the security of supply, we maintain the power plants that have been transferred to the grid reserve. Thermal Generation and Trading also includes the storage of gas, district heating, waste management and the provision of energy services.

Internal and total revenue reported under “Other/Consolidation” mainly refers to consolidation effects. In particular, activities that cannot be attributed to the separately presented activities of the segments are disclosed in the other performance indicators here.

Segment reporting is based on internal reporting.

The segment figures have been determined in accordance with the accounting policies used in the consolidated financial statements.

Internal revenue shows sales between Group companies. Sales between the segments were made at market prices.

The significant non-cash-relevant items principally comprise expenses from additions to provisions and impairment losses, and income from the reversal of construction cost subsidies and household connection costs as well as deferred liabilities.

Adjusted EBITDA is one of the key internal performance indicators. Adjusted EBITDA is an earnings ratio before the investment and financial results, income taxes and amortization, adjusted for non-operating effects, which accurately reflects the development of results of operations. In the management report, the performance of the segments is explained with the aid of adjusted EBITDA.

Adjusted EBITDA can be reconciled to earnings before taxes (EBT) as follows:

in € million <sup>1</sup>	2023	2022
Adjusted EBITDA	6,365.2	3,967.1
Non-operating EBITDA	-626.9	506.1
of which expenses/income relating to nuclear power	(-675.6)	(-591.6)
of which income from the reversal of other provisions	(57.2)	(14.8)
of which result from disposals	(-0.3)	(3.8)
of which reversals of/additions to the provisions for onerous contracts relating to electricity and gas procurement agreements	(-176.2)	(393.8)
of which income from reversals of impairment losses	(120.9)	(1,499.1)
of which restructuring	(-47.8)	(-28.7)
of which valuation effects	(481.5)	(-908.1)
of which other non-operating result	(-386.6)	(123.0)
<b>EBITDA</b>	<b>5,738.3</b>	<b>4,473.2</b>
Amortization and depreciation	-2,397.0	-2,332.0
<b>Earnings before interest and taxes (EBIT)</b>	<b>3,341.3</b>	<b>2,141.2</b>
Investment result	-89.2	276.8
Financial result	-411.3	-22.6
<b>Earnings before tax (EBT)</b>	<b>2,840.8</b>	<b>2,395.4</b>

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

The components of non-operating EBITDA can be found in the income statement in income to the amount of €2,146.3 million (previous year restated: €2,588.5 million), as well as in expenses to the amount of €2,773.2 million (previous year restated: €2,082.4 million).

Capital employed, which we record as segment assets, comprises all assets from the operating business. Non-interest-bearing liabilities – such as trade payables – are deducted.

Capital employed is calculated as follows:

in € million	31/12/2023	31/12/2022
Intangible assets	3,166.2	3,218.2
Property, plant and equipment	25,429.8	22,705.3
Investment properties	38.3	40.2
Investments <sup>1</sup>	1,943.2	1,705.8
Loans	252.3	350.8
Inventories	2,804.0	3,835.7
Trade receivables <sup>2</sup>	4,487.3	5,491.2
Other assets <sup>3</sup>	11,009.6	20,293.1
of which income tax refund claims	(135.3)	(192.9)
of which other tax refund claims	(435.6)	(297.7)
of which derivatives	(7,488.2)	(13,393.0)
of which payments on account	(100.3)	(159.2)
of which prepaid expenses	(347.8)	(484.2)
of which miscellaneous assets	(2,646.3)	(5,918.7)
of which assets held for sale	(0.0)	(7.8)
of which components attributable to net debt	(-143.9)	(-160.4)
Other provisions	-3,140.6	-3,790.2
Trade payables and other liabilities <sup>4</sup>	-16,439.4	-27,975.8
of which trade payables	(-5,014.5)	(-8,411.9)
of which other deferred income	(-405.1)	(-507.8)
of which derivatives	(-6,859.4)	(-11,128.9)
of which income tax liabilities	(-447.2)	(-501.7)
of which contract liabilities	(-1,177.0)	(-1,082.3)
of which other liabilities	(-2,559.8)	(-6,343.8)
of which components attributable to net debt	(23.6)	(0.6)
Subsidies	-18.7	-17.2
Deferred taxes <sup>5</sup>	-609.6	-878.7
<b>Capital employed</b>	<b>28,922.4</b>	<b>24,978.4</b>
<b>Average capital employed<sup>6</sup></b>	<b>27,310.0</b>	<b>22,690.5</b>

1 Including entities accounted for using the equity method, shares in affiliated entities and other investments allocable to operating activities.

2 Excluding affiliated entities, excluding receivables associated with nuclear provisions.

3 Excluding net profit from CTA, excluding valuation effects from interest-induced hedging transactions.

4 Excluding affiliated entities, excluding non-controlling interests in fully consolidated partnerships recognized as liabilities.

5 Deferred tax assets and liabilities netted.

6 Average calculation based on the relevant quarterly values for the reporting year and the year-end value for the previous year.

External revenue by region is determined by the location supplied. In the 2023 financial year, revenue of €5,890.4 million (previous year: €9,241.3 million) was generated in the Netherlands. The EnBW Group did not generate 10% or more of its external revenue with any one external customer as in the previous year.

#### External revenue by region

in € million	2023	2022
Germany	32,033.0	40,942.1
European currency zone excluding Germany	8,438.3	11,334.1
Rest of Europe	3,918.3	3,719.6
Rest of world	41.1	6.8
<b>Total</b>	<b>44,430.7</b>	<b>56,002.6</b>

#### External revenue by product

in € million	2023	2022
Electricity	19,682.3	23,050.1
Gas	21,895.4	30,104.4
Energy and environmental services/other	2,853.0	2,848.1
<b>Total</b>	<b>44,430.7</b>	<b>56,002.6</b>

**Intangible assets and property, plant and equipment by region**

in € million	31/12/2023	31/12/2022
Germany	25,720.9	23,215.4
European currency zone excluding Germany	853.4	685.6
Rest of Europe	2,021.6	2,022.5
<b>Total</b>	<b>28,596.0</b>	<b>25,923.5</b>

Other commitments are presented in note (27) "Contingent liabilities and other financial commitments."

**(36) Related parties (entities)**

Related parties include, above all, the Federal State of Baden-Württemberg and Zweckverband Oberschwäbische Elektrizitätswerke (OEW) as indirect major shareholders of EnBW AG. As of 31 December 2023, the Federal State of Baden-Württemberg and its wholly owned subsidiary NECKARPRI GmbH indirectly, and NECKARPRI-Beteiligungsgesellschaft mbH directly, held 46.75% of the shares in EnBW AG (unchanged). NECKARPRI-Beteiligungsgesellschaft mbH is a wholly owned subsidiary of NECKARPRI GmbH. OEW indirectly, and its wholly owned subsidiary OEW Energie-Beteiligungs GmbH (OEW GmbH) directly, held 46.75% of the shares in EnBW AG (also unchanged). This means that the related parties of EnBW AG include, in particular, the Federal State, NECKARPRI GmbH, OEW, OEW GmbH and entities controlled or jointly controlled by them, or over which they have a significant influence.

The transactions concluded with the Federal State and entities controlled or jointly controlled by it, or over which it has significant influence, essentially relate to supplying public entities such as universities, government authorities, zoos and clinics with electricity, gas and district heating. The revenue from these transactions was immaterial in the reporting period; most of the receivables had been settled as of 31 December 2023. All business transactions with the Federal State were based on customary market terms and conditions. There are no contingent liabilities or financial commitments to the Federal State.

Except for dividends paid, there are no business relations with OEW GmbH or NECKARPRI-Beteiligungsgesellschaft mbH.

Business relations with related parties, which, among others, result from supply and procurement agreements in the electricity and gas sectors, and took place at customary market terms and conditions, are as follows:

in € million	2023		2022	
	Joint ventures accounted for using the equity method	Associated companies accounted for using the equity method	Joint ventures accounted for using the equity method	Associated companies accounted for using the equity method
Income	181.5	271.7	196.6	614.0
Expenses	-134.8	-593.1	-140.4	-535.9
Assets	36.2	50.6	30.3	70.5
Liabilities	11.8	325.2	14.8	217.2

In business relations with joint ventures accounted for using the equity method, receivables and liabilities are almost exclusively due within one year.

The business relations with associated companies accounted for using the equity method, including with municipal entities (particularly municipal utilities), mainly exist in the course of ordinary business activity. The receivables and liabilities for the reporting period are predominantly due within one year. There are also provisions for long-term procurement agreements that are regularly adjusted to current market assessments. This is reflected in a decrease in income and an increase in liabilities in comparison to the previous year.

Further information on the CTAs can be found in note (21) "Provisions."

Related parties also include the CTAs that manage the plan assets for securing pension obligations.

### (37) Related parties (individuals)

The EnBW Group has not entered into any significant transactions with individuals that are related parties.

Total remuneration according to IAS 24 for members of the Board of Management and Supervisory Board was €21.4 million (previous year: €17.8 million). This includes variable remuneration paid in the reporting year and the previous year for the year 2022 (previous year: 2021) for the Short Term Incentive (STI) of €2.9 million (previous year: €0.5 million) and the Long Term Incentive (LTI) of €0.6 million (previous year: €2.4 million) as a result of a resolution by the Supervisory Board on 22 March 2023 (previous year: 22 March 2022).

For members of the Board of Management serving in the reporting year, there were short-term benefits of €7.4 million (previous year: €7.0 million), long-term benefits for the LTI of €7.3 million (previous year: €4.4 million) and service and interest costs for defined benefit obligations of €1.6 million (previous year: €1.9 million).

In addition, there were accrued obligations for short-term benefits related to the STI and LTI of €6.9 million (STI previous year: €3.2 million STI), for long-term benefits for the LTI of €6.9 million (previous year: €4.4 million) and for defined benefit obligations of €7.7 million (previous year: €10.1 million).

Total remuneration for the Board of Management according to section 314 (1) no. 6 a HGB was €18.7 million (previous year: €12.5 million). This includes variable remuneration of €2.5 million paid to members of the Board of Management who have already stepped down in previous years for periods in which they were still serving members (previous year: €0.3 million). It also includes variable remuneration paid in the reporting year and the previous year for the year 2022 (previous year: 2021) of €3.5 million (previous year: €2.9 million) for serving members of the Board of Management and €2.0 million (previous year: €1.1 million) for members of the Board of Management who have already stepped down for periods in which they were still serving members. Total remuneration does not include any pension expenses.

Former members of the Board of Management and their surviving dependents were granted total remuneration according to section 314 (1) no. 6b HGB of €9.7 million (previous year: €7.6 million). A post-contractual non-competition agreement for a period of two years following the termination of the employment contract has been agreed with two members of the Board of Management who stepped down from the Board of Management in previous years. In accordance with the legal regulations, non-competition compensation in the amount of half of the last annual remuneration for the respective member of the Board of Management was agreed for the duration of the non-competition agreement. The Supervisory Board has the right to withdraw from each of the non-competition agreements at any time with a notice period of six months. If the Supervisory Board does not make use of this right, the member of the Board of Management who stepped down from the Board of Management in the previous year will receive total non-competition compensation of €3.2 million during the terms of their two-year non-competition agreements. The member of the Board of Management who stepped down from the Board of Management in 2021 received non-competition compensation of €1.7 million in the two-year period. In the reporting year, the non-competition compensation for the member of the Board of Management who stepped down from the Board of Management in the previous year was €1.6 million and the compensation for the member who stepped down in 2021 was €0.4 million.

There are defined benefit obligations to former members of the Board of Management and their surviving dependents of €92.8 million (previous year: €87.7 million).

For the 2023 financial year, members of the Supervisory Board were granted total remuneration according to section 314 (1) no. 6 a HGB of €1.6 million (previous year: €1.6 million). In addition to fixed components, the short-term remuneration includes attendance fees and board remuneration from subsidiaries.

Please refer to the explanations in section "Provisions for pensions and similar obligations" in note (21) "Provisions" for further information.

## (38) Additional disclosures

## List of shareholdings pursuant to section 313 (2) HGB as of 31 December 2023

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
<b>Smart Infrastructure for Customers segment</b>					
<b>Fully consolidated companies</b>					
1	Alectron AG, Ruswil/Switzerland	6	100.00	2,294	523
2	BroadNet Deutschland GmbH, Cologne	15	100.00	–	–
3	ED Liegenschaften GmbH, Rheinfelden	6	100.00	534	28
4	EnBW Contracting GmbH, Stuttgart	3, 6	100.00	75,618	–
5	EnBW Energy Factory GmbH, Stuttgart	3, 6	100.00	250	–
6	EnBW Smart Meter GmbH, Karlsruhe (formerly symbiotic services GmbH, Karlsruhe)	15	100.00	–	–
7	EnBW Telekommunikation GmbH, Karlsruhe	15	100.00	–	–
8	EnBW Vertriebsbeteiligungen GmbH, Stuttgart	6	100.00	14,190	444
9	ESD Energie Service Deutschland GmbH, Offenburg	6	100.00	11,172	1,539
10	eYello CZ k.s., Prague/Czech Republic	5, 13	100.00	289	1
11	fonial GmbH, Cologne	6	100.00	-5,068	-221
12	G.EN. Gaz Energia Sp. z o.o., Warsaw/Poland	6	100.00	6,323	2,647
13	GasVersorgung Süddeutschland GmbH, Stuttgart	3, 6	100.00	65,000	–
14	Gasversorgung Unterland GmbH, Heilbronn	3	100.00	7,225	–
15	goldgas GmbH, Eschborn	3, 6	100.00	7,312	–
16	goldgas GmbH, Vienna/Austria	6	100.00	8,573	3,513
17	HANDEN Sp. z o.o., Warsaw/Poland	6	100.00	121,686	15,624
18	HEV Hohenloher Energie Versorgung GmbH, Ilshofen	3, 6	100.00	10,219	–
19	Messerschmid Energiesysteme GmbH, Bonndorf	5	100.00	2,056	90
20	NaturEnergie+ Deutschland GmbH, Mühlacker		100.00	3,020	78
21	NatürlichEnergie EMH GmbH, Platten	6	100.00	8,015	4,052
22	Plusnet GmbH, Cologne	3, 6	100.00	55,194	–
23	Plusnet Infrastruktur GmbH & Co. KG, Cologne	15	100.00	–	–
24	PREservisní, s.r.o., Prague/Czech Republic	5	100.00	1,981	190
25	PREzakaznicka a.s., Prague/Czech Republic	5	100.00	1,852	1,182
26	SENEC GmbH, Leipzig	6	100.00	-437,430	-544,731
27	SENEC Italia s.r.l., Rome/Italy	6	100.00	6,186	-9,447
28	Studer Söhne Elektro AG, Visp/Switzerland	6	100.00	4,837	2,502
29	Studer Söhne Holding AG, Visp/Switzerland	6	100.00	3,947	25
30	tritec-winsun AG, Steg-Hohtenn/Switzerland	6	100.00	5,075	2,554
31	Ventelo GmbH, Cologne	15	100.00	–	–
32	VNG Austria GmbH, Gleisdorf/Austria	6	100.00	12,485	7,508
33	VNG Energie Czech s.r.o., Prague/Czech Republic	6	100.00	2,331	672
34	VNG-Erdgascommerz GmbH, Leipzig	3, 6	100.00	162,101	–
35	VOLTCOM spol. s r.o., Prague/Czech Republic	5	100.00	872	455
36	Yello Solar GmbH, Karlsruhe	6	100.00	-14,616	-1,296
37	Yello Strom GmbH, Cologne	3, 6	100.00	1,100	–
38	ZEAG Immobilien GmbH & Co. KG, Heilbronn	6	100.00	2,153	1,583
39	EnBW mobility+ AG & Co. KG, Karlsruhe	15	99.90	–	–
40	Erdgas Südwest GmbH, Karlsruhe	6	79.00	-398,164	-118,313
41	NetCom BW GmbH, Ellwangen	6	74.90	39,189	-15,513
42	Energieversum GmbH & Co. KG, Gütersloh	6	51.41	-7,430	-7,637
43	SMATRICS EnBW GmbH, Vienna/Austria	6	51.00	37,539	-1,773
44	BSH GmbH & Co. KG, Bad Königshofen i. Grabfeld	6	50.10	-12,797	8,324
45	Solarmeisterei GmbH, Schwielowsee	6	50.10	3,194	2,827
46	Pražská energetika a.s., Prague/Czech Republic	5, 12	41.40	695,809	155,116
<b>Non-consolidated affiliated entities<sup>18</sup></b>					
47	010052 Telecom GmbH, Cologne	3, 5	100.00	25	–
48	010088 Telecom GmbH, Cologne	3, 5	100.00	25	–
49	010090 GmbH, Cologne	3, 5	100.00	156	–

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
50	01012 Telecom GmbH, Cologne	3, 5	100.00	27	-
51	01052 Communication GmbH, Cologne	3, 5	100.00	25	-
52	01098 Telecom GmbH, Cologne	3, 5	100.00	25	-
53	Broadnet Services GmbH, Cologne	3, 5	100.00	25	-
54	EnBW Contracting Service GmbH, Stuttgart	5	100.00	593	28
55	Energieversum Verwaltungs GmbH, Gütersloh	16	100.00	24	-1
56	F&Q Netzbetriebs GmbH & Co. KG, Cologne	5	100.00	1	0
57	GIBY GmbH, Leipzig	5	100.00	383	-469
58	mobility + Beteiligungs GmbH, Karlsruhe	5	100.00	36	5
59	NatürlichEnergie Projekte GmbH, Wittlich	5	100.00	23	1
60	NatürlichEnergie Swiss NES GmbH, Laufenburg/Switzerland	5	100.00	8	-1
61	Plusnet Verwaltungs GmbH, Cologne	5	100.00	31	1
62	Q-DSL home GmbH, Cologne	3, 5	100.00	1,293	-
63	Q-Süd Immobilien Verwaltungs GmbH, Heilbronn	5	100.00	34	5
64	SENEC Cloud s.r.l., Rome/Italy	5, 6	100.00	76	87
65	SENEC Fachpartner GmbH, Leipzig (formerly EnBW Omega 138. Verwaltungsgesellschaft mbH, Stuttgart)	5	100.00	25	0
66	SMATRICS EnBW Italia S.R.L., Bozen/Italy	11	100.00	-	-
67	T & Q Netzbetriebs GmbH & Co. KG, Cologne	5	100.00	120	26
68	VNG ViertelEnergie GmbH, Leipzig	3, 5	100.00	98	-
69	VNG-Erdgastankstellen GmbH, Leipzig	3, 5	100.00	25	-
70	ZEAG Immobilien Verwaltungsgesellschaft mbH, Heilbronn	5	100.00	33	2
71	effizienzcloud GmbH, Leipzig	5	74.99	31	-2
72	Elektrizitätswerk Weißenhorn AG, Weißenhorn	5	63.24	4,388	304
73	Glasfaser Gesellschaft Dinkelsbühl GmbH, Dinkelsbühl (formerly EnBW Omega 145. Verwaltungsgesellschaft mbH, Karlsruhe)	5	51.00	25	0
74	grünES GmbH, Esslingen am Neckar	5	51.00	100	56
75	Stromvertrieb Backnang Verwaltungs GmbH, Backnang	5	51.00	31	1
76	BSH Verwaltungs-GmbH, Bad Königshofen i. Grabfeld	5, 7	50.10	16	1
<b>Entities accounted for using the equity method</b>					
77	Fernwärme SBH AG, Grafenhausen	5	40.00	781	-60
78	SMATRICS GmbH & Co KG, Vienna/Austria	5	25.10	30,054	-4,192
79	MITGAS Mitteldeutsche Gasversorgung GmbH, Halle (Saale)	5	24.60	172,912	42,450
<b>Investments<sup>18</sup></b>					
80	bmp greengas GmbH, Munich	5, 6	100.00	5,697	71,406
81	Senec Australia PTY Ltd. i.L., Sorrento/Australia	5	100.00	-3,144	-1,124
82	AutenSys GmbH, Karlsruhe	5	65.00	-57	-49
83	backnangstrom GmbH & Co. KG, Backnang	5	51.00	111	31
84	CleverShuttle Düsseldorf GmbH, Düsseldorf	5, 6	50.00	-2,761	-135
85	Energiewerker GmbH, Östringen	5	50.00	171	-54
86	my-e-car GmbH, Lörrach	5	50.00	127	-70
87	Regionah Energie GmbH, Munderkingen	5	50.00	-199	172
88	Rezident Park 9 s.r.o., Prague/Czech Republic	5	50.00	-14	-18
89	Einhorn Energie GmbH & Co. KG, Giengen an der Brenz	5	49.90	661	1,079
90	Einhorn Energie Verwaltungsgesellschaft mbH, Giengen an der Brenz	5	49.90	37	1
91	iQ-Gesellschaft für integrierte Quartierslösungen mbH, Ravensburg	5	49.90	1,280	-298
92	Stadtwerke Freiberg a.N. GmbH, Freiberg am Neckar	5	49.90	6,762	295
93	BEN Fleet Services GmbH i.L., Karlsruhe	5	49.51	1,044	-3,323
94	Gasversorgung Pforzheim Land GmbH, Pforzheim	5	49.00	14,400	689
95	Sautter PE GmbH, Ellhofen	5	49.00	59	-104
96	caplog-x GmbH, Leipzig	5	37.34	2,793	857
97	Visp Infra AG, Visp/Switzerland	5	35.00	6,270	1
98	IDR Infrastrukturdienste Raron AG, Raron/Switzerland	5	33.00	568	262
99	Gemeinschaft für Energieeffizienz GmbH, Düsseldorf	5	32.83	-639	-48
100	espot GmbH, Stuttgart	5	32.60	554	14

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
101	Tempus s.r.l., Torri di Quartesolo/Italy	5, 6	30.43	678	34
102	Energie 360 GmbH & Co. KG, Korbach	5, 6	30.00	1,296	1,245
103	Schön Verwaltungsgesellschaft mbH, Korbach	5	30.00	32	1
104	Sungrade Photovoltaik GmbH, Günzburg	5	30.00	700	332
105	E-Mobility Provider Austria GmbH, Vienna/Austria	5	25.10	36	3
106	ehoch7 GmbH, Schönaich	5	25.10	959	512
107	Energieagentur Heilbronn GmbH, Heilbronn	5	25.00	48	-133
108	Stadt- und Überlandwerke GmbH Luckau-Lübbenau, Luckau	5	23.38	34,736	-431
109	EDSR Energiedienste Staldenried AG, Staldenried/Switzerland	5	20.00	233	13
110	Wolkenhaus GmbH, Visp/Switzerland	5	20.00	113	49
<b>System Critical Infrastructure segment</b>					
<b>Fully consolidated companies</b>					
111	ED Netze GmbH, Rheinfelden	3, 6	100.00	145,165	-
112	EnBW Kommunale Beteiligungen GmbH, Stuttgart	3, 6	100.00	995,495	-
113	EnBW Nachhaltige Quartiere GmbH, Karlsruhe (formerly EnBW Omega 143. Verwaltungs- gesellschaft mbH, Karlsruhe)	6	100.00	1,552	-3
114	EnBW Netze BW Beteiligungsgesellschaft mbH, Stuttgart	15	100.00	-	-
115	EnBW REG Beteiligungsgesellschaft mbH, Stuttgart	15	100.00	-	-
116	EnBW Urbane Infrastruktur GmbH, Karlsruhe	15	100.00	-	-
117	Energieversorgung Südbaar GmbH & Co. KG, Blumberg	5	100.00	6,103	72
118	EnPulse Ventures GmbH, Stuttgart	15	100.00	-	-
119	EVGA Grundstücks- und Gebäudemanagement GmbH & Co. KG, Obrigheim	6	100.00	91,621	13,209
120	FRONTIER TECHNOLOGIES, s.r.o., Prague/Czech Republic	5	100.00	1,368	315
121	G.EN. Operator Sp. z o.o., Tarnowo Podgórze/Poland	6	100.00	39,636	665
122	GDMcom GmbH, Leipzig	3, 6	100.00	34,879	-
123	GEOMAGIC GmbH, Leipzig	6	100.00	3,121	1,900
124	KORMAK Praha a.s., Prague/Czech Republic	5	100.00	1,087	962
125	Netze BW Wasser GmbH, Stuttgart	15	100.00	-	-
126	Netze ODR GmbH, Ellwangen Jagst	3	100.00	174,131	-
127	Netze-Gesellschaft Südwest mbH, Karlsruhe	3, 6	100.00	89,139	-
128	Netzgesellschaft Düsseldorf mbH, Düsseldorf	3, 5	100.00	1,000	-
129	NHF Netzgesellschaft Heilbronn-Franken mbH, Heilbronn	3, 6	100.00	4,000	-
130	NHL Netzgesellschaft Heilbronner Land GmbH & Co. KG, Heilbronn	3, 6	100.00	1,524	-
131	NWS Grundstücksmanagement GmbH & Co. KG, Obrigheim	15	100.00	-	-
132	NWS REG Beteiligungsgesellschaft mbH, Stuttgart	15	100.00	-	-
133	ONTRAS Gastransport GmbH, Leipzig	3, 6	100.00	760,000	-
134	PRE distribucni sluzby, a.s., Prague/Czech Republic	11	100.00	-	-
135	PREdistribuce a.s., Prague/Czech Republic	5	100.00	637,518	61,233
136	PREmerení a.s., Prague/Czech Republic	5	100.00	40,007	8,551
137	PREnetcom, a.s., Prague/Czech Republic	5	100.00	2,381	783
138	Q-Süd Gewerbe GmbH & Co. KG, Heilbronn	6	100.00	19,665	210
139	Q-Süd Wohnen GmbH & Co. KG, Heilbronn	6	100.00	16,571	99
140	RBS wave GmbH, Stuttgart	15	100.00	-	-
141	SMIGHT GmbH, Karlsruhe	6	100.00	1,572	1,076
142	terranets bw GmbH, Stuttgart	3, 6	100.00	335,000	-
143	TransnetBW GmbH, Stuttgart	3, 6	100.00	3,944,347	-
144	ZEAG Engineering GmbH, Heilbronn	6	100.00	4,889	1,209
145	EnBW Ostwürttemberg DonauRies AG, Ellwangen	3	99.74	115,439	-
146	ZEAG Energie AG, Heilbronn	6	98.66	226,572	24,239
147	Gas-Union GmbH, Frankfurt am Main	3, 6	98.15	67,486	-
148	FoxInsights GmbH, Munich	6	92.00	-4,708	-1,866
149	Netze BW GmbH, Stuttgart	3, 6	86.51	1,130,861	-
150	WTT CampusONE GmbH, Ludwigsburg		80.00	2,217	1,921
151	Stadtwerke Düsseldorf AG, Düsseldorf	5	54.95	643,447	89,000
152	EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG, Karlsruhe	15	50.10	-	-



		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
153	Stromnetzgesellschaft Heilbronn GmbH & Co. KG, Heilbronn	6, 8	49.90	36,093	1,677
154	Neckar Netze GmbH & Co. KG, Esslingen am Neckar	6, 8	49.00	49,936	5,830
<b>Non-consolidated affiliated entities<sup>18</sup></b>					
155	Batteriegesellschaft Kupferzell GmbH & Co. KG, Kupferzell	5	100.00	8	-1
156	CENTRALE HYDROGENE DE LA GRANDE BORNE SAS, Montpellier/France	11	100.00	-	-
157	CENTRALE HYDROGENE DE THENNES SAS, Montpellier/France	5	100.00	1	0
158	ChargeHere GmbH, Karlsruhe	5	100.00	-1,280	-1,305
159	DZ-4 GmbH, Hamburg	5	100.00	-7,810	-10,133
160	Elektrizitätswerk Aach GmbH, Aach	5	100.00	3,619	885
161	EnBW Cyber Security GmbH, Karlsruhe	3, 5	100.00	25	-
162	Energieversorgung Gaildorf OHG der EnBW Kommunale Beteiligungen GmbH und NWS REG Beteiligungsgesellschaft mbH, Gaildorf	5	100.00	2,243	616
163	GDMcom Bau GmbH, Cavertitz (formerly Schneider GmbH, Cavertitz)	5	100.00	5,998	526
164	GDMcom Netze GmbH, Leipzig	5	100.00	2,338	-339
165	GDMcom Planung GmbH, Zeulenroda-Triebes (formerly IBZ Neubauer GmbH, Zeulenroda-Triebes)	5	100.00	962	425
166	GEOMAGIC Utility Solutions Inc., Houston/USA	5	100.00	228	52
167	IBZ Bau GmbH, Zeulenroda-Triebes	5	100.00	2,642	544
168	InfraKom GmbH, Rheinfelden Baden	5	100.00	25	-1
169	InfraKom WaR GmbH, Rheinfelden Baden	5	100.00	24	-1
170	MoviaTec GmbH, Leipzig	5	100.00	1,310	276
171	Neckar Netze Verwaltungsgesellschaft mbH, Esslingen am Neckar	5	100.00	137	4
172	Netze Regional GmbH, Stuttgart	5	100.00	-54	-79
173	NHL Verwaltungs-GmbH, Heilbronn	5	100.00	25	0
174	OSG ONTRAS Servicegesellschaft mbH, Leipzig	5	100.00	25	0
175	Rieger Beteiligungs-GmbH, Lichtenstein, Kreis Reutlingen	5	100.00	41	5
176	Rieger GmbH & Co. KG, Lichtenstein, Kreis Reutlingen	5	100.00	1,187	400
177	Verwaltungsgesellschaft Batteriespeicher Kupferzell mbH, Kupferzell	5	100.00	24	0
178	Weishaupt Planungen GmbH, Grimma	5	100.00	3,126	-246
179	Wärmegesellschaft Heilbronn GmbH, Heilbronn	5	100.00	-77	-62
180	INFRACON Infrastruktur Service GmbH & Co. KG, Leipzig	5	99.50	3,973	3,227
181	Netze Pforzheim-Region GmbH & Co. KG, Pforzheim	5	60.00	8,047	698
182	Energieversorgung Donautal GmbH, Gundelfingen an der Donau	5	50.10	1,760	6
183	Gasnetzgesellschaft Laupheim GmbH & Co. KG, Laupheim	5	50.10	3,590	173
184	Gasnetzgesellschaft Laupheim Verwaltungs GmbH, Laupheim	5	50.10	30	0
185	Netzgesellschaft Elz-Neckar GmbH & Co. KG, Obrigheim	5	50.10	1,164	7
186	Netzgesellschaft Elz-Neckar Verwaltungs GmbH, Obrigheim	5	50.10	36	1
187	Stromnetzgesellschaft Albershausen GmbH & Co. KG, Albershausen	5	50.10	1,225	77
188	Stromnetzgesellschaft Albershausen Verwaltungs GmbH, Albershausen	5	50.10	34	1
189	Stromnetzgesellschaft Heilbronn Verwaltungs-GmbH, Heilbronn	5	50.10	27	0
190	Stromnetzgesellschaft Laupheim GmbH & Co. KG, Laupheim	5	50.10	3,068	94
191	Stromnetzgesellschaft Laupheim Verwaltungs GmbH, Laupheim	5	50.10	31	0
192	Netze Krauchenwies Verwaltungs-GmbH, Krauchenwies	5	50.00	28	1
<b>Entities accounted for using the equity method</b>					
193	Stadtwerke Esslingen am Neckar GmbH & Co. KG, Esslingen am Neckar	5	49.98	63,186	6,146
194	Pražská energetika Holding a.s., Prague/Czech Republic	5, 9	49.00	247,947	39,894
195	GasLINE Telekommunikationsnetzgesellschaft deutscher Gasversorgungsunternehmen mbH & Co. Kommanditgesellschaft, Straelen	5	29.24	131,719	33,320
196	Zweckverband Landeswasserversorgung, Stuttgart	5	27.20	117,951	2,200
197	Heilbronner Versorgungs GmbH, Heilbronn	4, 5	25.10	51,750	-
198	Stuttgart Netze GmbH, Stuttgart	4, 5, 9	25.10	329,944	-
199	FairEnergie GmbH, Reutlingen	4, 5	24.90	122,666	-
200	Energieversorgung Rheinfelden/Grenzach-Wyhlen GmbH & Co. KG, Rheinfelden Baden	5	24.00	31	-7
201	Stadtwerke Karlsruhe GmbH, Karlsruhe	4, 5	20.00	199,770	-
202	Zweckverband Bodensee-Wasserversorgung, Stuttgart	5, 17	19.83	165,307	5,000

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
<b>Investments<sup>18</sup></b>					
203	Netzgesellschaft Sontheim GmbH & Co. KG, Sontheim an der Brenz	5	74.90	1,941	350
204	Netzgesellschaft Sontheim Verwaltungsgesellschaft mbH, Sontheim an der Brenz	5	74.90	28	2
205	Netzgesellschaft Steinheim GmbH & Co. KG, Steinheim am Albuch	5	74.90	417	78
206	Netzgesellschaft Steinheim Verwaltungsgesellschaft mbH, Steinheim am Albuch	5	74.90	28	2
207	Stromnetz Herrenberg Verwaltungsgesellschaft mbH, Herrenberg	5	74.90	36	1
208	Stromnetzgesellschaft Herrenberg mbH & Co. KG, Herrenberg	5	74.90	4,327	461
209	Stadtwerke Sinsheim Versorgungs GmbH & Co. KG, Sinsheim	5	60.00	13,599	-686
210	Stadtwerke Sinsheim Verwaltungs GmbH, Sinsheim	5	60.00	35	1
211	Stromnetz Langenau GmbH & Co. KG, Langenau	5	50.10	2,626	122
212	Stromnetz Langenau Verwaltungs-GmbH, Langenau	5	50.10	39	1
213	e.wa riss GmbH & Co. KG, Biberach	5	50.00	36,317	4,355
214	e.wa riss Verwaltungsgesellschaft mbH, Biberach	5	50.00	57	2
215	Flexcess GmbH, Bayreuth	5	50.00	931	7
216	Fränkische Wasser Service GmbH, Crailsheim	5	50.00	45	7
217	litor GmbH, Leipzig	5	50.00	411	34
218	NETFIN Infrastructure, a.s., Prague/Czech Republic	5	50.00	78	-5
219	Netze Krauchenwies GmbH & Co. KG, Krauchenwies	5	50.00	1,572	111
220	Niederrheinisch-Bergisches Gemeinschaftswasserwerk GmbH, Düsseldorf	5	50.00	3,108	92
221	Ostalbwasser Ost GmbH, Ellwangen	5	50.00	55	3
222	Ostalbwasser Service GmbH, Aalen	5	50.00	38	13
223	Ostalbwasser West GmbH, Schwäbisch Gmünd	5	50.00	36	-1
224	regioaqua Gesellschaft für Wasser und Abwasser mbH, Rheinfelden	5	50.00	128	20
225	Stadtwerke Schramberg GmbH & Co. KG, Schramberg	5	50.00	16,384	2,105
226	Stadtwerke Schramberg Verwaltungsgesellschaft mbH, Schramberg	5	50.00	48	2
227	Wasserübernahme Neuss-Wahlscheid GmbH, Neuss	5	50.00	465	11
228	EberstadtWerke GmbH & Co. KG, Eberstadt	5	49.99	182	-6
229	Stadtwerke Emmendingen GmbH, Emmendingen	5	49.90	17,982	1,149
230	Stromnetz Blaubeuren GmbH, Blaubeuren	5	49.90	2,971	178
231	Netzgesellschaft Gerstetten mbH, Gerstetten	11	49.80	-	-
232	Stadtwerke Esslingen-Verwaltungsgesellschaft mbH, Esslingen am Neckar	5	49.80	48	1
233	Energie Sachsenheim GmbH & Co. KG, Sachsenheim	5	49.00	4,863	359
234	Energie Sachsenheim Verwaltungs-GmbH, Sachsenheim	5	49.00	39	1
235	LEO Energie GmbH & Co. KG, Leonberg	5	49.00	10,195	444
236	Netzgesellschaft Marbach GmbH & Co. KG, Marbach am Neckar	5	49.00	2,560	147
237	Rems-Murr Telekommunikation GmbH, Waiblingen	5	49.00	3,973	-3
238	Stadtwerke Backnang GmbH, Backnang	4, 5	49.00	14,940	-
239	Stadtwerke Bad Wildbad GmbH & Co. KG, Bad Wildbad	5	49.00	6,643	771
240	Stadtwerke Bad Wildbad Verwaltungs-GmbH, Bad Wildbad	5	49.00	47	1
241	Stadtwerke Eppingen GmbH & Co. KG, Eppingen	5	49.00	8,575	720
242	Energie Calw GmbH, Calw	4, 5	48.82	19,240	-
243	KBB GmbH Kommunalberatung Infrastrukturentwicklung, Baden-Baden	5	45.00	271	51
244	Stadtwerke Münsingen GmbH, Münsingen	5	45.00	7,612	607
245	Stadtwerke Böblingen GmbH & Co. KG, Böblingen	5	41.10	42,812	2,486
246	Stadtwerke Böblingen Verwaltungs GmbH, Böblingen	5	41.10	6	0
247	Gemeindewerke Bodanrück GmbH & Co. KG, Allensbach	5	40.00	3,949	207
248	Gemeindewerke Bodanrück Verwaltungs-GmbH, Allensbach	5	40.00	32	1
249	SUEnergie GmbH & Co. KG, Süssen	5	40.00	2,214	81
250	SUEnergie Verwaltungs GmbH, Süssen	5	40.00	36	1
251	Stadtwerke Weinheim GmbH, Weinheim	5	39.32	33,456	2,917
252	Energieversorgung Rottenburg am Neckar GmbH, Rottenburg am Neckar	4, 5	38.00	7,660	-
253	EVG Grächen AG, Grächen/Switzerland	5	35.00	5,293	70
254	EVN Energieversorgung Nikolai AG, St. Niklaus/Switzerland	5, 7	35.00	1,836	113
255	EVR Energieversorgung Raron AG, Raron/Switzerland	5, 7	35.00	1,031	85
256	EVWR Energiedienste Visp-Westlich Raron AG, Visp/Switzerland	5	35.00	4,994	383

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
257	VED Visp Energie Dienste AG, Visp/Switzerland	5, 7	35.00	4,035	398
258	nue GmbH, Berlin (formerly certflow GmbH, Stuttgart)	5	33.33	19	-6
259	Seeallianz GmbH & Co. KG, Markdorf	5	33.00	7,527	456
260	Taubernetze GmbH & Co. KG, Tauberbischofsheim	5	33.00	2,436	153
261	Taubernetze Verwaltungs-GmbH, Tauberbischofsheim	5	33.00	30	1
262	ErmstalEnergie Dettingen an der Erms GmbH & Co. KG, Dettingen an der Erms	5	32.60	4,975	468
263	Versorgungsbetriebe Dettingen an der Erms Verwaltungs-GmbH, Dettingen an der Erms	5	32.60	25	1
264	eneREGIO GmbH, Muggensturm	5	32.00	12,949	1,058
265	Regionalnetze Linzgau GmbH, Pfullendorf	4, 5	31.64	6,462	-
266	Elektrizitätswerk Mittelbaden AG & Co. KG, Lahr	5	31.00	67,085	15,359
267	Elektrizitätswerk Mittelbaden Verwaltungsaktiengesellschaft, Lahr	5	31.00	166	8
268	Levl Energy GmbH, Stuttgart	11	30.00	-	-
269	Stadtwerke Bad Herrenalb GmbH, Bad Herrenalb	5	30.00	10,625	-976
270	Energie- und Wasserversorgung Bruchsal GmbH, Bruchsal	4, 5	27.41	23,002	-
271	Stadtwerke Bad Säckingen GmbH, Bad Säckingen	3, 5	26.30	16,939	-
272	Albwerk GmbH & Co. KG, Geislingen an der Steige	5	25.10	31,189	5,638
273	Albwerk Verwaltungsgesellschaft mbH, Geislingen an der Steige	5	25.10	9	3
274	Energie Kirchheim unter Teck GmbH & Co. KG, Kirchheim unter Teck	5	25.10	12,055	737
275	Energie Kirchheim unter Teck Verwaltungs-GmbH, Kirchheim unter Teck	5	25.10	33	1
276	Energieversorgung Immenstaad GmbH & Co. KG, Immenstaad am Bodensee	5	25.10	985	42
277	Energieversorgung Strohgau GmbH & Co. KG, Gerlingen	5	25.10	8,957	460
278	Energieversorgung Strohgau Verwaltungs GmbH, Gerlingen	5	25.10	26	1
279	Filderstadt Netze GmbH, Filderstadt	5	25.10	147	-14
280	Gasnetzgesellschaft Schorndorf GmbH & Co. KG, Schorndorf	5	25.10	4,728	390
281	Gasnetzverwaltungsgesellschaft Schorndorf GmbH, Schorndorf	5	25.10	36	1
282	Gemeindewerke Brühl GmbH & Co. KG, Brühl	5	25.10	1,507	31
283	Gemeindewerke Brühl Verwaltungs-GmbH, Brühl	5	25.10	36	1
284	Gemeindewerke Plüderhausen GmbH, Plüderhausen	4, 5	25.10	1,941	-
285	Infrastrukturgesellschaft Plochingen GmbH & Co. KG, Plochingen	5	25.10	4,224	314
286	Netzgesellschaft Besigheim GmbH & Co. KG, Besigheim	5	25.10	4,753	271
287	Netzgesellschaft Besigheim Verwaltungs GmbH, Besigheim	5	25.10	35	1
288	Netzgesellschaft Leinfelden-Echterdingen GmbH, Leinfelden-Echterdingen	5	25.10	13,351	816
289	Netzgesellschaft Salach GmbH & Co. KG, Salach	5	25.10	3,709	189
290	Netzgesellschaft Salach Verwaltungs GmbH, Salach	5	25.10	34	1
291	Netzgesellschaft Schwetzingen GmbH & Co. KG, Schwetzingen	5	25.10	2,441	118
292	Netzgesellschaft Schwetzingen Verwaltungs GmbH, Schwetzingen	5	25.10	32	1
293	Netzgesellschaft Vaihingen GmbH & Co. KG, Vaihingen an der Enz	5	25.10	8,369	618
294	Netzgesellschaft Vaihingen Verwaltungs-GmbH, Vaihingen an der Enz	5	25.10	35	1
295	Stadtwerke Ellwangen GmbH, Ellwangen	4, 5	25.10	13,132	-
296	Stadtwerke Giengen GmbH, Giengen	5	25.10	15,516	1,627
297	Stadtwerke Schwäbisch Gmünd GmbH, Schwäbisch Gmünd	4, 5	25.10	30,751	-
298	Stadtwerke Stockach GmbH, Stockach	5	25.10	15,103	2,035
299	Stadtwerke Weinstadt Energieversorgung GmbH, Weinstadt	4, 5	25.10	7,653	-
300	Stadtwerke Wiesloch - Strom - GmbH & Co. KG, Wiesloch	5	25.10	2,624	129
301	Stromgesellschaft March GmbH & Co. KG, March	5	25.10	966	0
302	Stromnetzgesellschaft Ebersbach GmbH & Co. KG, Ebersbach an der Fils	5	25.10	4,356	120
303	Stromnetzgesellschaft Ebersbach Verwaltungs GmbH, Ebersbach an der Fils	5	25.10	35	1
304	Stromnetzgesellschaft Östlicher Schurwald GmbH & Co. KG, Rechberghausen	5	25.10	3,265	169
305	Stromnetzgesellschaft Östlicher Schurwald Verwaltungs GmbH, Rechberghausen	5	25.10	34	1
306	Technische Werke Schussental GmbH & Co. KG, Ravensburg	5	25.10	62,840	5,941
307	Technische Werke Schussental Verwaltungsgesellschaft mbH, Ravensburg	5	25.10	30	11
308	tktVivax GmbH, Backnang	5	25.06	2,123	183
309	Elektroenergetické datové centrum, a.s., Prague/Czech Republic	11	25.00	-	-
310	Switchboard GmbH, Stuttgart	16	25.00	4	-21
311	Stromversorgung Sulz am Neckar GmbH, Sulz am Neckar	16	24.90	4,318	273

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
312	Netzeigentumsgesellschaft Rheinstetten GmbH & Co. KG, Rheinstetten	5	24.50	4,928	127
313	Stadtwerke Schopfheim GmbH, Schopfheim	5	24.50	110	-232
314	Stadtwerke Wehr GmbH & Co. KG, Wehr	5	24.50	3,363	456
315	Stadtwerke Wehr Verwaltungs-GmbH, Wehr	5	24.50	24	1
316	Energieversorgung Oberes Wiesental GmbH, Todtnau	5	24.00	4,377	267
317	Netzgesellschaft Edingen-Neckarhausen GmbH & Co. KG, Edingen-Neckarhausen	5	24.00	1,188	67
318	q-bility GmbH, Gerolsbach Alberzell	5	22.50	-535	-560
319	ENRW Energieversorgung Rottweil GmbH & Co. KG, Rottweil	5	20.00	33,376	3,945
320	ENRW Verwaltungs-GmbH, Rottweil	5	20.00	15	1
321	Stadtwerke Sindelfingen GmbH, Sindelfingen	5	20.00	52,107	8,715
322	Versorger-Allianz 450 Beteiligungs GmbH & Co. KG, Bonn	5	17.63	27,859	-880
<b>Sustainable Generation Infrastructure segment</b>					
<b>Fully consolidated companies</b>					
323	Aletsch AG, Mörel/Switzerland	6	100.00	28,007	1,436
324	AWISTA Logistik GmbH, Düsseldorf	3, 5	100.00	3,025	-
325	BALANCE Erneuerbare Energien GmbH, Leipzig	3, 6	100.00	49,615	-
326	Barre Energie SARL, Montpellier/France		100.00	68	-8
327	Biogas Produktion Altmark GmbH, Hohenberg-Krusemark	6	100.00	16,047	-6,501
328	Cambert Énergie SARL, Montpellier/France		100.00	64	531
329	Centrale Photovoltaïque de la Forêt Baignollais SARL, Montpellier/France		100.00	134	287
330	Centrale Photovoltaïque de la ZA de Gaudet SARL, Montpellier/France		100.00	1	728
331	Centrale Photovoltaïque de Saint Quentin la Tour SAS, Montpellier/France		100.00	-174	-105
332	Centrale Solaire d'Exideuil SARL, Montpellier/France		100.00	-606	374
333	Centrale Solaire de Bors de Montmoreau SARL, Montpellier/France		100.00	1	2,005
334	Centrale Solaire de Châteauvert SARL, Montpellier/France		100.00	-153	431
335	Centrale Solaire de Coste Cuyère SARL, Montpellier/France		100.00	23	844
336	Centrale Solaire de Maine SARL, Montpellier/France		100.00	-174	-128
337	Centrale Solaire de Montegut SARL, Montpellier/France		100.00	-153	-63
338	Centrale Solaire de Severac SARL, Montpellier/France		100.00	-336	147
339	Centrale Solaire des Terres Rouges SARL, Montpellier/France		100.00	-1,567	508
340	Centrale Solaire du Sycala SARL, Montpellier/France		100.00	1	-1,439
341	Centrale Solaire du Tea Fleury-Merogis SARL, Montpellier/France		100.00	-385	-274
342	Centrale Solaire EMA Solar SARL, Montpellier/France		100.00	-329	-131
343	Centrales Solaires de l'Isle sur la Sorgue SAS, Montpellier/France		100.00	-293	-93
344	Connected Wind Services A/S, Balle/Denmark	5	100.00	5,422	-4,267
345	Connected Wind Services Danmark A/S, Balle/Denmark	5	100.00	1,593	475
346	Connected Wind Services Deutschland GmbH, Rantrum	5	100.00	1,559	-1,541
347	Connected Wind Services France SAS, Dijon/France	5	100.00	589	-655
348	Connected Wind Services Refurbishment A/S, Balle/Denmark	5	100.00	-20	173
349	Couffrau Energie SARL, Montpellier/France		100.00	30	-44
350	Deves Énergie SARL, Montpellier/France		100.00	9	806
351	EnBW Biogas GmbH, Stuttgart	3, 6	100.00	52	-
352	EnBW Biomasse GmbH, Karlsruhe	6	100.00	3,739	652
353	EnBW Erneuerbare Operation & Service GmbH, Klausdorf (formerly EnBW Offshore Service GmbH, Klausdorf)	3, 6	100.00	12,140	-
354	EnBW Etzel Speicher GmbH, Karlsruhe	3, 6	100.00	825	-
355	EnBW France GmbH, Stuttgart	15	100.00	-	-
356	EnBW Grundstücksverwaltung Rheinhafen GmbH, Karlsruhe		100.00	2,153	-118
357	EnBW Holding A.S., Gümüssuyu-Istanbul/Turkey	6	100.00	237,478	-136
358	EnBW Kraftwerk Lippendorf Beteiligungsgesellschaft mbH, Stuttgart	3, 6	100.00	97,640	-
359	EnBW Mainfrankenpark GmbH, Dettelbach	3, 6	100.00	3,759	-
360	EnBW NAG-Beteiligungsgesellschaft mbH, Stuttgart	6	100.00	21	-4
361	EnBW Norway AS, Oslo/Norway	5	100.00	468	478
362	EnBW Offshore 1 GmbH, Stuttgart	15	100.00	-	-
363	EnBW Offshore 2 GmbH, Stuttgart	15	100.00	-	-

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
364	EnBW Offshore 3 GmbH, Stuttgart	15	100.00	–	–
365	EnBW Offshore 4 GmbH, Stuttgart	15	100.00	–	–
366	EnBW Offshore Service Denmark ApS, Skødstrup/Denmark	6	100.00	3,765	39
367	EnBW Renewables International GmbH, Stuttgart	15	100.00	–	–
368	EnBW Rückbauservice GmbH, Stuttgart	15	100.00	–	–
369	EnBW Solar GmbH, Stuttgart	3, 6	100.00	244,551	–
370	EnBW Solarpark Gottesgabe GmbH, Stuttgart	3, 6	100.00	73,182	–
371	EnBW Solarpark Tuningen GmbH, Stuttgart	3, 6	100.00	2,733	–
372	EnBW Solarpark Weesow-Willmersdorf GmbH, Stuttgart	3, 6	100.00	81,034	–
373	EnBW Sverige AB, Falkenberg/Sweden	5	100.00	89,327	21,785
374	EnBW UK Limited, London/United Kingdom	5	100.00	73,199	76,088
375	EnBW Wind Onshore 1 GmbH, Stuttgart	3, 6	100.00	25	–
376	EnBW Windkraftprojekte GmbH, Stuttgart	3, 6	100.00	277,839	–
377	EnBW Windpark Hemme GmbH, Stuttgart	6	100.00	-92	-210
378	EnBW Windpark Prötzel GmbH, Stuttgart	6	100.00	5,485	614
379	ENERGIEUNION GmbH, Schwerin	3, 6	100.00	6,223	–
380	Erdgasspeicher Peissen GmbH, Halle (Saale)	6	100.00	-126,696	3,632
381	Ferme Éolienne de la Bessière SARL, Montpellier/France		100.00	-1,525	517
382	Ferme Éolienne de Puech de Cambert SARL, Montpellier/France		100.00	308	884
383	Ferme Éolienne de Puech de l'Homme SARL, Montpellier/France		100.00	1,446	489
384	Gemeinschaftsheizkraftwerk Fortuna GmbH, Düsseldorf	5	100.00	242,134	1,750
385	Gesellschaft für nukleares Reststoffrecycling mbH, Neckarwestheim	15	100.00	–	–
386	Gramentes Énergie SAS, Montpellier/France		100.00	-1,732	31
387	Grünwerke GmbH, Düsseldorf	3, 5	100.00	38,400	–
388	Heizkraftwerk Stuttgart GmbH, Stuttgart	6	100.00	5,274	130
389	Interconnector GmbH, Karlsruhe	3, 6	100.00	25	–
390	Kernkraftwerk Obrigheim GmbH, Obrigheim	3, 6	100.00	51,130	–
391	Kraftwerk Lötschen AG, Steg/Switzerland	6	100.00	32,381	1,017
392	La Société des Monts de Lacauene SAS, Montpellier/France		100.00	2,317	-106
393	Le Val Energie SARL, Montpellier/France		100.00	1	654
394	MSE Mobile Schlammmentwässerungs GmbH, Karlsbad-Ittersbach	15	100.00	–	–
395	naturenergie hochrhein AG, Rheinfelden Baden (formerly Energiedienst AG, Rheinfelden Baden)	6	100.00	205,208	35,265
396	Parc Éolien de Bornay 2 SARL, Montpellier/France		100.00	734	9
397	Parc Éolien de Breuillac SARL, Montpellier/France		100.00	835	-463
398	Parc Éolien de Champs Perdus 2 SARL, Montpellier/France		100.00	843	870
399	Parc Éolien de la Vallée de Belleuse SARL, Montpellier/France		100.00	1	615
400	Parc Éolien de le Quesnel SARL, Montpellier/France		100.00	763	-933
401	Parc Éolien de Marendeuil SARL, Montpellier/France		100.00	-806	778
402	Parc Éolien du Mont de l'Echelle SARL, Montpellier/France		100.00	511	-28
403	Parc Éolien du Mont de Maisnil SARL, Montpellier/France		100.00	-408	592
404	PRE FVE Nové Sedlo, s.r.o., Prague/Czech Republic	5	100.00	-33	-21
405	PRE FVE Svetlik s.r.o., Leitowitz/Czech Republic	5	100.00	5,197	994
406	PRE VTE Částkov s.r.o., Prague/Czech Republic	5	100.00	-397	152
407	Socpe de Champs Perdus SARL, Montpellier/France		100.00	-1,306	-47
408	SOLARINVEST - GREEN ENERGY, s.r.o., Prague/Czech Republic	5	100.00	1,290	251
409	Svenska Connected Wind Services AB, Falkenberg/Sweden	6	100.00	989	327
410	TAE Thermische Abfallentsorgung Ansbach GmbH, Ansbach		100.00	60,961	1,804
411	TPLUS GmbH, Karlsruhe	15	100.00	–	–
412	TWS Kernkraft GmbH, Gemmrigheim	3, 6	100.00	149,297	–
413	u-plus Umweltservice GmbH, Karlsruhe	15	100.00	–	–
414	Valeco SAS, Montpellier/France		100.00	121,828	-2,349
415	VNG Gasspeicher GmbH, Leipzig	3, 6	100.00	21,311	–
416	VNG Gasspeicher Service GmbH, Leipzig	3, 6	100.00	132	–
417	VNG Handel & Vertrieb GmbH, Leipzig	3, 6	100.00	37,840	–
418	Windpark "Auf der Weißen Trisch" GmbH, Zweibrücken		100.00	2,573	443

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
419	Windpark Breitenbach GmbH, Düsseldorf	6	100.00	25	359
420	Windpark Obhausen/Nemsdorf GmbH & Co. KG, Stuttgart	6	100.00	15,100	2,538
421	Windpark Rot am See GmbH, Ellwangen Jagst	3, 6	100.00	25	-
422	EE Bürgerenergie Braunsbach GmbH & Co. KG, Braunsbach	6	99.99	7,600	781
423	BürgerEnergie Königheim GmbH & Co. KG, Königheim	6	99.97	3,000	307
424	EE BürgerEnergie Forchtenberg GmbH & Co. KG, Forchtenberg	6	99.93	1,500	166
425	EE BürgerEnergie Krautheim GmbH & Co. KG, Krautheim	6	99.90	8,336	-120
426	EE BürgerEnergie Roigheim GmbH & Co. KG, Roigheim	6	99.90	2,080	-189
427	EnBW Kernkraft GmbH, Obrigheim	4, 6	99.80	10,000	-
428	EnAlpin AG, Visp/Switzerland	6	98.60	275,787	13,959
429	Erneuerbare Energien Tauberbischofsheim GmbH & Co. KG, Tauberbischofsheim	6	98.00	753	-94
430	Valeco Solar SARL, Montpellier/France		95.20	1	718
431	EE BürgerEnergie Möckmühl GmbH & Co. KG, Möckmühl	6	95.17	1,575	160
432	EE BürgerEnergie Jagsthausen GmbH & Co. KG, Jagsthausen	6	95.11	4,625	219
433	Bürgerenergie Widdern GmbH & Co. KG, Widdern	6	95.07	9,072	181
434	JatroSolutions GmbH, Karlsruhe (formerly JatroSolutions GmbH, Stuttgart)	6	94.55	-1,537	-131
435	EE BürgerEnergie Rosenberg GmbH & Co. KG, Rosenberg	6	92.45	2,980	-278
436	EnPV GmbH, Karlsruhe	6	90.48	5,446	-2,479
437	Südwestdeutsche Nuklear-Entsorgungsgesellschaft mbH, Stuttgart	6	86.49	7,959	583
438	EE Bürgerenergie Hardthausen GmbH & Co. KG, Hardthausen am Kocher	6	84.40	12,393	1,353
439	Langenburg Infrastruktur GmbH, Stuttgart	6	83.33	7,214	-59
440	Neckar Aktiengesellschaft, Stuttgart	6	82.20	17,179	0
441	EE BürgerEnergie Boxberg GmbH & Co. KG, Boxberg	6	78.31	16,600	1,897
442	Zentraldeponie Hubbelrath GmbH, Düsseldorf	6	76.00	6,136	24
443	Geothermie-Gesellschaft Bruchsal GmbH, Bruchsal	6	74.90	3,690	1,539
444	Saint Laurent Solar SAS, Montpellier/France		72.02	547	1,727
445	Energiedienst Holding AG, Laufenburg/Switzerland	6, 10	66.67	1,144,253	35,105
446	Centrale Solaire de la Durance SARL, Montpellier/France		65.00	935	572
447	Parc Éolien de Bel Air SAS, Montpellier/France		63.40	-457	-222
448	EE Bürgerenergie Ilshofen GmbH & Co. KG, Ilshofen	6	60.25	3,950	516
449	EnBW Windpark Aalen-Waldhausen GmbH, Stuttgart	6	59.00	20,386	709
450	Rheinkraftwerk Neuhausen AG, Neuhausen/Switzerland	6	56.00	1,343	55
451	EnBW Solarpark Ingoldingen GmbH, Stuttgart	6	55.00	3,269	32
452	Erneuerbare Energien Neckarwestheim GmbH & Co. KG, Neckarwestheim	6	51.90	1,050	16
453	AWISTA Gesellschaft für Abfallwirtschaft und Stadtreinigung mbH, Düsseldorf	5	51.00	57,481	25,262
454	Centrale Solaire de Saint Mamet SARL, Montpellier/France		51.00	-753	30
455	Solarpark Berghülen GmbH, Stuttgart	6	51.00	2,228	4
456	Solarpark Leutkirch GmbH & Co. KG, Leutkirch im Allgäu	6	51.00	6,243	505
457	Solarpark Riedlingen-Zwiefaltendorf GmbH, Stuttgart	6	51.00	4,020	40
458	KNG Kraftwerks- und Netzgesellschaft mbH, Rostock	6	50.40	560	875
459	EnBW Baltic 1 GmbH & Co. KG, Biberach an der Riß	6	50.32	42,175	2,224
460	EnBW Albatros GmbH & Co. KG, Biberach an der Riß	6	50.11	389,624	36,112
461	EnBW Hohe See GmbH & Co. KG, Biberach an der Riß	6	50.11	1,612,664	161,962
462	EnBW Baltic 2 GmbH & Co. KG, Biberach an der Riß	6	50.10	675,915	12,125
463	EnBW He Dreht GmbH & Co. KG, Biberach an der Riß (formerly EnBW He Dreht GmbH, Varel)	15	50.10	-	-
464	EnBW SunInvest GmbH & Co. KG, Stuttgart	6	50.10	314,125	17,234
465	EnBW WindInvest GmbH & Co. KG, Stuttgart	6	50.10	162,801	7,207
466	EnBW Windpark Buchholz III GmbH, Stuttgart	6	50.10	16,677	36
467	Windenergie Tautschbuch GmbH, Riedlingen		50.10	619	-1
468	EnBW Onshore Portfolio GmbH, Stuttgart	6	50.02	47,081	3,941
469	EnBW Solarpark Birkenfeld GmbH, Stuttgart		50.00	3,301	100
470	Energie Renouvelable du Languedoc SARL, Montpellier/France		50.00	-3,192	-1,196
471	Joncels Energie SARL, Montpellier/France		50.00	-2,973	-46
<b>Joint operations</b>					
472	Friedeburger Speicherbetriebsgesellschaft mbH "Crystal", Friedeburg	6, 9	50.00	63,657	43

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
473	Rheinkraftwerk Iffezheim GmbH, Iffezheim	6, 9	50.00	80,253	2,625
474	Rhonewerke AG, Ernen/Switzerland	5, 9	30.00	32.088	2.756
<b>Non-consolidated affiliated entities<sup>18</sup></b>					
475	BALANCE Management GmbH, Leipzig	5	100.00	15	-3
476	Biogas Trelder Berg 1 GmbH, Buchholz	3, 5	100.00	1,125	-
477	Biogas Trelder Berg 2 GmbH, Buchholz	3, 5	100.00	525	-
478	Biogas Trelder Berg 3 GmbH, Buchholz	3, 5	100.00	525	-
479	Biosphärenwindpark Schwäbische Alb GmbH, Stuttgart	5	100.00	146	-4
480	Bliekevare Nät AB, Falkenberg/Sweden	5	100.00	60	277
481	CarbonBW (Thailand) Ltd., Bangkok/Thailand	5	100.00	14,394	632
482	CAS DE BROSSAC SARL, Montpellier/France	5	100.00	-38	-5
483	CAS DE CANET SAS, Montpellier/France	5	100.00	1	0
484	CAS DE CUSEY SAS, Montpellier/France	5	100.00	1	0
485	CAS DE LA DURANDIERE SAS, Montpellier/France	11	100.00	-	-
486	CAS DE LA LOGE SAS, Montpellier/France	11	100.00	-	-
487	CAS de la Plaine SAS, Montpellier/France	5	100.00	-7	-8
488	CAS DE LIGLET SAS, Montpellier/France	11	100.00	-	-
489	CAS DE LIGNAC SAS, Montpellier/France	5	100.00	1	0
490	CAS DE L'ABBAYE LE CLOU SAS, Montpellier/France	5	100.00	1	0
491	CAS DE MALIGNY SARL, Montpellier/France	5	100.00	-25	-5
492	CAS DE MEILLANT SASU, Montpellier/France	5	100.00	-5	-5
493	CAS DE MONTIGNY-SUR-AUBE SAS, Montpellier/France	11	100.00	-	-
494	CAS de Raix SAS, Montpellier/France	11	100.00	-	-
495	CAS DE RUNASQUER SARL, Montpellier/France (formerly CAS DE SOULERIS SARL, Montpellier/France)	5	100.00	-31	-8
496	CAS DE SAUVIGNAC SAS, Montpellier/France	11	100.00	-	-
497	CAS DE TAOUOU-BAYSSIÈRES SARL, Montpellier/France	5	100.00	-6	-1
498	CAS DE TOTAINVILLE SAS, Montpellier/France	11	100.00	-	-
499	CAS DE TREVOL SAS, Montpellier/France	11	100.00	-	-
500	CAS EXPERIMENTATION AGRO-CINERGIE SARL, Montpellier/France (formerly Parc Éolien de Bornay SARL, Montpellier/France)	5	100.00	-36	-5
501	Centernach Énergie SARL, Montpellier/France	5	100.00	-920	42
502	Centrale de stockage d'énergie de Barre SARL, Montpellier/France (formerly Ferme Éolienne de la Ferrière-de-Flée SARL, Montpellier/France)	5	100.00	-17	-5
503	Centrale de stockage d'énergie de Foulventour SAS, Montpellier/France (formerly PE des Paquieriès SAS, Montpellier/France)	5	100.00	-7	-8
504	Centrale Photovoltaïque de Sirius SARL, Montpellier/France	5	100.00	284	303
505	Centrale Photovoltaïque des Gravières SARL, Montpellier/France	5	100.00	-65	-12
506	Centrale Photovoltaïque Retour sur l'Isle SARL, Montpellier/France	5	100.00	-22	-7
507	Centrale Sol. de la Forêt au Maître SAS, Montpellier/France	5	100.00	-11	-5
508	Centrale Solaire de Beauce SARL, Montpellier/France	5	100.00	-33	-6
509	Centrale Solaire de Biltagarbi SARL, Montpellier/France	5	100.00	-319	-26
510	Centrale Solaire de Carré Sud SARL, Montpellier/France	5	100.00	-95	-28
511	Centrale Solaire de Catreille SARL, Montpellier/France	5	100.00	-39	-21
512	Centrale Solaire de Châteauperrouse SARL, Montpellier/France	5	100.00	-8	-2
513	Centrale Solaire de Clave SARL, Montpellier/France	5	100.00	-81	-6
514	Centrale Solaire de Colombiers SARL, Montpellier/France	5	100.00	-126	44
515	Centrale Solaire de la Fourchale SAS, Montpellier/France	5	100.00	-11	-5
516	Centrale Solaire de la Tastère SARL, Montpellier/France	5	100.00	-26	-6
517	Centrale Solaire de les Leches SAS, Montpellier/France	5	100.00	-10	-5
518	Centrale Solaire de Leyritz-Moncassin SAS, Montpellier/France	5	100.00	-11	-5
519	Centrale Solaire de Lunel SARL, Montpellier/France	5	100.00	106	71
520	Centrale Solaire de MAGNAC-LAVAL SAS, Montpellier/France	5	100.00	-10	-5
521	Centrale Solaire de Nohanent SARL, Montpellier/France	5	100.00	-17	-5
522	Centrale Solaire de Peregrine SARL, Montpellier/France	5	100.00	-35	-19
523	Centrale Solaire de Roubian SARL, Montpellier/France	5	100.00	-77	-7



		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
524	Centrale Solaire de Saint Leger de Balson SARL, Montpellier/France	5	100.00	-227	-198
525	Centrale Solaire de Saint-Just SAS, Montpellier/France	5	100.00	-14	-10
526	Centrale Solaire de Saumejan SAS, Montpellier/France	5	100.00	-11	-5
527	Centrale Solaire de Til Chatel 2 SARL, Montpellier/France	5	100.00	-13	-5
528	Centrale Solaire de Til Chatel SARL, Montpellier/France	5	100.00	-41	-14
529	Centrale Solaire des Coëvrons SARL, Montpellier/France	5	100.00	-44	-18
530	Centrale Solaire des Moulins Lodevois SARL, Montpellier/France	5	100.00	-28	-5
531	Centrale Solaire du Bois Comte SARL, Montpellier/France	5	100.00	-25	-11
532	Centrale Solaire du Caussanel SARL, Montpellier/France	5	100.00	-35	-13
533	Centrale Solaire du Tertre SAS, Montpellier/France	5	100.00	-11	-5
534	Centrale Solaire d'Aguessac SAS, Montpellier/France	5	100.00	-16	-33
535	Centrale Solaire EuroPrimeur SARL, Montpellier/France	5	100.00	-4	-1
536	Centrale Solaire la Charme SARL, Montpellier/France	5	100.00	-5	-2
537	Centrales Solaires d'Hyperion SARL, Montpellier/France	5	100.00	-21	-2
538	Centrales Solaires de Terreneuve SARL, Montpellier/France	5	100.00	-28	-5
539	Centrales Solaires des Terres Rouges 3 SAS, Montpellier/France	5	100.00	-9	-5
540	Centrales Solaires du Languedoc SARL, Montpellier/France	5	100.00	446	128
541	CP D'ORVAL SASU, Montpellier/France	5	100.00	-6	-7
542	CS DE BLENEAU SAS, Montpellier/France	11	100.00	-	-
543	CS DE CLUNDOC'H SARL, Montpellier/France	5	100.00	-4	-1
544	CS DE COURTENAY SASU, Montpellier/France	5	100.00	-6	-6
545	CS DE DAMMARIE EN PUISAYS SAS, Montpellier/France	11	100.00	-	-
546	CS DE DOMERAT SASU, Montpellier/France	5	100.00	-5	-5
547	CS DE FONTAINES SARL, Montpellier/France	5	100.00	-4	-1
548	CS DE GRON SAS, Montpellier/France	11	100.00	-	-
549	CS DE LA GOUTTE SARL, Montpellier/France (formerly Parc Éolien du Bois du Piné SARL, Montpellier/France)	5	100.00	-17	-5
550	CS DE LA GRANDE MAIREE SARL, Montpellier/France	5	100.00	-24	-5
551	CS DE LA GROLLE SASU, Montpellier/France	5	100.00	-6	-6
552	CS DE LA TOUREILLE SARL, Montpellier/France	5	100.00	-39	-5
553	CS DE LA VALLEE SARL, Montpellier/France	5	100.00	-6	-1
554	CS DE LIGUGE SAS, Montpellier/France	11	100.00	-	-
555	CS DE LONGUYON SASU, Montpellier/France	5	100.00	1	0
556	CS DE L'ATELIER COMMUNAL SAS, Montpellier/France	11	100.00	-	-
557	CS DE L'ANCIENNE CARRIERE D'HAMEL SARL, Montpellier/France	5	100.00	-9	-1
558	CS DE MAGNY SUR TILLE SASU, Montpellier/France	5	100.00	-6	-6
559	CS DE MAGNY-DANIGON-PUITS-ARTHUR SAS, Montpellier/France	11	100.00	-	-
560	CS DE MORNAY SUR ALLIER SASU, Montpellier/France	5	100.00	-5	-5
561	CS DE PANZOULT SAS, Montpellier/France	11	100.00	-	-
562	CS DE PEZENES SARL, Montpellier/France	5	100.00	-38	-5
563	CS DE PIERREFITE SAS, Montpellier/France	5	100.00	-11	-6
564	CS DE SAINT-JULIEN-LE-MONTAGNIER SAS, Montpellier/France	11	100.00	-	-
565	CS DE SALLAUMINES SARL, Montpellier/France	5	100.00	-4	-1
566	CS DE SANCOINS SASU, Montpellier/France	5	100.00	-5	-5
567	CS DE SCHOENECK SAS, Montpellier/France	11	100.00	-	-
568	CS DE VERETZ SAS, Montpellier/France	11	100.00	-	-
569	CS DES CHAUMES SASU, Montpellier/France	5	100.00	-5	-5
570	CS DES GRANDS CHAMPS SASU, Montpellier/France	5	100.00	1	0
571	CS des Roches Bleues SARL, Montpellier/France	5	100.00	-23	-5
572	CS DES TROIS VALLEES SARL, Montpellier/France	5	100.00	-21	-1
573	CS DU CAKEMPIN SARL, Montpellier/France	5	100.00	-6	-1
574	CS DU CARROI SARL, Montpellier/France	5	100.00	15	-1
575	CS DU PRAT DEL FOUR SARL, Montpellier/France (formerly Centrale Photovoltaïque de Pavailier SARL, Montpellier/France)	5	100.00	-17	-1



		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
576	CS D'AMPUS SAS, Montpellier/France (formerly Centrale Photovoltaïque Domitita SAS, Montpellier/France)	5	100.00	-6	-5
577	CS LAS SERETTES SASU, Montpellier/France	5	100.00	-6	-7
578	CS Ste AGATHE LA BOUTERESSE SARL, Montpellier/France (formerly Centrale Solaire d'Algosud SARL, Montpellier/France)	5	100.00	-6	-1
579	CS VEINAZES SASU, Montpellier/France	5	100.00	-6	-6
580	Düsseldorfer Entsorgungs- und Stadtreinigungsgesellschaft mbH, Düsseldorf	5	100.00	25	0
581	EnBW Albatros Management GmbH, Biberach an der Riß	5	100.00	30	1
582	EnBW Baltic 1 Verwaltungsgesellschaft mbH, Biberach an der Riß	5	100.00	28	1
583	EnBW Baltic 2 Management GmbH, Biberach an der Riß	5	100.00	42	-2
584	EnBW Baltic Windpark Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	38	1
585	EnBW Bürgerbeteiligung Wind 1 GmbH, Stuttgart	3, 5	100.00	25	-
586	EnBW Energy SA, Lausanne/Switzerland	11	100.00	-	-
587	EnBW Generation UK Limited, London/United Kingdom	11	100.00	-	-
588	EnBW He Dreht Management GmbH, Stuttgart	5	100.00	25	0
589	EnBW Hohe See Management GmbH, Biberach an der Riß	5	100.00	32	1
590	EnBW Holm Vind AB, Falkenberg/Sweden	5	100.00	2	0
591	EnBW International Markets GmbH, Karlsruhe	3, 5	100.00	24	-
592	EnBW Kusberget Vind AB, Falkenberg/Sweden	5	100.00	1,232	-5
593	EnBW Neue Energien GmbH, Stuttgart	3, 5	100.00	1,690	-
594	EnBW Offshore 5 GmbH, Karlsruhe (formerly EnBW Omega Sechsendachtzigste Verwaltungsgesellschaft mbH, Karlsruhe)	3, 5	100.00	25	-
595	EnBW Offshore 6 GmbH, Karlsruhe (formerly EnBW Omega Vierundneunzigste Verwaltungsgesellschaft mbH, Karlsruhe)	3, 5	100.00	25	-
596	EnBW Offshore 7 GmbH, Karlsruhe (formerly EnBW Omega Fünfundneunzigste Verwaltungsgesellschaft mbH, Karlsruhe)	3, 5	100.00	25	-
597	EnBW Okome Vind AB, Falkenberg/Sweden	5, 7	100.00	2	0
598	EnBW Solar Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	34	6
599	EnBW Solarpark Emmingen-Liptingen GmbH & Co. KG, Stuttgart	5	100.00	3	-8
600	EnBW Solarpark Gickelfeld GmbH & Co. KG, Stuttgart	5	100.00	2,531	8
601	EnBW Solarpark Groß Lübbenau GmbH & Co. KG, Stuttgart	5	100.00	1,337	-1
602	EnBW Solarpark Görz GmbH & Co. KG, Stuttgart	5	100.00	890	-18
603	EnBW Solarpark Kroppen GmbH & Co. KG, Stuttgart	5	100.00	949	-11
604	EnBW Solarpark Lauenhagen GmbH, Stuttgart	5	100.00	23	0
605	EnBW Solarpark Lindenau GmbH & Co. KG, Stuttgart	5	100.00	837	-15
606	EnBW Solarpark Rot an der Rot GmbH & Co. KG, Stuttgart	5	100.00	4	-2
607	EnBW Solarpark Sonnewalde GmbH & Co. KG, Stuttgart	5	100.00	1,278	-9
608	EnBW SunInvest Management GmbH, Stuttgart	5	100.00	26	0
609	EnBW Wind Onshore Portfolio 2019 GmbH, Stuttgart	5	100.00	24	0
610	EnBW Wind Onshore Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	36	-2
611	EnBW WindInvest Management GmbH, Stuttgart	5	100.00	27	3
612	EnBW Windpark Kleinliebringen GmbH, Stuttgart	5	100.00	16	-1
613	EnBW Windpark Ober-Ramstadt GmbH, Ober-Ramstadt	5	100.00	23	0
614	EnergieFinanz GmbH, Schwerin	5	100.00	961	19
615	Ferme Éolienne Beaucamps-le-Jeune SARL, Montpellier/France	5	100.00	-16	-5
616	Ferme Éolienne de Donzère SARL, Montpellier/France	5	100.00	381	265
617	Ferme Éolienne de la Vallée de Valenne SARL, Montpellier/France	5	100.00	-16	-5
618	Ferme Éolienne de Plo d'Amoures SAS, Montpellier/France	5	100.00	-439	-24
619	Grünwerke Verwaltungs GmbH, Düsseldorf	5	100.00	49	3
620	HAUT DU VAL DE SAONE ENERGIE SASU, Montpellier/France	5	100.00	-5	-5
621	Mistral SAS, Aix-en-Provence/France	5	100.00	-14	-5
622	Mélagues Energie SAS, Montpellier/France	5	100.00	-232	-7
623	NatürlichSonne Trogen GmbH & Co. KG, Wittlich	5	100.00	541	227
624	NatürlichSonne Trogen Verwaltungs GmbH, Ettlingen	5	100.00	15	-3
625	Norseman Wind AS, Kristiansand/Norway (formerly Norseman Wind AS, Oslo/Norway)	5	100.00	63	-310
626	ODR Erneuerbare Energien GmbH, Ellwangen Jagst	11	100.00	-	-

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
627	Parc Éolien d'Amfreville-les-Champs SARL, Montpellier/France	5	100.00	-82	-29
628	Parc Éolien d'Argillières SARL, Montpellier/France	5	100.00	-148	-90
629	Parc Éolien d'Hilvern SARL, Montpellier/France	5	100.00	-17	-5
630	Parc Éolien de Barbezières-Lupsault SARL, Montpellier/France	5	100.00	-25	-5
631	Parc Éolien de Bellenoie SAS, Montpellier/France	5	100.00	-11	-5
632	Parc Éolien de Boussais SARL, Montpellier/France	5	100.00	-32	-7
633	Parc Éolien de Champ Serpette SARL, Montpellier/France	5	100.00	-42	-5
634	Parc Éolien de Chan des Planasses SARL, Montpellier/France	5	100.00	-43	-5
635	Parc Éolien de Chasseneuil SARL, Montpellier/France	5	100.00	-116	-6
636	Parc Éolien de Combaynard SARL, Montpellier/France	5	100.00	-18	-5
637	Parc Éolien de Houarn SAS, Montpellier/France	5	100.00	-18	-5
638	Parc Éolien de Keranflech SARL, Montpellier/France	5	100.00	-37	-11
639	Parc Éolien de Kerimard SARL, Montpellier/France	5	100.00	-17	-5
640	Parc Éolien de l'Épinette SARL, Montpellier/France	5	100.00	-52	-5
641	Parc Éolien de la Bussière SARL, Montpellier/France	5	100.00	-80	-8
642	Parc Éolien de la Cote du Moulin SARL, Montpellier/France	5	100.00	-15	-5
643	Parc Éolien de la Cressionnière SARL, Montpellier/France	5	100.00	-35	-5
644	Parc Éolien de la Fougère SARL, Montpellier/France	5	100.00	-114	-27
645	Parc Éolien de la Naulerie SARL, Montpellier/France	5	100.00	-8	-5
646	Parc Éolien de la Pezille SARL, Montpellier/France	5	100.00	-17	-5
647	Parc Éolien de la Queille SARL, Montpellier/France	5	100.00	-13	-5
648	Parc Éolien de la Roche SARL, Montpellier/France	5	100.00	1	-7
649	Parc Éolien de la Vallée Berture SARL, Montpellier/France	5	100.00	-32	-5
650	Parc Éolien de Lupsault SARL, Montpellier/France	5	100.00	-21	-5
651	Parc Éolien de l'Étourneau SARL, Montpellier/France	5	100.00	-21	-5
652	Parc Éolien de Mandres la Cote SAS, Montpellier/France	5	100.00	-25	-5
653	Parc Éolien de Monsures SARL, Montpellier/France	5	100.00	-134	-10
654	Parc Éolien de Nongée SARL, Montpellier/France	5	100.00	-92	-51
655	Parc Éolien de Noroy SARL, Montpellier/France	5	100.00	-34	-5
656	Parc Éolien de Picoud SARL, Montpellier/France	5	100.00	-19	-5
657	Parc Éolien de Pistole SARL, Montpellier/France	5	100.00	-22	-5
658	Parc Éolien de Prinquies SAS, Montpellier/France	5	100.00	-46	-15
659	Parc Éolien de Puggy SARL, Montpellier/France	5	100.00	-15	-5
660	Parc Éolien de Revelles SAS, Montpellier/France	5	100.00	-8	-5
661	Parc Éolien de Ribemont SARL, Montpellier/France	5	100.00	-32	-5
662	Parc Éolien de Saint-Ygeaux SAS, Montpellier/France	5	100.00	-20	-5
663	Parc Éolien de Sery-les-Mezières SARL, Montpellier/France	5	100.00	-17	-5
664	Parc Éolien de Thennes SARL, Montpellier/France	5	100.00	-33	-5
665	Parc Éolien de Vellexon SARL, Montpellier/France	5	100.00	-24	-5
666	Parc Éolien de Vervant et Lea SARL, Montpellier/France	5	100.00	-54	-8
667	Parc Éolien de Warlus SARL, Montpellier/France	5	100.00	-59	-5
668	Parc Éolien des Bouiges SARL, Montpellier/France	5	100.00	-198	-111
669	Parc Éolien des Brandes de l'Ozon Sud SARL, Montpellier/France	5	100.00	-92	-5
670	Parc Éolien des Cours SAS, Montpellier/France	5	100.00	-9	-5
671	Parc Éolien des Ecoulottes SARL, Montpellier/France	5	100.00	-401	-298
672	Parc Éolien des Gaudines SARL, Montpellier/France	5	100.00	-24	-6
673	Parc Éolien des Gours SARL, Montpellier/France	5	100.00	-16	-5
674	Parc Éolien des Quatre Chemins SARL, Montpellier/France	5	100.00	-30	-5
675	Parc Éolien des Rapailles SARL, Montpellier/France	5	100.00	-24	-5
676	Parc Éolien des Rieux SARL, Montpellier/France	5	100.00	-34	-22
677	Parc Éolien des Saules SARL, Montpellier/France	5	100.00	-81	-46
678	Parc Éolien des Smermesnil SAS, Montpellier/France	5	100.00	-9	-5
679	Parc Éolien du Bel Essart SARL, Montpellier/France	5	100.00	-42	-5
680	Parc Éolien du Bois de la Motte SARL, Montpellier/France	5	100.00	-18	-5
681	Parc Éolien du Bois du Raz SAS, Montpellier/France	5	100.00	-9	-5

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
682	Parc Éolien du Fresnay SARL, Montpellier/France	5	100.00	-16	-5
683	Parc Éolien du Frestoy SARL, Montpellier/France	5	100.00	-19	-5
684	Parc Éolien du Houssais SARL, Montpellier/France	5	100.00	-16	-5
685	Parc Éolien du Mecorbon SARL, Montpellier/France	5	100.00	-64	-36
686	Parc Éolien du Moulin a Vent SARL, Montpellier/France	5	100.00	-13	-5
687	Parc Éolien du Puy Peret SARL, Montpellier/France	5	100.00	-106	-8
688	Parc Éolien le Mont du Bouillet SAS, Montpellier/France	5	100.00	-9	-5
689	PE CHEMIN JUSTICE SAS, Amiens/France	11	100.00	-	-
690	PE de Brion SAS, Montpellier/France	5	100.00	-8	-5
691	PE DE CHAMPAGNE MOUTON SAS, Montpellier/France	11	100.00	-	-
692	PE DE FAUJOL SAS, Montpellier/France	11	100.00	-	-
693	PE DE FORBEAUVOISIN SAS, Montpellier/France	11	100.00	-	-
694	PE DE JAPPE-RENARD SAS, Montpellier/France	11	100.00	-	-
695	PE DE LA CHAPELLE SAINT ETIENNE SARL, Montpellier/France	5	100.00	-24	-5
696	PE DE LA CHENAIE D'EOLE SAS, Montpellier/France	11	100.00	-	-
697	PE DE LA FAVILLIERE SAS, Montpellier/France	11	100.00	-	-
698	PE DE LA GRANDE BORNE SARL, Montpellier/France	11	100.00	-	-
699	PE DE LA PATURELLE SAS, Montpellier/France	5	100.00	1	0
700	PE DE LA PLAINE DE GRUCHET SAS, Montpellier/France	11	100.00	-	-
701	PE DE LA RIXOUSE SAS, Montpellier/France	11	100.00	-	-
702	PE DE LA RONCE SARL, Montpellier/France (formerly PE DES POMMERAIES SARL, Montpellier/France)	5	100.00	-23	-5
703	PE DE LANN DU SAS, Montpellier/France	11	100.00	-	-
704	PE DE LONGECOURT SARL, Montpellier/France (formerly Parc Éolien de Ravery SARL, Montpellier/France)	5	100.00	-18	-5
705	PE DE MAREILLES SAS, Montpellier/France	11	100.00	-	-
706	PE DE RAIX SAS, Montpellier/France	11	100.00	-	-
707	PE DE ROCHE-ET-RAUCOURT SAS, Montpellier/France	5	100.00	-7	-6
708	PE DE SAINT-GENOU SAS, Montpellier/France	5	100.00	1	0
709	PE DE TENNIE SASU, Montpellier/France	5	100.00	1	0
710	PE DES BRANDIERES SASU, Montpellier/France	5	100.00	1	0
711	PE DES BRETONNIERES SARL, Montpellier/France	5	100.00	-372	-316
712	PE DES EPIS DE BLE SARL, Montpellier/France	5	100.00	-21	-5
713	PE DES LAVIERES SAS, Montpellier/France	5	100.00	-8	-5
714	PE DES MAZOIRES SAS, Montpellier/France	5	100.00	1	0
715	PE DU BINGARD SARL, Montpellier/France	5	100.00	-38	-14
716	PE du Bois Breton SAS, Montpellier/France	5	100.00	-8	-5
717	PE DU MOULIN DE LA BUTTE SAS, Montpellier/France	11	100.00	-	-
718	PE DU PIROUET 2 SAS, Montpellier/France	11	100.00	-	-
719	PE VENTE-BEN SARL, Montpellier/France	5	100.00	-32	-5
720	POSTE PRIVE DE LA VALLEE D'AUGE SARL, Montpellier/France (formerly Parc Éolien des Terres de Caumont SARL, Montpellier/France)	5	100.00	-62	-22
721	POSTE PRIVE DE MAINE-ET-LOIRE SUD SARL, Montpellier/France (formerly PE DU PIROUET SARL, Montpellier/France)	5	100.00	-16	-5
722	POSTE PRIVE DU GRELLE SARL, Montpellier/France (formerly Parc Éolien des Navarros SARL, Montpellier/France)	5	100.00	-48	-8
723	Poste privé du Bois de Grassy SARL, Montpellier/France (formerly Parc Éolien de Mouterre-Silly SARL, Montpellier/France)	5	100.00	-33	-9
724	P <sup>2</sup> Plant & Pipeline Engineering GmbH, Essen	5	100.00	2,386	473
725	Röbergsfjället Nät AB, Falkenberg/Sweden	5	100.00	8	41
726	SENEC Solar s.r.l., Bari/Italy	5, 6	100.00	11	-1
727	Sepe de la Gare SAS, Montpellier/France	5	100.00	185	143
728	SP 33 GmbH & Co. KG, Cottbus	5	100.00	1	-2
729	SP 34 GmbH & Co. KG, Cottbus	5	100.00	1	-2
730	Valeco Énergie Québec Inc., Montréal/Canada	5	100.00	-1,419	-655
731	VNG Italia S.r.l., Bologna/Italy	5	100.00	43,445	-485
732	Windpark Wiemerstedt II GmbH & Co. KG, Stuttgart	5	100.00	100	-1

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
733	ZEAG Erneuerbare Energien GmbH, Heilbronn	5	100.00	55	30
734	ZEPHYR HOLDING SAS, Montpellier/France (formerly Ferme Éolienne de Thalys SAS, Montpellier/France)	5	100.00	-261	-128
735	EE Bürgerenergie Bühlerzell GmbH & Co. KG, Bühlerzell	5	99.90	30	-12
736	EE Bürgerenergie Hardheim GmbH & Co. KG, Hardheim	5	99.90	0	-22
737	EE Bürgerenergie Höpfingen GmbH & Co. KG, Höpfingen	5	99.90	20	-17
738	EE Bürgerenergie Frankenhardt GmbH & Co. KG, Frankenhardt	5	99.00	63	-5
739	EE BürgerEnergie Neudenaу GmbH & Co. KG, Neudenaу	5	99.00	55	-6
740	EE BürgerEnergie Osterburken GmbH & Co. KG, Osterburken	11	99.00	-	-
741	EE BürgerEnergie Pfaffenhofen GmbH & Co. KG, Pfaffenhofen	11	99.00	-	-
742	EE Bürgerenergie Sulzbach-Laufen GmbH & Co. KG, Sulzbach-Laufen	5	99.00	59	-8
743	EE BürgerEnergie Zaberfeld GmbH & Co. KG, Zaberfeld	11	99.00	-	-
744	Neue Energie Billigheim GmbH & Co. KG, Billigheim	5	99.00	90	-7
745	EE BürgerEnergie Schöntal GmbH & Co. KG, Schöntal	5	98.00	0	0
746	EnBW Solarpark Gückelhirn GmbH & Co. KG, Stuttgart	5	98.00	10	-2
747	Parc Éolien des Bruyères SAS, Plaisance/France	5	95.02	-26	-6
748	CS DE TEILHEDE SAS, Montpellier/France	5	95.00	1	0
749	EE BürgerEnergie Heuchelberg GmbH & Co. KG, Schwaigern	11	95.00	-	-
750	Parc Éolien des Moussières SARL, Montpellier/France	5	95.00	-24	-5
751	PE DE LAPAIROUSE SAS, Montpellier/France	5	95.00	1	0
752	PE DES ESSARDS SAS, Montpellier/France	5	95.00	1	0
753	PE DE LA FONTAINE OISEAU SAS, Montpellier/France	5	91.00	-5	-5
754	CAS DE SAIGUEDE SAS, Montpellier/France	11	90.00	-	-
755	CAS DES MAROUILLEERS SAS, Montpellier/France	11	90.00	-	-
756	Parc Éolien de la Lanques-sur-Rognon SARL, Montpellier/France	5	90.00	-24	-5
757	PE DE LA JARROUE SAS, Montpellier/France	5	90.00	-5	-5
758	PE DES HAUTES-FAGES 2 SAS, Montpellier/France	5	90.00	1	0
759	PE DES POMMERAIES SAS, Montpellier/France	11	90.00	-	-
760	PE DU FOSSE PICARD SAS, Montpellier/France	5	90.00	-8	-5
761	Parc Éolien de Brebières SAS, Montpellier/France	5	87.86	-21	-7
762	Parc Éolien de la Celle Saint CYR SAS, Montpellier/France	5	87.00	-9	-5
763	PE DU GRAND CHANOIS SAS, Montpellier/France	11	85.00	-	-
764	PE DE LA GRANDE CHARME SAS, Montpellier/France	5	83.33	-5	-5
765	HOLDING DE LA VILAINE SAS, Montpellier/France	5	75.00	-5	-6
766	JatroGreen S.A.R.L., Antananarivo/Madagascar	5	70.00	69	17
767	PE DE LA LANDE LIVREUL SAS, Montpellier/France	11	70.00	-	-
768	Nahwärme Düsseldorf GmbH, Düsseldorf	5	66.00	2,545	150
769	Labruguière Énergies SAS, Montpellier/France	5	63.00	1,563	1,066
770	Hydro Léman SARL, Montpellier/France	5	57.00	-13	-2
771	PE DES LANDES DE LA GRENOUILLERE SASU, Montpellier/France	5	55.00	-6	-6
772	Alb-Windkraft Verwaltungs GmbH, Geislingen an der Steige	5	51.00	55	10
773	Neuenstadter Energie GmbH & Co. KG, Neuenstadt am Kocher	11	51.00	-	-
774	Solarpark Leutkirch Verwaltungsgesellschaft mbH, Leutkirch im Allgäu	5	51.00	30	1
775	PE DES PISTES SAS, Amiens/France	11	50.10	-	-
776	Sonnensysteme AF GmbH, Ottobrunn, Munich district	5, 6	50.10	1,521	1,160
777	Kemberg Windpark Management GmbH & Co. Betriebsgesellschaft KG, Düsseldorf	5	33.33	1,309	472
<b>Entities accounted for using the equity method</b>					
778	Valeco Ren SAS, Montpellier/France	5, 9	51.00	53,677	75,307
779	Borusan EnBW Enerji yatırımları ve Üretim Anonim Şirketi, Istanbul/Turkey	5, 9	50.00	313,042	82,446
780	Elektrizitätswerk Rheinau AG, Rheinau/Switzerland	5, 7	50.00	24,139	841
781	Fernwärme Ulm GmbH, Ulm	5, 7, 9	50.00	37,197	2,619
782	Mona Offshore Wind Holdings Limited, Sunbury-On-Thames/United Kingdom	5, 9	50.00	31,687	2
783	Morgan Offshore Wind Holdings Limited, Sunbury-On-Thames/United Kingdom	5, 9	50.00	31,686	2
784	Morven Offshore Wind Holdings Limited, Sunbury-On-Thames/United Kingdom	5	50.00	142,156	8
785	Schluchseewerk Aktiengesellschaft, Laufenburg Baden	5	50.00	73,384	2,809

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
786	REMONDIS Rhein-Wupper GmbH & Co. KG, Düsseldorf	5	49.00	17,859	11,382
787	Bayerische-Schwäbische Wasserkraftwerke Beteiligungsgesellschaft mbH, Gundremmingen	5	37.80	62,819	8,431
788	Grosskraftwerk Mannheim AG, Mannheim	5	32.00	154,022	6,647
789	KW Ackersand I AG, Stalden/Switzerland	5	25.00	2,503	327
<b>Investments<sup>18</sup></b>					
790	Netzanschlussgesellschaft Windparks Ostercappeln/Bohmte mbH, Kirchdorf	5	66.66	152	10
791	UW Obhausen GmbH & Co. OHG, Stuttgart	5	58.06	74	0
792	PE DE POULGAT SAS, Montpellier/France	11	55.00	–	–
793	Centrale Solaire des Calottes SARL, Montpellier/France	5	50.34	–42	–37
794	Aranea Battery Solutions GmbH, Stuttgart	5, 6	50.00	3,331	482
795	BALANCE EnviTec Bio-LNG GmbH & Co. KG, Ahrensfelde (formerly BALANCE EnviTec Bio-LNG GmbH, Ahrensfelde)	5	50.00	4,843	–264
796	biogasNRW GmbH i.L., Düsseldorf	14	50.00		
797	Centrale Electrique Rhénane de Gamsheim SA, Gamsheim/France	5	50.00	9,004	0
798	Centrale Solaire Lac Bedorede SAS, Montpellier/France	5	50.00	–82	–75
799	EE BürgerEnergie Buchen GmbH & Co. KG, Buchen Odenwald	5	50.00	0	0
800	EE BürgerEnergie Lauffen am Neckar GmbH & Co. KG, Lauffen am Neckar	11	50.00	–	–
801	EnergyIncore GmbH, Schwerin	5	50.00	93	22
802	Holding de la Montagne Noire SARL, Montpellier/France	5	50.00	–4	–3
803	KDM Kompostierungs- und Vermarktungsgesellschaft für Stadt Düsseldorf/Kreis Mettmann mit beschränkter Haftung, Ratingen	5	50.00	2,194	204
804	Kraftwerk Aegina A.G., Obergoms/Switzerland	5, 7	50.00	14,791	790
805	Kraftwerk Reckingen AG, Reckingen	5	50.00	3,203	72
806	Parc Éolien des Quintefeulles SAS, Montpellier/France	5	50.00	–844	–431
807	Parc Éolien Vallée de l'Escrebieux SAS, Montpellier/France	5	50.00	–22	–7
808	Powerment GmbH & Co. KG, Ettlingen	5	50.00	3,290	3,699
809	REEFUELERY GmbH, Bakum	5	50.00	10,175	–220
810	Rheinkraftwerk Säckingen AG, Bad Säckingen	5	50.00	8,404	300
811	RheinWerke GmbH, Düsseldorf	5	50.00	5,245	303
812	Wasserkraftwerk Hausen GbR, Hausen im Wiesental	5, 13	50.00	263	33
813	WKM Wasserkraftwerke Maulburg GmbH, Maulburg	5	50.00	536	13
814	MOWA Mobile Waschanlagen GmbH, Overath	5	49.00	486	453
815	EE BürgerEnergie Adelsheim GmbH & Co. KG, Adelsheim	5	49.00	87	–6
816	Elektrolyse Mitteldeutschland GmbH, Düsseldorf	5	49.00	25	0
817	KW Jungbach AG, St. Niklaus/Switzerland	5	49.00	4,566	335
818	Projektentwicklung Waldeck-Frankenberg Verwaltungs GmbH, Korbach	5	49.00	30	1
819	REMONDIS Rhein-Wupper Verwaltungs GmbH, Düsseldorf	5	49.00	37	0
820	Windpark Halsberg GmbH & Co. KG, Bad Arolsen (formerly Projektentwicklung Waldeck-Frankenberg GmbH & Co. KG, Korbach)	5	49.00	987	–28
821	HWM Holzwärme Müllheim GmbH, Müllheim	5	45.00	409	–64
822	Centrale Solaire de la Petite Vicomté SAS, Montpellier/France	5	44.00	209	–221
823	Obere Donau Kraftwerke AG, Munich	5	40.00	3,180	0
824	Segalasses Énergie SARL, Toulouse/France	5	40.00	4,842	1,128
825	TWKW Trinkwasserkraftwerke Niedergesteln AG, Niedergesteln/Switzerland	5	40.00	1,981	157
826	Untergrundspeicher- und Geotechnologie-Systeme Gesellschaft mit beschränkter Haftung, Mittenwalde	5	40.00	8,075	1,367
827	Kraftwerk Ryburg-Schwörstadt AG, Rheinfelden/Switzerland	5, 7	38.00	39,728	1,821
828	Parc Éolien de Montelu SAS, Montpellier/France	5	34.00	16	13
829	Parc Éolien des Gassoillies SAS, Montpellier/France	5	34.00	–3	–6
830	GEIE Exploitation Minière de la Chaleur, Kutzenhausen/France	5, 13	33.33	1,279	–1,004
831	Windpark Hemme Infrastrukturgesellschaft GmbH & Co. KG, Walddorfhäslach	16	33.33	–2	–5
832	Windpark Prütze II GmbH & Co. KG, Düsseldorf	5	33.33	1,342	511
833	KWT Kraftwerke Töbel-Moosalp AG, Töbel/Switzerland	5	30.00	980	0
834	Baltic Windpark Beteiligungen GmbH & Co. KG, Stuttgart	5	29.17	24,833	1,983
835	Kraftwerke Gougria AG, Sierre/Switzerland	5	27.50	60,891	2,897
836	EE Bürgerenergie Heilbronn GmbH & Co. KG, Heilbronn	5	26.00	1,000	105
837	Parc Éolien de Lavacquerie SAS, Montpellier/France	5	26.00	–532	–246

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
838	Windpark Lindtorf GmbH, Rheine	5	26.00	2,966	1,456
839	Alb-Windkraft GmbH & Co. KG, Geislingen an der Steige	5	25.50	792	921
840	EE BürgerEnergie Talheim GmbH & Co. KG, Talheim	11	25.10	–	–
841	Kooperation Erneuerbare Energien im Landkreis Rottweil GmbH, Schramberg	5	25.00	55	-7
842	ANOG Anergienetz Obergoms AG, Obergoms/Switzerland	5	24.50	222	12
843	KWOG Kraftwerke Obergoms AG, Obergoms/Switzerland	5	24.10	14,450	953
844	CARDABELLE HOLDING SAS, Montpellier/France	5	20.00	8,335	177
845	Wasserkraftwerk Pfinztal GmbH & Co. KG, Pfinztal	5	20.00	190	-6
<b>Other</b>					
<b>Fully consolidated companies</b>					
846	Der neue Stöckach GmbH & Co KG, Obrigheim	15	100.00	–	–
847	ED Immobilien GmbH & Co. KG, Rheinfelden	6	100.00	0	281
848	ED Immobilien Verwaltungsgesellschaft mbH, Rheinfelden	6	100.00	33	1
849	EnBW Betriebs- und Servicegesellschaft mbH, Karlsruhe	15	100.00	–	–
850	EnBW Central and Eastern Europe Holding GmbH, Stuttgart	15	100.00	–	–
851	EnBW City GmbH & Co. KG, Obrigheim	15	100.00	–	–
852	EnBW Immobilienbeteiligungen GmbH, Karlsruhe	6	100.00	526,845	25,778
853	EnBW International Finance B.V., Amsterdam/The Netherlands	6	100.00	109,589	29,149
854	EnBW New Ventures GmbH, Karlsruhe	15	100.00	–	–
855	EnBW Perspektiven GmbH, Karlsruhe	15	100.00	–	–
856	Facilma Grundbesitzmanagement und -service GmbH & Co. Besitz KG, Obrigheim	15	100.00	–	–
857	MURVA Grundstücks-Verwaltungsgesellschaft mbH & Co. KG, Grünwald	5	100.00	-3,997	1,531
858	Neckarwerke Stuttgart GmbH, Stuttgart	15	100.00	–	–
859	NWS Finanzierung GmbH, Karlsruhe	15	100.00	–	–
860	VNG AG, Leipzig	6	79.83	1,398,252	-53,902
861	ED Kommunal GmbH, Rheinfelden	6	73.57	37,526	1,332
862	EnBW Versicherungsvermittlung GmbH, Stuttgart	6	51.00	51	4,915
<b>Non-consolidated affiliated entities<sup>18</sup></b>					
863	EnBW Bürgerbeteiligung Solar 1 GmbH, Stuttgart	3, 5	100.00	25	–
864	EnBW France SAS, Boulogne-Billancourt/France	5	100.00	-3	-8
865	EnBW Omega 107. Verwaltungsgesellschaft mbH, Stuttgart	3, 5	100.00	25	–
866	EnBW Omega 108. Verwaltungsgesellschaft mbH, Stuttgart	3, 5	100.00	25	–
867	EnBW Omega 121. Verwaltungsgesellschaft mbH, Karlsruhe	3, 5	100.00	25	–
868	EnBW Omega 122. Verwaltungsgesellschaft mbH, Karlsruhe	3, 5	100.00	25	–
869	EnBW Omega 123. Verwaltungsgesellschaft mbH, Stuttgart	3, 5	100.00	25	–
870	EnBW Omega 124. Verwaltungsgesellschaft mbH, Stuttgart	3, 5	100.00	25	–
871	EnBW Omega 125. Verwaltungsgesellschaft mbH, Stuttgart	3, 5	100.00	25	–
872	EnBW Omega 126. Verwaltungsgesellschaft mbH, Stuttgart	3, 5	100.00	25	–
873	EnBW Omega 132. Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	25	0
874	EnBW Omega 133. Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	25	0
875	EnBW Omega 134. Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	25	0
876	EnBW Omega 139. Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	25	0
877	EnBW Omega 140. Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	25	0
878	EnBW Omega 141. Verwaltungsgesellschaft mbH, Karlsruhe	5	100.00	26	1
879	EnBW Omega 144. Verwaltungsgesellschaft mbH, Karlsruhe	5	100.00	25	0
880	EnBW Omega 146. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
881	EnBW Omega 147. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
882	EnBW Omega 148. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
883	EnBW Omega 149. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
884	EnBW Omega 150. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
885	EnBW Omega 151. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
886	EnBW Omega 152. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
887	EnBW Omega 153. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
888	EnBW Omega 154. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–
889	EnBW Omega 155. Verwaltungsgesellschaft mbH, Stuttgart	11	100.00	–	–

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
890	EnBW Omega 156. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
891	EnBW Omega 157. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
892	EnBW Omega 158. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
893	EnBW Omega 159. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
894	EnBW Omega 160. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
895	EnBW Omega 161. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
896	EnBW Omega 162. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
897	EnBW Omega 163. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
898	EnBW Omega 164. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
899	EnBW Omega 165. Verwaltungsgesellschaft mbH, Karlsruhe	11	100.00	–	–
900	EnBW Omega Neunundachtzigste Verwaltungsgesellschaft mbH, Karlsruhe	3, 5	100.00	25	–
901	EnBW Real Estate GmbH, Obrigheim	5	100.00	141	10
902	EnBW Senergi Immobilien GmbH, Karlsruhe	5	100.00	73	0
903	EnBW vernetzt Beteiligungsgesellschaft mbH, Stuttgart	5	100.00	260	5
904	KMS Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	42	0
905	MGMTree GmbH, Leipzig	5	100.00	31	-102
906	MURVA Grundstücks-Verwaltungsgesellschaft mbH, Munich	5	100.00	30	1
907	Regionalnetze GmbH & Co. KG, Stuttgart	5	100.00	5	0
908	Regionalnetze Verwaltungs-GmbH, Stuttgart	5	100.00	23	0
909	Rheintal PE GmbH & Co. KG, Bad Homburg v. d. Höhe	5	100.00	74,833	27,275
910	VNG Innovation GmbH, Leipzig	3, 5	100.00	2,653	–
911	GDiesel Technology GmbH, Leipzig	5	60.00	311	-190
912	EnBW Übertragungsnetz Immobilien Verwaltungsgesellschaft mbH, Karlsruhe	5, 6	50.10	30	4
<b>Investments<sup>18</sup></b>					
913	UnigestionFLEX SCS SICAV RAIF, Luxembourg/Luxembourg	5	100.00	306,174	6,301
914	WP Global Germany Private Equity L.P., Wilmington, Delaware/USA	5, 13	100.00	201,219	5,819
915	Sirius EcoTech Fonds Düsseldorf GmbH & Co. KG i.L., Düsseldorf	5	78.15	1,459	-2,814
916	ID Quadrat Verwaltungsgesellschaft mbH, Düsseldorf	5	50.00	28	1
917	Innovative Immobilien Duisburg Düsseldorf ID Quadrat GmbH & Co. Betriebsgesellschaft KG, Düsseldorf	5	50.00	4,905	-39
918	Intelligent Energy System Services GmbH, Ludwigsburg	5	50.00	2,229	761
919	Neuss-Düsseldorfer Häfen GmbH & Co. KG, Neuss	5	50.00	90,566	7,597
920	Neuss-Düsseldorfer Häfen Verwaltungs-GmbH, Neuss	5	50.00	65	2
921	regiodata GmbH, Lörrach	5	35.00	2,094	1,443
922	EFR Europäische Funk-Rundsteuerung GmbH, Munich	5	25.10	5,473	2,888
923	vialytics GmbH, Stuttgart	5	24.45	308	-2,595
924	GasLINE Telekommunikationsnetz-Geschäftsführungsgesellschaft deutscher Gasversorgungsunternehmen mbH, Straelen	5	23.39	76	2

1 Shares of the respective parent company calculated in accordance with section 313 [2] HGB (as of 31/12/2023).

2 In the case of separate entities, the figures stem from financial statements prepared pursuant to local principles and do not show the contributions of each entity to the consolidated financial statements.

3 Profit and loss transfer agreement and/or domination agreement and/or loss assumption agreement.

4 Profit and loss transfer agreement with third parties.

5 Previous year's figures.

6 Preliminary figures.

7 Divergent financial year.

8 Control due to contractual agreement.

9 Joint control pursuant to IFRS 11.

10 Before taking treasury shares of the company into account.

11 New company, annual financial statements not yet available.

12 Other shareholdings included due to contractual control arrangements.

13 Companies whose shareholder with unlimited liability is a company that is included in the consolidated financial statements.

14 In liquidation. No financial statements available.

15 The company has made use of exemption provisions according to section 264 [3] HGB and section 264b HGB.

16 Most recent financial statements.

17 Significant influence due to contractual agreement.

18 Includes non-consolidated affiliated entities and other investments that are not fully consolidated or accounted for using the equity method because of their minor importance. They are recognized instead at their acquisition costs.



### (39) Significant events after the reporting date

On 16 January 2024, EnBW issued a green subordinate bond with a total volume of €500 million. In accordance with the criteria in EnBW's Green Financing Framework, the funds will be exclusively used to finance climate-friendly projects. The green subordinated bond has a term of 60 years. EnBW has the right to redeem the bond with a starting coupon of 5.250% at the first call date on 23 October 2029. The bond is subordinate to all other financial liabilities but has an equal ranking to the existing subordinated bonds from EnBW.

According to the Natural Gas Act in the USA, LNG may only be exported from the USA with the approval of the Department of Energy. On 26 January 2024, the current US administration in the White House announced a temporary pause on all pending decisions for the export of LNG to countries which are not members of free trade agreements. This decision impacts the LNG procurement agreement made by EnBW with Venture Global from the Calcasieu Pass 2 facility. Based on our initial analyses, it is not expected to have any material impact on EnBW.

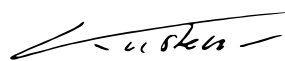
In agreement with the Supervisory Board of EnBW, Andreas Schell stepped down from his position as Chairman of the Board of Management with effect from the end of 8 March 2024. The Supervisory Board approved this decision in an extraordinary meeting on 8 March 2024. At the same time, the Supervisory Board appointed Dr. Georg Stamatelopoulos as the new Chairman of the Board of Management. He will still be responsible for the remit "Sustainable Generation Infrastructure" until his successor is appointed. Dr. Georg Stamatelopoulos has been appointed Chairman of the Board of Management for the term of his existing mandate, which runs until the end of 31 May 2029. Furthermore, the Supervisory Board has appointed Thomas Kusterer, who has been Chief Financial Officer of EnBW since 2011, as Deputy Chairman of the Board of Management. Thomas Kusterer has also been appointed Deputy Chairman until the end of his existing mandate.

Karlsruhe, 11 March 2024

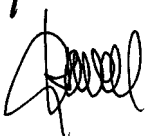
EnBW Energie Baden-Württemberg AG



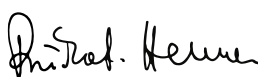
Dr. Stamatelopoulos



Kusterer



Güsewell



Rückert-Hennen



# Independent auditor's report

## To EnBW Energie Baden-Württemberg AG

### Report on the audit of the consolidated financial statements and of the group management report

#### Opinions

We have audited the consolidated financial statements of EnBW Energie Baden-Württemberg AG, Karlsruhe, and its subsidiaries (the Group), which comprise the income statement and statement of comprehensive income for the fiscal year from 1 January to 31 December 2023, the balance sheet as at 31 December 2023, the cash flow statement and the statement of changes in equity for the fiscal year from 1 January to 31 December 2023, and the notes to the 2023 financial statements of the EnBW Group, including a summary of significant accounting policies. In addition, we have audited the group management report of EnBW Energie Baden-Württemberg AG, which was combined with the management report of EnBW Energie Baden-Württemberg AG, for the fiscal year from 1 January to 31 December 2023. In accordance with the German legal requirements, we have not audited the content of the parts of the group management report referred to in the appendix to the auditor's report and the company information listed there that is provided outside the Annual Report and is referenced in the group management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB ["Handelsgesetzbuch": German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2023 and of its financial performance for the fiscal year from 1 January to 31 December 2023, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not extend to the content of the parts of the group management report listed in the appendix to the auditor's report.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

#### Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

### Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from 1 January to 31 December 2023. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

## 1. Valuation of the cash-generating unit conventional power plants

### Reasons why the matter was determined to be a key audit matter

We classified the valuation of the cash-generating unit conventional power plants as a key audit matter because the determination of the recoverable amount is highly dependent on the assessment of future cash flows by the executive directors and in our view poses an elevated risk of material misstatement with respect, in particular, to the regular adjustment to assumptions for the short, medium and long-term planning forecasts. In order to create these planning forecasts, it is necessary to derive scenarios that describe potential future developments as realistically as possible. The scenarios derived by the executive directors differ primarily regarding the degree of climate protection and the sustainable economic growth that is achievable in the long term. The judgmental assumptions include, in particular, the projected cash flows based on pricing assumptions for fuel, CO<sub>2</sub> allowances and electricity, as well as the discount rates used and the determination of the remaining service lives of the coal power plants, which are especially influenced by the law for reducing and ending coal-fired generation and amending other laws (Coal Phaseout Act), the decision issued by the German Federal Constitutional Court on climate protection on 24 March 2021 and the implementation of the EU Green Deal into effective directives. In addition, the war between Russia and Ukraine has changed the energy sector framework. Membership of the Science Based Targets initiative (SBTi) also provides for the ongoing refinement of EnBW's goals for climate neutrality based on remaining greenhouse gas budgets for the various emission categories, which entails a further reduction of coal-fired generation capacity in the future. In order to achieve EnBW's climate protection targets, the planned coal phaseout was brought forward to 2028.

### Auditor's response

As part of our audit procedures, we analyzed the valuation process, the valuation model including the associated inputs and the accounting principles used to determine the recoverable amount of the cash-generating unit conventional power plants. The short and medium-term pricing assumptions are derived from liquid markets, contracts for forward transactions and current market data. We evaluated these pricing forecasts made on the basis of the budget prepared by the Board of Management and approved by the Supervisory Board, as well as the medium-term plans prepared by the Board of Management and acknowledged by the Supervisory Board. In addition, we assessed the plausibility of the derived pricing assumptions based on our own valuation analyses using market data. The long-term price assumptions are derived using different scenarios, whereby the key parameters are the achievement of certain climate protection targets and the development of prices for gas, coal, oil and CO<sub>2</sub> allowances. These pricing assumptions have a significant influence on the relative profitability of the individual generation capacities in the different scenarios. An economic market model is used to derive the assumptions for electricity prices. We discussed the key assumptions, scenarios and their weighting with those responsible for planning and analyzed them based on external market assessments and a comparison with the assumptions made in the prior year. We also involved our own energy market specialists in the process for evaluating the pricing assumptions. Other influencing factors are the costs for the power plants that depend on their planned remaining service lives and which we evaluated as part of the audit by, among other things, questioning those responsible for planning and making comparisons with the inspection plans. To assess the remaining service lives of the coal power plants applied in the valuation, we tested the approach and interpretation of the executive directors to the phaseout path taking into account the current energy policy conditions and EnBW's strategy for climate neutrality. We investigated the process for determining other key valuation assumptions such as the discount rate and the market risk premium on the basis of an analysis of market indicators and with the help of our valuation specialists. We also checked the mathematical accuracy of the valuation model and the calculation of the reported impairment losses.

Our audit procedures did not lead to any reservations concerning the valuation of the cash-generating unit conventional power plants.

#### Reference to related disclosures

With regard to the recognition and measurement principles applied in the valuation of the cash-generating unit conventional power plants, we refer to the disclosures in the notes to the consolidated financial statements in the section "Significant accounting policies" under "Property, plant and equipment" and in the section "Exercise of judgment and estimates when applying accounting policies" under "Property, plant and equipment", which explain the key judgments made when valuing the power plants. Please refer to the information in the notes to the consolidated financial statements in note (6) "Amortization and depreciation" for explanations of the reported impairment losses.

## 2. Valuation of the individual EnBW offshore wind farms

#### Reasons why the matter was determined to be a key audit matter

We classified the valuation of the cash-generating units of the individual EnBW offshore wind farms as a key audit matter because the determination of the recoverable amounts is highly dependent on the assessment of future cash flows by the executive directors and in our view poses an elevated risk of material misstatement with respect, in particular, to the regular adjustment to assumptions for the short, medium and long-term planning forecasts. In order to create these planning forecasts, it is necessary to derive scenarios that describe potential future developments as realistically as possible. The scenarios derived by the executive directors differ primarily regarding the degree of climate protection and the sustainable economic growth that is achievable in the long term. The judgmental assumptions include the projected cash flows, discount rates used and the underlying wind forecasts. In addition, the diminishing number of operating years subject to EEG ["Erneuerbare-Energien-Gesetz": German Renewable Energy Act] funding in the future has an effect on the value of individual offshore wind farms. The assessments made by the executive directors with respect to the judgmental assumptions have a significant influence on the valuation.

#### Auditor's response

As part of our audit procedures, we analyzed the valuation process, the valuation model including the associated inputs and the accounting principles used to determine the recoverable amounts of the cash-generating units of the individual EnBW offshore wind farms. The short and medium-term pricing assumptions are derived from liquid markets, contracts for forward transactions and current market data. We evaluated these pricing forecasts made on the basis of the budget prepared by the Board of Management and approved by the Supervisory Board, as well as the medium-term plans prepared by the Board of Management and acknowledged by the Supervisory Board. In addition, we assessed the plausibility of the derived pricing assumptions based on our own valuation analyses using market data. The long-term price assumptions are derived using different scenarios, which differ in terms of the achievement of certain climate protection targets. An economic market model is used to derive the assumptions for electricity prices. We discussed the key assumptions, scenarios and their weighting with those responsible for planning and analyzed them based on external market assessments and a comparison with the assumptions made in the prior year. We also involved our own energy market specialists in the process for evaluating the pricing assumptions. In order to assess the wind forecasts on which the valuations are based, we discussed and obtained an understanding of the main reasons for deviations between the forecasts and the actual wind conditions in the past fiscal year for the individual EnBW offshore wind farms with those responsible for planning, applying our experience in the sector. We investigated the process for determining other key valuation assumptions such as the discount rate and the market risk premium on the basis of an analysis of market indicators and with the help of our valuation specialists. We also checked the mathematical accuracy of the valuation model and the calculation of the reported impairment losses.

Our audit procedures did not lead to any reservations concerning the valuation of the cash-generating units of the individual EnBW offshore wind farms.

### Reference to related disclosures

With regard to the recognition and measurement principles applied in the valuation of the individual EnBW offshore wind farms, we refer to the disclosures in the notes to the consolidated financial statements in the section "Significant accounting policies" under "Property, plant and equipment" and the section "Exercise of judgment and estimates when applying accounting policies", which explain the key judgments made when valuing the power plants. Please refer to the information in the notes to the consolidated financial statements in note (6) "Amortization and depreciation" for explanations of the reported impairment losses.

## 3. Recognition and measurement of energy trades

### Reasons why the matter was determined to be a key audit matter

The energy trading business unit at EnBW is responsible for central access to the relevant markets along the value added chain for electricity, gas, fuels and emission allowances and sells the electricity generated by the renewable energy and conventional power plants. The product portfolio comprises physical and financial trading products on various stock exchanges and the over-the-counter market for electricity, gas, coal, freight, oil, LNG and CO<sub>2</sub> allowances, as well as structured contracts and gas storage. Additionally, long-term renewable power purchase agreements are used and regularly sold with guarantees of origin.

We classified the recognition and measurement of energy trades as a key audit matter because the complexity of the accounting for certain energy trades as derivatives according to IFRS 9 or as executory contracts according to IAS 37 entails uncertainties and the use of judgment. The latter also includes transactions that are to be settled physically, which do not come under the scope of IFRS 9 in accordance with the own use exemption. The large trading volume and the high volatility on the energy trading markets leads to an elevated risk of material misstatement.

The contracts concluded by the energy trading business unit are derivative financial instruments, leases or contracts for the purchase or sale of non-financial items (executory contracts). The transactions accounted for as derivative financial instruments are entered into as hedges in some cases to hedge price risks from future sales and procurement transactions. Leases are accounted for according to IFRS 16. Executory contracts must be regularly assessed according to IAS 37 to determine any need for provisions for onerous contracts. The valuation of standard products is based on prices on futures markets (exchanges, broker platforms), while the valuation of complex contracts is carried out using the Company's own valuation models.

### Auditor's response

As part of our audit procedures, we analyzed the energy trading organization at the Company and evaluated the internal control system across all trading and valuation processes. In particular, we assessed the structure and execution of trades, the processes used to evaluate standard trading products and complex derivatives, the issuing and verification of incoming and outgoing invoices and the calculation of invoice amounts from individual transactions and, where relevant, their netting.

Furthermore, we assessed the structures and processes as well as the risk management and risk controlling processes including the trading systems used. In the process, we also assessed compliance with the segregation of functions and the settlement and valuation of energy trades. During the evaluation of the effectiveness of the internal control system in the energy trading business unit, we tested the established controls.

As part of our audit procedures on derivatives and the requirements placed on liquidity management, we obtained bank confirmations for the clearing accounts and external balance confirmations for over-the-counter transactions as audit evidence for their existence and amount. To assess the foreign currency derivatives that were entered into for the procurement of fuels (especially coal and LNG), we revalued foreign currency derivatives and assessed the hedging relationship using documentation from the trading business.

To assess the accounting for transactions that are to be settled physically, which do not come under the scope of IFRS 9 in accordance with the own use exemption, we examined the implemented processes and assessed the audit evidence presented to us by those responsible for the accounting. This included, in particular, a contract analysis, the separation of portfolios and an assessment of whether a possible net settlement had been achieved. Furthermore, we tested – both for various accounting portfolios and also for individual, separately managed electricity and gas procurement contracts – the assessments of the accountants to see whether there were any onerous contracts existing on the reporting date for which it was necessary to recognize provisions for potential losses pursuant to IAS 37. We checked the allocation of hedging instruments used to hedge energy price risks from future sales and procurement transactions based on the documentation for the hedges consisting of the hedged transactions and the hedging instruments.

In order to assess the measurement of financial instruments according to IFRS 13, we tested the price curves for standard trading products. We checked observable prices used as inputs for the energy trading valuation model against information available externally (prices from exchanges and broker platforms). We revalued standard trading products and products with contract-specific components on a sample basis and evaluated whether the valuation of the transactions recognized met our expectations. To assess complex energy trades, the energy trading department uses internally developed valuation models. Complex stochastic models are necessary, for example, to value flexible contracts such as swing options and storage capacities. Our internal valuation specialists were brought in to analyze these models and also assess their consistency and market conformity. Our evaluation also covered whether all of the contractual components relevant to the valuation were taken into account in the respective valuation model.

Our audit procedures did not lead to any reservations concerning the recognition and measurement of energy trades.

#### **Reference to related disclosures**

With regard to the recognition and measurement principles applied in the accounting for energy trades, we refer to the disclosures in the notes to the consolidated financial statements in the section “Significant accounting policies” under “Derivatives” and the section “Exercise of judgment and estimates when applying accounting policies”, which explain the key judgments made in accounting for derivatives and executory contracts. Information on energy trading and its impact on the consolidated financial statements can be found in the notes to the consolidated financial statements in note (26) “Accounting for financial instruments”.

## 4. Valuation of provisions relating to nuclear power

### Reasons why the matter was determined to be a key audit matter

We classified the valuation of provisions relating to nuclear power as a key audit matter because the recognition and the subsequent valuation are highly dependent on the estimates and assumptions of the executive directors. We therefore believe there is an elevated risk of material misstatement. The assumptions subject to judgment include in particular the decommissioning and disposal costs, including the rate of increase in costs, that are primarily derived from sector-specific appraisals by external experts. In addition, the determination of the term-specific discount rates has a significant impact on the valuation. Additionally, the temporary extension of operations and the prolonged fuel cycle of the Neckarwestheim 2 plant until mid-April 2023 also affected the planning for the dismantling of the nuclear power plant.

### Auditor's response

As part of our audit procedures, we analyzed the process implemented and the recognition and measurement requirements for the valuation of provisions relating to nuclear power and obtained an understanding of the processes installed by the executive directors. We also evaluated the significant assumptions underlying the valuation and the valuation method. We examined the valuation based on the external appraisals used to derive significant assumptions. We also assessed the professional competence and objectivity of the independent external experts for the cost estimate. We compared the specific costs used in the valuation model for selected decommissioning and disposal activities with the cost estimates of the external experts. We tested the mathematical accuracy of the valuation model and assessed the applied cost increases using the external appraisals and the Company's analyses based on its experience of cost increases in prior fiscal years. In addition, we checked the derivation of the interest rates for the respective terms using market data.

Our audit procedures did not lead to any reservations concerning the valuation of provisions relating to nuclear power.

### Reference to related disclosures

With regard to the recognition and measurement principles applied for the valuation of the provisions relating to nuclear power, we refer to the disclosures in the notes to the consolidated financial statements in the section "Significant accounting policies" under "Provisions relating to nuclear power". Information on the development of provisions, on significant valuation assumptions and valuation inputs and their sensitivities can be found in the section "Exercise of judgment and estimates when applying accounting policies" and under note (21) "Provisions".

## 5. Accounting for risks in the Smart Infrastructure for Customers segment with regard to the biomethane and battery storage business

### Reasons why the matter was determined to be a key audit matter

We classified the accounting for risks in the Smart Infrastructure for Customers segment with regard to the biomethane and battery storage business as a key audit matter because these are financial reporting matters that are highly dependent on the executive directors' assessment of the strategic alignment, the associated continuation of operating activities as well as the supply chains, which affects future cash flows. This also gives rise to legal risks, particularly in the area of damages and insolvency law. In the biomethane business, protective shield proceedings were initiated at bmp greengas GmbH at the end of May 2023, as significant market shifts and the war in Ukraine have made it impossible to supply the volumes of biomethane agreed. On 1 August 2023, Karlsruhe Local Court subsequently launched self-administration insolvency proceedings for bmp greengas GmbH. On 12 December 2023, the creditors' meeting accepted the insolvency plan on the basis of a takeover bid by EnBW. For the consolidated financial statements, there is a risk that the effects on earnings from the deconsolidation of bmp greengas GmbH, the accounting for impairment of receivables and the related disclosures in the notes to the consolidated financial statements are not appropriately

recognized. In the battery storage business, SENEK GmbH decided to replace the majority of the existing storage modules with a new battery technology based on lithium iron phosphate in November 2023 due to incidents with lithium ion storage modules. As a precautionary measure, storage facilities of a specific module generation have been placed in conditioning mode until they are replaced. For the consolidated financial statements, there is a risk of incorrect accounting for the costs caused by the conditioning mode, the replacement of storage modules and legal risks.

#### **Auditor's response**

In the course of our audit, we regularly discussed the current developments and causes as well as the executive directors' assessments of the operational, technical and legal risks with the relevant general managers of the biomethane and battery storage business, the Company's legal department and the external lawyers and independent experts engaged by the executive directors. We scrutinized and assessed the explanations as well as the information and evidence received. With the involvement of our own legal experts, we reconciled the confirmations received from external lawyers with the risk assessment made by the executive directors.

During our audit of the risks relating to the biomethane business and the deconsolidation of bmp greengas GmbH, we assessed the insolvency application together with the independent expert's report on compliance with the requirements of Sec. 270d InsO ["Insolvenzordnung": German Insolvency Code]. We also evaluated the statement on the loss of control and deconsolidation prepared by the Company. We assessed the calculation of the deconsolidation effect on accrual accounting and the assessment of the recoverability of receivables, including a legal assessment by EnBW. We also analyzed the accounting effects from the supply chain. We obtained an understanding of the deconsolidation entries and the related disclosures in the notes to the consolidated financial statements.

As part of our audit of the risks relating to the battery storage business, we assessed the measures and costs of the shift to a new battery technology. In this context, we assessed the report obtained from the executive directors on the corporate and financial planning of the battery storage business and the implemented financing measures. To assess the provisions for the replacement of the storage modules and systems and the realignment of the supply chain, we obtained, among other things, reports, deliverables and statements from independent experts as audit evidence. Our audit procedures also included assessing the competence, skills and objectivity of the independent experts and the suitability of the appraisals commissioned by the executive directors as audit evidence. We obtained an understanding of management's methodology and the key assumptions underlying the cost estimates and assessed the impairment of property, plant and equipment and inventories as well as the claims from the downstream supply chain. We also assessed the impairment test for the goodwill of the battery storage business with the involvement of our own valuation specialists.

Our audit procedures did not lead to any reservations concerning the accounting for risks in the Smart Infrastructure for Customers segment with regard to the biomethane and battery storage business.

#### **Reference to related disclosures**

With regard to the recognition and measurement principles applied for the accounting for risks in the Smart Infrastructure for Customers segment with regard to the biomethane and battery storage business, we refer to the disclosures in the notes to the consolidated financial statements in the section "Significant accounting policies" under "Provisions" and in the section "Exercise of judgment and estimates when applying accounting policies" under "Warranty provisions and impact of the war between Russia and Ukraine". Please refer to the information in the notes to the consolidated financial statements in section "Deconsolidation of fully consolidated entities 2023" as well as in note (5) "Other operating expenses", (17) "Inventories" and (21) "Provisions" for explanations of the accounting effects.



**Emphasis of matter paragraph – immanent risk due to uncertainties regarding the legal conformity of the interpretation of the EU Taxonomy Regulation**

We draw attention to the executive directors' comments in the "EU taxonomy" section of the group management report, which was combined with the management report of EnBW Energie Baden-Württemberg AG, where it is stated that the EU Taxonomy Regulation and the Delegated Acts adopted thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. The executive directors describe how they interpreted the EU Taxonomy Regulation and the Delegated Acts adopted thereunder. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties. Our opinion on the group management report, which was combined with the management report of EnBW Energie Baden-Württemberg AG, is not modified in this respect.

**Other information**

The Supervisory Board is responsible within the meaning of ISA [DE] 720 (Revised) for the Report of the Supervisory Board in the Annual Report 2023. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG ["Aktiengesetz": German Stock Corporation Act] on the German Corporate Governance Code, which is part of the declaration of corporate management. In all other respects, the executive directors are responsible for the other information. The other information comprises the parts of the Annual Report mentioned in the appendix.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

**Responsibilities of the executive directors and the Supervisory Board for the consolidated financial statements and the group management report**

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted in the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB and for the preparation of the consolidated financial statements that, in compliance with these requirements, give a true and fair view of the assets and liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.



The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

### **Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

## Other legal and regulatory requirements

### **Report on the assurance on the electronic rendering of the consolidated financial statements and the group management report prepared for publication purposes in accordance with Sec. 317 (3a) HGB**

#### **Opinion**

We have performed assurance work in accordance with Sec. 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the file ENBW\_AG\_KAuKLB\_ESEF-2023-12-31.zip and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained within these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the file identified above and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinions on the accompanying consolidated financial statements and the accompanying group management report for the fiscal year from 1 January to 31 December 2023 contained in the "Report on the audit of the consolidated financial statements and of the group management report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

**Basis for the opinion**

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the file identified above in accordance with Sec. 317 (3a) HGB and the IDW Assurance Standard: Assurance on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Sec. 317 (3a) HGB (IDW AsS 410 (06.2022)). Our responsibility in accordance therewith is further described in the "Group auditor's responsibilities for the assurance work on the ESEF documents" section. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

**Responsibilities of the executive directors and the Supervisory Board for the ESEF documents**

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the group management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328 (1) Sentence 4 No. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have determined necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB for the electronic reporting format.

The Supervisory Board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

**Group auditor's responsibilities for the assurance work on the ESEF documents**

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e., whether the file containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, on the technical specification for this file.
- Evaluate whether the ESEF documents enable an XHTML rendering with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Arts. 4 and 6 of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

**Further information pursuant to Art. 10 of the EU Audit Regulation**

We were elected as group auditor by the Annual General Meeting on 3 May 2023. We were engaged by the Supervisory Board on 28 October 2023. We have been the group auditor of EnBW Energie Baden-Württemberg AG without interruption since fiscal year 2019.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

**Other matter – use of the auditor's report**

Our auditor's report must always be read together with the audited consolidated financial statements and the audited group management report as well as the assured ESEF documents. The consolidated financial statements and the group management report converted to the ESEF format – including the versions to be published in the Unternehmensregister [German Company Register] – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

**German Public Auditor responsible for the engagement**

The German Public Auditor responsible for the engagement is Prof. Dr. Steffen Kuhn.

Stuttgart, 11 March 2024

EY GmbH & Co. KG  
Wirtschaftsprüfungsgesellschaft

Prof. Dr. Kuhn  
Public Auditor

Müller  
Public Auditor

## Appendix to the auditor's report:

### 1. Parts of the group management report whose content is not audited

We did not audit the content of the following parts of the group management report that are considered "other information":

- The declaration of corporate management which is published on the website stated in the group management report
- The chapter "Appropriateness and effectiveness of the risk management system and the internal control system (iRM)" in the report on opportunities and risks of the group management report.

### 2. Further other information

The other information also comprises other parts to be included in the Annual Report, of which we obtained a copy prior to issuing this auditor's report, in particular the sections:

- "Performance indicators of the EnBW Group"
- "EnBW at a glance"
- "Service"
- "Letter to Shareholders"
- "Report of the Supervisory Board (condensed)"
- "The Board of Management"
- "Declaration of the legal representatives" (for the annual and consolidated financial statements and combined management report)
- "Declaration of corporate management"
- "Corporate bodies"
- "Further information"

but not the consolidated financial statements, not the group management report disclosures whose content is audited and not our auditor's report thereon.

### 3. Company information outside the Annual Report referenced in the group management report

Besides the cross-reference under "1. Parts of the group management report whose content is not audited", the group management report contains other cross-references to websites of the Group. We have not audited the contents of the information to which the latter cross-references refer.

# Corporate bodies

**303** The Supervisory Board

**306** Offices held by members of the  
Board of Management

**307** Other offices held by members of the  
Supervisory Board

# The Supervisory Board

## Members

### Status

- Active member
- Inactive member

As of 11 March 2024

Further information on our **Supervisory Board** can be found here.

[Online ↗](#)

- **Lutz Feldmann, Bochum**  
Independent business consultant  
Chairman of the Supervisory Board of the EnBW Group
- **Achim Binder, Stuttgart**  
Chairman of the Group works council for the EnBW Group, Chairman of the central works council "grids sector" of EnBW Energie Baden-Württemberg AG and Chairman of the regional service works council of Netze BW GmbH, Stuttgart  
Deputy Chairman of the Supervisory Board of Netze BW GmbH  
Deputy Chairman of the Supervisory Board of the EnBW Group
- **Dr. Danyal Bayaz, Stuttgart**  
Minister for Finance of the Federal State of Baden-Württemberg
- **Dr. Dietrich Birk, Göppingen**  
Managing Director of the Regional Association for Baden-Württemberg at the Verband Deutscher Maschinen- und Anlagenbau e.V. Baden-Württemberg (VDMA)
- **Stefanie Bürkle, Sigmaringen**  
District Administrator of the Sigmaringen district
- **Stefan Paul Hamm, Gerlingen**  
Deputy Regional Head of Department A for Financial Services, Communication and Technology, Culture, Utilities and Waste Management, ver.di state district Baden-Württemberg
- **Michaela Kräutter, Stutensee**  
Union Secretary for Financial Services, Communication and Technology, Culture, Utilities and Waste Management and State Union Secretary for Employees, ver.di Central Baden/North Black Forest district
- **Christina Ledong, Leipzig**  
Second Deputy Chairwoman of the Group works council for the EnBW Group, Chairwoman of the Group works council for VNG AG and Chairwoman of the joint works council for VNG AG, ONTRAS Gastransport GmbH, VNG Gasspeicher GmbH and VNG Handel & Vertrieb GmbH
- **Klarissa Lerp, Düsseldorf**  
Member of the Group works council for the EnBW Group, Chairwoman of the works council and First Deputy Chairwoman of the Supervisory Board at Stadtwerke Düsseldorf AG and Deputy Chairwoman of the Supervisory Board of Netzgesellschaft Düsseldorf mbH
- **Dr. Hubert Lienhard, Heidenheim an der Brenz**  
Supervisory Board Member for various German companies
- **Bernad Lukacin, Karlsdorf-Neuthard**  
Spokesperson for specialized tasks in the "market sector" of EnBW Energie Baden-Württemberg AG  
Member of the Group works council for the EnBW Group, Chairman of the central works council for the "market sector" and Chairman of the Karlsruhe works council for the "market sector" of EnBW Energie Baden-Württemberg AG
- **Marika Lulay, Heppenheim**  
Chairwoman of the Managing Directors (CEO) and member of the Board of Directors at GFT Technologies SE, Stuttgart
- **Dr. Wolf-Rüdiger Michel, Rottweil**  
District Administrator of the Rottweil district
- **Thorsten Pfirrmann, Neuburg am Rhein**  
Full-time works council representative in the "generation sector" of EnBW Energie Baden-Württemberg AG
- **Gunda Röstel, Flöha**  
Commercial Director of Stadtentwässerung Dresden GmbH and Authorized Officer of Gelsenwasser AG
- **Joachim Rudolf, Plochingen**  
Deputy Chairman of the Group Works Council  
Chairman of AK Energie  
Chairman of the central works council in the "generation sector" of EnBW Energie Baden-Württemberg AG

**Status**

- **Active member**
- **Inactive member**

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As of 11 March 2024

Further information on our **Supervisory Board** can be found here.

[Online ↗](#)

- **Heiner Scheffold, Ehingen**  
District Administrator of the Alb-Donau district  
(member of the Supervisory Board since 14 May 2023)
- **Lothar Wölfle, Friedrichshafen**  
District Administrator of the Lake Constance district until 13 May 2023  
(member of the Supervisory Board until 13 May 2023)
- **Harald Sievers, Ravensburg**  
District Administrator of the Ravensburg district
- **Ulrike Weindel, Karlsruhe**  
Member of the Group works council for the EnBW Group as well as Chairwoman of the central works council for the “functional units” and Chairwoman of the Karlsruhe works council for the “functional units” of EnBW Energie Baden-Württemberg AG, Karlsruhe
- **Dr. Bernd-Michael Zinow, Karlsruhe**  
Head of the functional unit Legal Services, Auditing, Compliance and Regulation (General Counsel) at EnBW Energie Baden-Württemberg AG, Karlsruhe



## Committees

### Status

- **Active member**
- Inactive member

As of 11 March 2024

Further information on our **Supervisory Board** can be found here.

[Online ↗](#)

### Personnel committee

- **Lutz Feldmann**  
Chairman
- **Dr. Danyal Bayaz**
- **Achim Binder**
- **Stefanie Bürkle**  
(since 14 May 2023)
- **Stefan Paul Hamm**
- **Joachim Rudolf**
- **Lothar Wölfl**  
(until 13 May 2023)

### Finance and investment committee

- **Lutz Feldmann**  
Chairman
- **Dr. Danyal Bayaz**
- **Achim Binder**
- **Dr. Dietrich Birk**
- **Stefanie Bürkle**  
(since 14 May 2023)
- **Stefan Paul Hamm**
- **Joachim Rudolf**
- **Dr. Bernd-Michael Zinow**
- **Lothar Wölfl**  
(until 13 May 2023)

### Nomination committee

- **Lutz Feldmann**  
Chairman
- **Dr. Danyal Bayaz**
- **Dr. Dietrich Birk**
- **Stefanie Bürkle**  
(since 14 May 2023)
- **Dr. Wolf-Rüdiger Michel**
- **Gunda Röstel**
- **Lothar Wölfl**  
(until 13 May 2023)

### Audit committee

- **Gunda Röstel**  
Chairwoman
- **Michaela Kräutter**
- **Dr. Hubert Lienhard**
- **Bernad Lukacin**
- **Dr. Wolf-Rüdiger Michel**
- **Thorsten Pfirrmann**
- **Heiner Scheffold**  
(since 14 May 2023)
- **Ulrike Weindel**
- **Stefanie Bürkle**  
(until 13 May 2023)

### Digitalization committee (since 1 January 2019)

- **Dr. Hubert Lienhard**  
Chairman
- **Christina Ledong**
- **Bernad Lukacin**
- **Marika Lulay**
- **Harald Sievers**
- **Ulrike Weindel**

### Mediation committee (committee pursuant to section 27 (3) German Co-determination Act (MitbestG))

- **Lutz Feldmann**  
Chairman
- **Dr. Danyal Bayaz**
- **Achim Binder**
- **Klarissa Lerp**

### Ad hoc committee (since 7 June 2010)

- **Dr. Bernd-Michael Zinow**  
Chairman
- **Achim Binder**
- **Gunda Röstel**
- **Harald Sievers**

### Special committee (29 September 2022 to 3 May 2023)

- **Lutz Feldmann**  
Chairman
- **Dr. Danyal Bayaz**
- **Achim Binder**
- **Stefan Paul Hamm**
- **Gunda Röstel**
- **Joachim Rudolf**
- **Lothar Wölfl**
- **Dr. Bernd-Michael Zinow**

# Offices held by members of the Board of Management

## Status

- **Active member**
- **Inactive member**

## Disclosures of office holders pursuant to section 285 no. 10 German Commercial Code (HGB)

- Membership in other statutory supervisory boards
- Membership in comparable domestic and foreign control bodies of business enterprises

As of 11 March 2024

Further information on our **Board of Management** can be found here.

[Online ↗](#)

- **Dr. Georg Stamatelopoulos**
  - EnBW Kernkraft GmbH (Chairman)
  - illwerke vkw AG
  - Schluchseewerk AG (Chairman)
  - Grosskraftwerk Mannheim AG
- **Thomas Kusterer**
  - Energiedienst AG (Chairman) (until 4 October 2023)
  - naturenergie hochrhein AG (Chairman) (since 5 October 2023)
  - SICK AG
  - Energiedienst Holding AG (President of the Administrative Board)
- **Dirk Güsewell**
  - Netze BW GmbH (Chairman)
  - terranets bw GmbH (Chairman)
  - TransnetBW GmbH (Chairman)
  - VNG AG (Chairman)
- **Colette Rückert-Hennen**
  - Stadtwerke Düsseldorf AG (Chairwoman)
  - Pražská energetika a.s. (Deputy Chairwoman)
- **Andreas Schell** (until 8 March 2024)

# Other offices held by members of the Supervisory Board

## Status

- Active member
- Inactive member

## Disclosures of office holders pursuant to section 285 no. 10 German Commercial Code (HGB)

- Membership in other statutory supervisory boards
- Membership in comparable domestic and foreign control bodies of business enterprises

As of 11 March 2024

Further information on our **Supervisory Board** can be found here.

[Online ↗](#)

- **Lutz Feldmann**
  - Villa Claudius gGmbH (Chairman) (until 19 June 2023)
  - Thyssen'sche Handelsgesellschaft mbH (Chairman)
  - OMV AG, Wien (Chairman) (since 31 May 2023)
- **Achim Binder**
  - Netze BW GmbH (Deputy Chairman)
- **Dr. Danyal Bayaz**
  - Baden-Württemberg Stiftung gGmbH
  - Landesbank Baden-Württemberg, Anstalt des öffentlichen Rechts (Deputy Chairman)
  - Landeskreditbank Baden-Württemberg, Förderbank, Anstalt des öffentlichen Rechts (Chairman of the Administrative Board)
  - Cyber Valley GmbH (Deputy Chairman)
- **Dr. Dietrich Birk**
  - Netze BW GmbH
  - SRH Holding (SdbR)
  - Green Hydrogen Technology GmbH
- **Stefanie Bürkle**
  - SWEG Südwestdeutsche Landesverkehrs-GmbH
  - Hohenzollerische Landesbank Kreis-sparkasse Sigmaringen, Anstalt des öffentlichen Rechts (Chairwoman of the Administrative Board)
  - Flugplatz Mengen-Hohentengen GmbH (Chairwoman)
  - SRH Kliniken Landkreis Sigmaringen GmbH (Chairwoman)
  - Sparkassenverband Baden-Württemberg, Anstalt des öffentlichen Rechts
  - Verkehrsverbund Neckar-Alb-Donau GmbH (naldo) (Chairwoman)
- Wirtschaftsförderungs- und Standort-marketinggesellschaft Landkreis Sigmaringen mbH (Chairwoman)
- Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairwoman and since 13 March 2023 Chairwoman)
- Zweckverband Thermische Abfall-verwertung Donautal (TAD) (Deputy Chairwoman)
- **Stefan Paul Hamm**
  - Netze BW GmbH
- **Michaela Kräutter**
  - EnBW Kernkraft GmbH
  - Netze BW GmbH
- **Christina Ledong**
  - VNG AG (Second Deputy Chairwoman)
- **Klarissa Lerp**
  - Stadtwerke Düsseldorf AG (Deputy Chairwoman)
  - Netzgesellschaft Düsseldorf mbH (Deputy Chairwoman)
  - RheinWerke GmbH
- **Dr. Hubert Lienhard**
  - Heraeus Holding GmbH
  - Siemens Energy AG
  - SMS group GmbH
  - TransnetBW GmbH
  - KAEFER SE & Co. KG
  - Heitkamp & Thumann GmbH & Co. KG
  - Siemens Gas and Power Management GmbH
- **Bernad Lukacin**
- **Marika Lulay**
  - GFT Technologies SE
  - Aareal Bank AG

**Status**

- Active member
- Inactive member

**Disclosures of office holders  
pursuant to section 285 no. 10  
German Commercial Code (HGB)**

- Membership in other statutory supervisory boards
- Membership in comparable domestic and foreign control bodies of business enterprises

As of 11 March 2024

Further information on our **Supervisory Board** can be found here.

[Online ↗](#)

- **Dr. Wolf-Rüdiger Michel**

- Kreisbaugenossenschaft Rottweil eG (Chairman)
- SV SparkassenVersicherung Holding AG
- Komm.ONE, Anstalt des öffentlichen Rechts (formerly ITEOS)
- Kreissparkasse Rottweil, Anstalt des öffentlichen Rechts (Chairman)
- Schwarzwald Tourismus GmbH
- SMF Schwarzwald Musikfestival gGmbH
- Sparkassen-Beteiligungen Baden-Württemberg GmbH
- Sparkassenverband Baden-Württemberg, Körperschaft des öffentlichen Rechts
- Wirtschaftsförderungsgesellschaft Schwarzwald-Baar-Heuberg mbH
- Zweckverband Bauernmuseum Horb/Sulz
- Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairman)
- Zweckverband Verkehrsverbund Schwarzwald-Baar-Heuberg (Deputy Chairman)
- Zweckverband RBB Restmüllheizkraftwerk Böblingen (Deputy Chairman)
- ZTN-Süd Warthausen
- Unfallkasse Baden-Württemberg (UKBW) (since 1 June 2023)
- Zweckverband Regionale Deponie Schwarzwald-Baar-Heuberg (Deputy Chairman) (since 1 January 2024)

- **Thorsten Pfirrmann**

- **Gunda Röstel**

- Universitätsklinikum Carl Gustav Carus Dresden an der Technischen Universität Dresden, Anstalt des öffentlichen Rechts (Deputy Chairwoman)
- VNG AG
- Netze BW GmbH
- Hochschulrat der Technischen Universität Dresden, Körperschaft des öffentlichen Rechts (Chairwoman) (until 30 September 2023)
- Stadtwerke Burg GmbH

- **Joachim Rudolf**

- **Heiner Scheffold**

- ADK GmbH für Gesundheit und Soziales (Chairman) (since 1 October 2016)
- Kreisbaugesellschaft mbH Alb-Donau (Chairman) (since 1 October 2016)
- Fernwärme Ulm GmbH (since 1 March 2017)
- EnBW ODR AG (since 1 June 2023)
- SV SparkassenVersicherung Holding AG (since 1 July 2021)
- Krankenhaus Alb-Donau-Kreis GmbH (Chairman) (since 1 October 2016)
- Pflegeheim Alb-Donau-Kreis GmbH (Chairman) (since 1 October 2016)
- Donau-Iller Nahverkehrsverbund GmbH (Chairman) (1 January 2023 to 31 December 2023)
- Sparkasse Ulm, Anstalt des öffentlichen Rechts (Deputy Chairman of the Administrative Board) (annual rotation) (since 1 October 2016)
- Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairman of the Administrative Board) (since 1 May 2023)
- Komm.Paket.Net, Anstalt des öffentlichen Rechts (Chairman of the Administrative Board) (since 1 November 2015)
- Innovationsregion Ulm e. V. (Chairman) (since 1 November 2022)
- Zweckverband Thermische Abfallverwertung Donautal (TAD) (Chairman of the Association) (18 November 2022 to 31 December 2023)
- Baden-Württembergische Krankenhausgesellschaft e. V. (Chairman) (since 1 July 2021)

**Status**

- **Active member**
- **Inactive member**

**Disclosures of office holders  
pursuant to section 285 no. 10  
German Commercial Code (HGB)**

- Membership in other statutory supervisory boards
- Membership in comparable domestic and foreign control bodies of business enterprises

As of 11 March 2024

Further information on our **Supervisory Board** can be found here.

**Online** ➔

- **Harald Sievers**

- Oberschwabenklinik gGmbH (Chairman)
- Gesellschaft für Wirtschafts- und Innovationsförderung Landkreis Ravensburg mbH (WiR) (Chairman)
- Ravensburger Entsorgungsanlagen-gesellschaft mbH (REAG) (Chairman)
- Bodensee-Oberschwaben Verkehrsverbund GmbH (Chairman)
- Kreissparkasse Ravensburg (Chairman of the Administrative Board)
- Landesbausparkasse Südwest, Anstalt des öffentlichen Rechts
- Zweckverband Oberschwäbische Elektrizitätswerke

- **Ulrike Weindel**

- **Dr. Bernd-Michael Zinow**

- TransnetBW GmbH
- VNG AG
- TransnetBW SuedLink GmbH & Co. KG (until 30 June 2023)

- **Lothar Wölfle**

- Abfallwirtschaftsgesellschaft der Landkreise Bodenseekreis und Konstanz (Deputy Chairman) (until 13 May 2023)
- Bodensee-Oberschwaben Verkehrsverbund GmbH (Deputy Chairman until 31 December 2022) (until 13 May 2023)
- Bodensee-Oberschwaben-Bahn Verkehrsgesellschaft mbH (Chairman until 31 December 2022) (until 13 May 2023)
- Sparkasse Bodensee (Chairman) (until 13 May 2023)
- Zweckverband Oberschwäbische Elektrizitätswerke (Chairman) (until 13 May 2023)
- Zweckverband Breitband Bodensee (Deputy Chairman) Wirtschaftsförderungsgesellschaft Bodenseekreis GmbH (Chairman) (until 13 May 2023)
- Regionales Innovations- und Technologietransfer Zentrum GmbH (RITZ) (Chairman until 31 December 2022) (Deputy Chairman since 1 January 2023) (until 13 May 2023)

## Further information

**311** [Multi-year overview](#)

**314** [Glossary](#)

**321** [Important notes](#)

**322** [Financial calendar and imprint](#)

# Multi-year overview

## Financial and strategic performance indicators

EnBW Group		2023	2022	2021	2020	2019
<b>Earnings</b>						
External revenue	in € million	44,431	56,003	32,148	19,694	19,436
<b>TOP</b> Adjusted EBITDA <sup>6</sup>	in € million	6,365	3,967	2,959	2,781	2,433
EBITDA	in € million	5,738	4,473	2,804	2,663	2,245
Adjusted EBIT <sup>6</sup>	in € million	4,679	2,352	1,403	1,392	945
EBIT	in € million	3,341	2,141	159	1,103	597
Adjusted Group net profit <sup>1,6</sup>	in € million	2,780	1,413	1,203	683	787
Group net profit <sup>1</sup>	in € million	1,538	1,738	363	596	734
EnBW share price as of 31/12	in €	79.20	87.00	76.00	56.00	50.50
Earnings per share from Group net profit <sup>1</sup>	in €	5.68	6.42	1.34	2.20	2.71
Dividend per share / dividend payout ratio <sup>2,3</sup>	in €/in %	1.50/15	1.10/31	1.10/36	1.00/40	0.70/40
<b>Balance sheet</b>						
Non-current assets	in € million	36,618	33,618	31,544	30,644	29,321
Total assets	in € million	64,719	69,504	71,273	45,965	43,288
Equity	in € million	15,853	12,769	8,499	7,769	7,445
Equity ratio	in %	24.5	18.4	11.9	16.9	17.2
Net debt <sup>4</sup>	in € million	11,703	10,847	10,351	14,407	12,852
Net financial debt <sup>4</sup>	in € million	7,558	7,214	4,466	7,232	6,022
<b>Cash flow</b>						
Retained cash flow <sup>6</sup>	in € million	4,832	3,217	1,784	1,639	1,241
<b>TOP</b> Debt repayment potential <sup>4,5,6</sup>	in %	41.3	29.7	17.2	11.4	–
Internal financing capability <sup>5</sup>	in %	–	–	–	102.8	90.0
Net cash investment	in € million	2,740	2,768	2,471	1,827	2,481
<b>Profitability</b>						
<b>TOP</b> Value spread <sup>6,7</sup>	in %	10.2	4.1	2.0	–	–
Return on capital employed (ROCE) <sup>6,7</sup>	in %	17.6	10.9	6.9	6.3	5.2
Weighted average cost of capital before tax	in %	7.4	6.8	4.9	5.2	5.2
Average capital employed	in € million	27,310	22,691	22,250	23,026	19,315
<b>Sales</b>						
Electricity	in billion kWh	81	106	108	107	153
Gas	in billion kWh	548	509	495	442	362
<b>Smart Infrastructure for Customers</b>						
<b>TOP</b> Adjusted EBITDA <sup>6</sup>	in € million	240	498	344	335	326
External revenue <sup>6</sup>	in € million	17,249	18,755	13,924	9,965	9,350
<b>System Critical Infrastructure</b>						
<b>TOP</b> Adjusted EBITDA <sup>6</sup>	in € million	1,772	1,058	1,263	1,347	1,355
External revenue <sup>6</sup>	in € million	6,328	6,697	4,413	3,657	3,460
<b>Sustainable Generation Infrastructure</b>						
<b>TOP</b> Adjusted EBITDA <sup>6</sup>	in € million	4,648	2,616	1,540	1,278	925
External revenue	in € million	20,832	30,543	13,804	6,064	6,623

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

2 For 2023, subject to approval from the ordinary Annual General Meeting on 07/05/2024.

3 The dividend payout ratio for 2022 was calculated based on the adjusted Group net profit before the restatement of the figure for the previous year. Adjusted for the valuation effects of IFRS 9 in 2021 and 2019.

4 For the calculation of the net debt and debt repayment potential, please refer to the section "The EnBW Group" of the management report.

5 The debt repayment potential replaced the internal financing capacity as a key performance indicator in 2021.

6 The figures for the 2022 financial year have been restated.

7 The value spread replaced the return on capital employed (ROCE) as a key performance indicator in 2022.

## Non-financial performance indicators

		2023	2022	2021	2020	2019
<b>Customers and society goal dimension</b>						
<b>TOP</b> Reputation Index		55	58	55	56	53
<b>TOP</b> EnBW/Yello Customer Satisfaction Index		130/161	139/166	127/159	132/159	116/157
<b>TOP</b> SAIDI electricity in min./year		19.3	16.6	15.8	15.3	14.5
SAIDI gas in min./year <sup>1</sup>		< 2 <sup>2</sup>	< 6 <sup>2,3</sup>	< 1	< 1	–
<b>Environment goal dimension</b>						
<b>TOP</b> Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE	in GW/in %	5.7/46.9	5.4/41.7	5.1/40.1	4.9/39.0	4.4/31.8
<b>TOP</b> CO <sub>2</sub> intensity excluding nuclear generation <sup>4,7</sup>	in g/kWh	347	491	478	342	406
CO <sub>2</sub> intensity including nuclear generation <sup>5,7</sup>	in g/kWh	366	401	386	268	235
Own electricity generation <sup>6,7</sup>	in GWh	26,552	42,084	42,399	35,149	47,807
Total final energy consumption <sup>8</sup>	in GWh	1,146	1,072	1,019	1,057	975
Proportion of RE in final energy consumption <sup>9</sup>	in %	20.6	20.2	20.2	15.8	13.7
Direct CO <sub>2</sub> emissions (Scope 1)	in million t CO <sub>2</sub> eq	10.9	17.5	16.4	9.5	10.8
Indirect CO <sub>2</sub> emissions (Scope 2) <sup>10</sup>	in million t CO <sub>2</sub> eq	0.4	0.5	0.4	0.8	0.9
Upstream indirect CO <sub>2</sub> emissions (Scope 3)	in million t CO <sub>2</sub> eq	4.0	5.9	8.9	7.2	6.0
Downstream indirect CO <sub>2</sub> emissions (Scope 3)	in million t CO <sub>2</sub> eq	22.6	31.8	52.0	42.6	36.0
CO <sub>2</sub> emissions avoided <sup>11</sup>	in million t CO <sub>2</sub> eq	9.9	10.0	9.8	8.9	7.9
SO <sub>2</sub> intensity of own electricity generation <sup>4,7</sup>	in mg/kWh	204	259	233	226	181
NO <sub>x</sub> intensity of own electricity generation <sup>4,7</sup>	in mg/kWh	224	286	269	253	231
Carbon monoxide (CO) intensity of own electricity generation <sup>4,12</sup>	in mg/kWh	33.7	22.2	27.5	21.1	–
Particulate matter (total) intensity of own electricity generation <sup>4,12</sup>	in mg/kWh	3.2	5.7	5.1	4.1	–
Waste water intensity <sup>4,13</sup>	in l/kWh	28.0	30.2	–	–	–
Extracted water <sup>14</sup>	in million m <sup>3</sup>	904	1,131	1,076	972	1,661
Water consumption <sup>15</sup>	in million m <sup>3</sup>	14	37	35	34	40
Total waste <sup>3</sup>	in t	740,394	656,682	671,629	653,273	691,115
Hazardous waste <sup>3</sup>	in t	69,007	65,457	69,505	69,539	60,429
Non-hazardous waste <sup>3</sup>	in t	671,386	591,225	602,124	583,734	630,686
Recycling rate <sup>3</sup>	in %	88	96	96	94	96
Radioactive waste	in g/kWh	0.0002	0.0006	0.0006	0.0008	0.0012
Coverage ISO 14001 or EMAS <sup>16</sup>	in %	74.8	78.2	73.3	74.8	75.5
Coverage ISO 50001 <sup>16</sup>	in %	50.8	47.8	43.5	47.8	47.2

1 The performance indicator was reported for the first time in 2021. There are no values available for the comparative period 2019.

2 The current figure is not comparable with earlier figures due to a change in the allocation of business activities to the segments.

3 The figures for the previous year have been restated.

4 The calculation for this performance indicator does not include nuclear generation and the share of positive redispatch that cannot be controlled by EnBW.

5 Including nuclear generation and the share of positive redispatch that cannot be controlled by EnBW. This performance indicator will be reported for the last time for 2023 following the final phaseout of nuclear energy.

6 The generation volumes are reported without the controllable volumes for redispatch deployment since 2020.

7 Includes long-term procurement agreements and partly owned power plants.

8 Includes final energy consumption of production excluding electricity and heat generation losses and including pump energy, energy consumption of grid facilities (electricity, gas and water) excluding grid losses, energy consumption of buildings and vehicles.

9 For electricity consumption for which the proportion of renewable energies is unknown, the Bundesmix (federal mix) label for electricity of the respective reporting year is assumed. For fuels, a proportion of 5% bioethanol is generally assumed.

10 Market-based method. According to the location-based method, the Scope 2 emissions were 921 thousand t CO<sub>2</sub>eq in 2022 and 875 thousand t CO<sub>2</sub>eq in 2023.

11 Through the expansion of renewable energies, energy efficiency projects at the sites of customers/partners and the generation and sale of biogas.

12 Variations in the group of consolidated companies (excluding GKM, Fernwärme Ulm and contracting plants). The performance indicator was reported for the first time in 2020. There are no values available for the comparative period 2019.

13 Variations in the group of consolidated companies (excluding GKM, Fernwärme Ulm and contracting plants). The performance indicator was reported for the first time in 2023. Waste water is the total of the amounts of cooling and waste water that are discharged into surface water.

14 Total extracted water from surface/river water, well/ground water and drinking water. Does not include water for the drinking water supply.

15 Includes evaporation and wastewater.

16 Measured in % of employees.



## Non-financial performance indicators

		2023	2022	2021	2020	2019
<b>Employees goal dimension</b>						
<b>TOP</b> People Engagement Index (PEI) <sup>1</sup>		82	81	82	83	–
<b>TOP</b> LTIF for companies controlled by the Group <sup>2,3/</sup> LTIF overall <sup>3</sup>		2.4/3.7	2.6/4.1	2.3/3.3	2.1/3.6	2.1/3.8
Number of employees as of 31/12		28,630	26,980	26,064	24,655	23,293
Number of full-time equivalents <sup>4</sup>		26,943	25,339	24,519	23,078	21,843
Number of employees in Germany	in %	89.4	89.8	90.0	89.9	89.7
Number of employees abroad	in %	10.6	10.2	10.0	10.1	10.3
Employees covered by collective bargaining agreement	in %	83.3	83.9	85.3	87.6	88.6
Number of deaths after work accidents		0	1	2	0	1
Sickness ratio	in %	4.8	5.3	4.1	4.3	4.9
Proportion of women in the overall workforce	in %	28.4	27.8	27.7	27.0	26.8
Proportion of women in management positions	in %	20.8	19.5	18.1	17.2	17.4
Employee turnover ratio <sup>5</sup>	in %	9.3	7.9	6.2	5.9	6.3
Time spent on further training and education per employee	in days	6.6	6.7	7.3	6.8	5.3

<sup>1</sup> Variations in the group of consolidated companies (all companies with more than 100 employees are considered [except ITOs]). The performance indicator was reported for the first time in 2020. No figures are available for the comparative period 2019.

<sup>2</sup> LTIF indicates how many LTI occurred per one million working hours performed. The LTIF for companies controlled by the Group excluding waste management and LTIF overall, which includes the area of waste management, only includes companies with more than 100 employees excluding external agency workers and contractors.

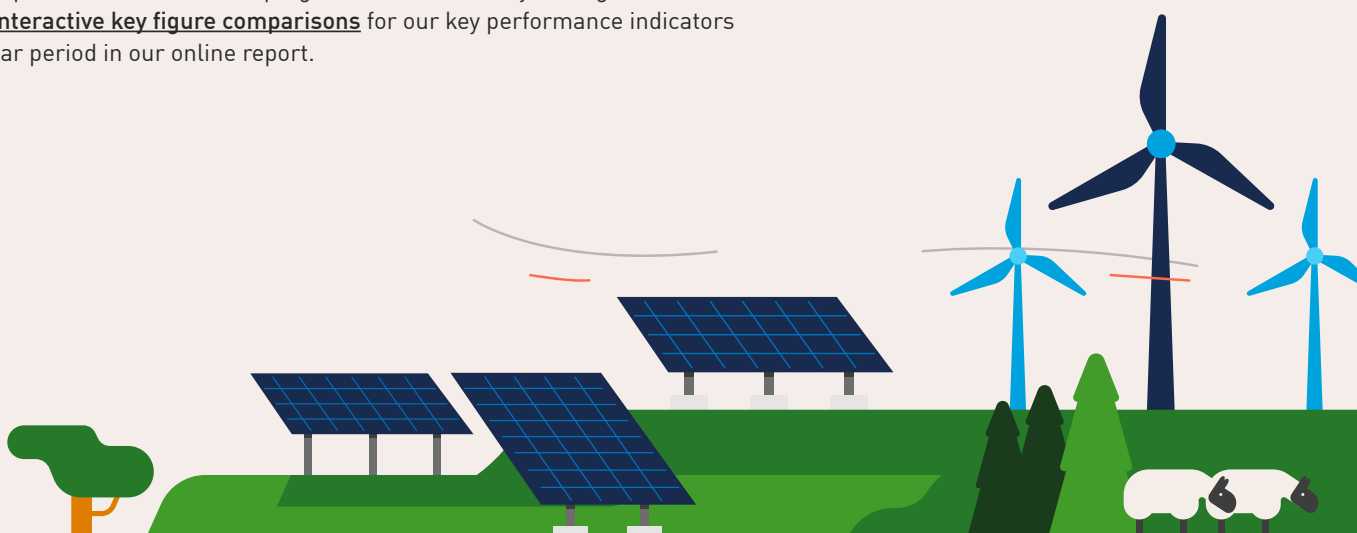
<sup>3</sup> Newly fully consolidated companies are not included for a maximum transition period of three years.

<sup>4</sup> Converted into full-time equivalents.

<sup>5</sup> There are no mass redundancies included in the stated figures. There have been no compulsory redundancies at EnBW during this period.

## Other EnBW performance indicators

You can find numerous other performance indicators on our website. We use our **ESG performance indicators** – quantitative metrics for environment, social and governance aspects – to measure our progress in sustainability management. You will find **interactive key figure comparisons** for our key performance indicators over a five-year period in our online report.



# Glossary

## A

### **Adjusted earnings figures**

Adjusted earnings figures are operational earnings figures that are adjusted for non-operating effects. They include, among other things, adjusted EBIT and adjusted Group net profit/loss.

### **Adjusted EBIT**

Adjusted EBIT is the earnings before interest and taxes adjusted for non-operating effects.

### **Adjusted EBITDA**

The operating profitability of companies is often measured based on adjusted EBITDA (earnings before interest, taxes, depreciation and amortization). It describes earnings before the investment and financial results, income taxes and depreciation and amortization, adjusted for non-operating effects. The key performance indicator adjusted EBITDA is the central earnings indicator for EnBW.

### **Asset liability management (ALM) model**

A model for asset liability and cash flow management. A cash flow-based model is used to determine the effects of the pension and nuclear provisions on the balance sheet, income statement and cash flow statement over the next 30 years. This ensures that the Group can cover its long-term pension and nuclear provisions within an economically viable time period using corresponding financial investments (so-called “dedicated financial assets”).

### **Asset management**

A financial asset management system facilitates the active management of investments that are used to cover pension and nuclear provisions. The central focus of this activity is to generate appropriate returns while taking into account the risks incurred.

## B

### **Base**

Base load product. The constant base level of supply/demand over a period of time.

### **Broadband**

EnBW supports local authorities and municipal associations with tasks ranging from broadband planning and the installation of the infrastructure through to operation, as well as with the associated end-customer business (Internet, telephone and television).

### **Bundle**

Product bundling (bundle offer) describes offering multiple products or services together in one package. Customers receive an appropriate add-on in addition to their purchase.

## C

### **Capital employed**

Capital employed comprises all assets from the operating business. At EnBW, it primarily comprises property, plant and equipment in the form of power plants or grids. Non-interest-bearing liabilities – such as trade payables – are deducted.

### **Cash pooling**

Daily pooling of the cash or cash equivalents of one or multiple companies within a Group with the target of concentrating and transparently depicting them at the level of the parent company in order to optimize the interest result.

**Climate Bonds Initiative**

The Climate Bonds Initiative is an international organization working exclusively to mobilize the largest capital markets for bonds for climate action.

**Climate Bonds Standard Board**

The Climate Bonds Standard Board provides oversight over the implementation and operation of the Climate Bonds Standard & Certification Scheme.

**CO<sub>2</sub> allowances**

CO<sub>2</sub> allowances have been traded on the Leipzig electricity exchange since 2005. If a company purchases a CO<sub>2</sub> allowance, it is entitled to emit 1 t CO<sub>2</sub>.

**Commercial paper (CP) program**

The CP program is a flexible financing instrument and serves to issue unsecured bonds on the money market for the purpose of short-term financing.

**D****Debt Issuance Program (DIP)**

The DIP, also known as EMTN (Euro Medium Term Notes), is a standardized documentation platform for raising debt through the issuing of medium- and long-term bonds on the capital market.

**Debt repayment potential**

This key performance indicator describes the retained cash flow in relation to the net debt and is the most significant performance indicator of the Group's ability to repay its debts internally. It replaced internal financing capability in 2021.

**Dedicated financial assets**

Dedicated financial assets are cash and cash equivalents and financial assets that are held to cover the pension and nuclear obligations.

**Derivatives**

Financial instruments whose price or market rate is derived from its underlying asset.

**E****EBIT**

EBIT stands for earnings before interest and taxes.

**EBITDA**

EBITDA stands for earnings before interest, taxes, depreciation and amortization.

**EBT**

EBT stands for earnings before taxes.

**EEG cost allocations**

Cost allocations under the EEG (Renewable Energies Act) are charged by the transmission system operators (TSO). On the one hand, the cost allocations cover the difference between the income generated by the TSOs from selling the electricity from renewable energies (RE) plants and the expenses incurred by the TSOs for the fixed feed-in remuneration and market premium payments to direct marketers of RE plants, while on the other hand, they also cover the costs of implementing the EEG. More than half of the electricity price for household customers today consists of taxes, duties and cost allocations. The EEG cost allocations account for the largest share.

**EPEX**

The European Power Exchange (EPEX SPOT SE) is a stock exchange for the short-term wholesale trading of electricity in Germany, France, Austria, Switzerland and Luxembourg.

**EU Green Deal**

The EU Green Deal is a package of measures from the European Union with the primary aim of making the EU climate neutral by 2050 and which contains staggered measures to achieve this goal.

**EUA certificate**

EU emission allowance. An EUA (European Union Allowance) entitles a company to emit 1 t CO<sub>2</sub>. Each EU state allocates its supply of EUAs (1 EUA = 1 t CO<sub>2</sub>) to its national companies either free of charge or via auctions.

**EU taxonomy**

In light of global warming, European countries have committed themselves to do more for climate protection and the EU aims to become climate neutral by 2050. The introduction of the sustainable finance taxonomy by the European Commission is a key instrument for achieving the climate protection targets in Europe. The EU taxonomy is a classification system that for the first time offers a uniform understanding of which economic activities are sustainable. In the first stage, it is focusing on climate change mitigation and climate change adaptation.

**F****Fit for 55**

Fit for 55 is a package of reformed and new directives and regulations issued by the European Commission for climate policy in the European Union. The package was presented on 14 July 2021. It is intended to help achieve the targets set in the European Green Deal of reducing greenhouse gas emissions in the EU by at least 55% by 2030, compared to 1990 levels, and making Europe climate neutral by 2050.

**Forward market**

Market on which the supply and procurement of electricity, fuel and CO<sub>2</sub> allowances are traded for a future period. Usual periods include weeks, months, quarters and years. Settlement can be either physical or financial. The forward market has the primary function of acting as a price hedge.

**Fuel switch**

Fuel switching, i.e., changing from coal to more climate-friendly natural gas, is a bridging technology on the path to climate neutrality. It is a necessary intermediate step because the availability of energy from renewable sources, such as wind and solar energy, is not yet sufficient to cover the demand for energy.

**Funds from operations (FFO)**

FFO is the cash-relevant earnings from operating activities that is available to the company for investments, the distribution of dividends and the repayment of debt.

**G****Green bonds**

Green bonds are issued exclusively to finance climate-friendly projects. The proceeds are invested in sustainable environmental and climate-protection projects.

**Greenhouse gas emissions**

The increase in the concentration of various greenhouse gases, especially carbon dioxide (CO<sub>2</sub>), increases the greenhouse effect and leads to global warming, which itself has many consequences. Alongside carbon dioxide, other greenhouse gases include methane, nitrous oxide, fluorinated hydrocarbons, sulfur hexafluoride and nitrogen trifluoride.

## H

### Hedging

Hedging is a structured approach for securing against financial risks through financial transactions. Hedging involves engaging in countertrade transactions to offset a transaction or an existing position. This is usually carried out in the form of futures contracts.

### HVDC

High-voltage DC transmission lines (HVDC) are used to transport electrical energy over large distances. The transmission lines use direct current for transportation as the transmission losses are lower.

## I

### Independent Transmission Operators (ITOs)

The “Independent Transmission Operators” must fulfill the European unbundling regulations for greater liberalization of the electricity and natural gas markets. The aim is to increase competition on the European energy market. An important prerequisite here is that the transmission grids are made available to all market participants as a neutral platform in a non-discriminatory way.

### Inhouse bank

The inhouse bank provides banking services to those Group companies that participate in cash pooling and the clearing system for receivables and liabilities. These services cover standardized functions in the areas of payment transactions and cash management. This includes internal payments between Group companies as well as the provision of internal bank statements. This gives a clear picture of receivables and liabilities on a daily basis and enables the automated management of interest on these balances.

### Internal financing capability

The internal financing capability describes the adjusted retained cash flow in relation to the net (cash) investment and was the most significant key performance indicator in the period from 2017 to 2020 of the Group’s ability to finance its activities internally.

### Intraday trading

Intraday trading of electricity takes place on both the EPEX SPOT in Paris and the OTC (Over-the-Counter) market, i.e., via contracts negotiated off-exchange between electricity purchasers and sellers. It describes the continuous purchase and sale of electricity that is delivered on the same day. Therefore, it is also described as short-term wholesale electricity trading.

### Investment-grade rating

An investment-grade rating exists if a credit rating of at least Baa3 (Moody’s) or BBB- (Standard & Poor’s) has been issued.

## L

### Liquefied Natural Gas (LNG)

LNG is a liquefied form of natural gas. It is produced by cooling natural gas under atmospheric pressure to a temperature of -160 °C. The main advantage offered by this energy source is its energy density. Due to its lower volume, LNG is easier to store and transport than natural gas.

## M

### Market stability reserve (MSR)

The market stability reserve (MSR) is a regulatory instrument that aims to reduce surpluses of EUAs in the CO<sub>2</sub> market and avoid any additional surpluses arising.

## N

### **Net (cash) investment and adjusted net (cash) investment**

Net (cash) investment describes the overall cash-relevant investment less the overall cash-relevant divestitures in the financial year. In the 2019 financial year, the adjusted net (cash) investment was adjusted to take account of accelerated growth investment, which has already had a positive effect on the EnBW 2025 growth strategy.

### **Net debt**

Net debt comprises net financial debt and the net debt relating to pension and nuclear obligations.

### **Net debt relating to pension and nuclear obligations**

Net debt relating to pension and nuclear obligations comprises the provisions for pensions and similar obligations and provisions relating to nuclear power. These provisions are netted against receivables relating to the dismantling of nuclear power plants and the dedicated financial assets.

### **Net financial debt**

Net financial debt comprises the financial liabilities (including finance leases) taken on by the company less cash and cash equivalents and financial assets that are available to the company for its operating business. Financial liabilities are adjusted for valuation effects from interest-induced hedging transactions and for the portion of equity for the hybrid bonds.

### **Network Development Plan Electricity (NDP Electricity)**

This plan describes the measures that need to be deployed over the next 10 and 20 years to expand and restructure the German land-based high-voltage grid to ensure the secure operation of the network. These measures make a significant contribution to the integration of rapidly growing renewable energies and thus also to the energy transition. The NDP Electricity is prepared jointly by the four German transmission system operators every two years (since 2016), before being submitted to the German Federal Network Agency (BNetzA) as the responsible regulator.

### **Network Development Plan Gas (NDP Gas)**

In the NDP Gas, German gas transmission system operators calculate the transportation capacities that they will require in the future. The plan is prepared every two years in close cooperation with the German Federal Network Agency and in consultation with relevant market participants.

### **Non-operating EBITDA**

Non-operating EBITDA is the earnings before interest and taxes that includes effects that cannot be predicted or directly influenced by EnBW and as such are not relevant to the ongoing management of the company.

### **Non-operating figures**

The non-operating figures include effects that cannot be predicted or cannot be directly influenced by EnBW and as such are not relevant to the ongoing management of the company. They include, among other things, non-operating EBIT and non-operating Group net profit/loss.

## R

### **Retained cash flow**

After covering ongoing costs and dividend payments, the retained cash flow is available to the company for investment without the need to raise additional debt.

### **ROA (return on assets) relevant to remuneration**

The return on the capital expenditure for intangible assets and property, plant and equipment based on the relationship between the non-adjusted EBIT and the sum of intangible assets and property, plant and equipment (adjusted for subsidies related to capital expenditure). The non-adjusted EBIT (earnings before interest and taxes) is the EBIT adjusted only for earnings from the measurement of financial assets allocated to the financial result and outstanding items for derivatives allocated

under trading as well as for effects due to the adjustment of the nuclear provisions and to changes in the inflation rate for costs for the operation, dismantling and disposal of the nuclear power plants and changes in the discount rate.

### **ROCE**

ROCE is the return on capital employed in a company. It describes the relationship between adjusted EBIT including the adjusted investment result and the average capital employed and is thus the central value-oriented performance indicator of EnBW for assessing the return on capital employed in the relevant financial year.

## **S**

### **Scopes**

In accordance with the GHG Protocol (Greenhouse Gas Protocol), greenhouse gas emissions are classified in three emissions categories (Scopes). Scope 1 includes the direct greenhouse gas emissions from a company's own stationary or mobile plants/sources. Scope 2 includes the indirect greenhouse gas emissions that arise in the production of externally generated energy (electricity, steam, district heating and cooling) consumed in the company, as well as grid losses. Scope 3 includes the other indirect greenhouse gas emissions in the upstream and downstream supply chain that are not covered by Scope 2. The GHG Protocol obligates its users to report Scope 1 and 2 emissions, whereas the reporting of Scope 3 emissions is voluntary.

### **Sector coupling**

Sector coupling is the networking of electricity, heating, mobility and industrial processes for the purpose of lowering carbon dioxide emissions. As sector coupling offers synergy effects in the integration of high proportions of renewable energies, it is viewed as a key concept for the energy transition and the development of energy systems using 100% renewable energies. There is a general consensus that sector coupling is necessary for the implementation of the energy transition and the achievement of climate protection targets.

### **Smart Grid**

The smart electricity grid: Networked communication and control of electricity generators, storage systems, electrical appliances and network operating equipment in energy and transmission grids enables monitoring and optimization of the interconnected elements. The aim is to optimize the supply of energy by operating the system efficiently, reliably and cost-effectively.

### **Spot market**

Market on which electricity supply and procurement quantities are offered and requested for the following day.

### **Sustainability-linked syndicated credit facility**

A credit facility offered by a consortium bank in which the financing costs are tied to the achievement of certain sustainability targets.

### **Sustainable Development Goals (SDGs)**

In the UN Agenda 2030, the global community set 17 goals (Sustainable Development Goals, SDGs) for socially, economically and environmentally sustainable development. The 17 global sustainable development goals cover a wide variety of themes. Areas of action include, for example, a greater commitment to peace and justice, promoting quality education, protecting the climate and strengthening industry, innovation and infrastructure.

**Sustainable finance**

Important foundations for sustainable finance are the Paris Agreement and the resulting EU action plan that defines specific sustainability targets for the finance sector. Sustainable financial products should help to achieve the Paris climate protection targets and realize the UN Sustainable Development Goals (SDGs). Sustainable business practices are a key focus of sustainable finance.

**System services**

The complete set of services required to ensure the quality of electricity supplies: provision of operating reserves, maintaining frequency stability, maintaining voltage levels, re-establishing supply, operation management.

**T****TCFD (Task Force on Climate-related Financial Disclosures)**

The Task Force on Climate-related Financial Disclosures (TCFD) has developed recommendations for the climate-related opportunity and risk reporting by companies. Companies are encouraged to disclose climate-related information – in the four key areas of Governance, Strategy, Risk Management and Metrics and Targets – where such information is considered material for the company. EnBW is represented on the international task force appointed by the G20 through its Chief Financial Officer and Deputy Chairman of the Board of Management Thomas Kusterer. ([www.fsb-tcfd.org](http://www.fsb-tcfd.org))

**Treasury IT landscape**

The treasury IT landscape comprises all the tools required for carrying out treasury functions. These functions include payment transactions, the management and processing of treasury transactions, cash management, liquidity planning and the management of bank and Group sureties.

**V****Value spread**

The value spread measures the surplus return over the minimum return on capital employed before taxes in a reporting period. It is calculated by deducting the minimum return on capital employed before tax, defined as the weighted average cost of capital (WACC), from the return on capital employed before taxes that was actually achieved (ROCE).

**W****WACC**

WACC stands for the weighted average cost of capital and is used in connection with value-based performance indicators. The cost of capital is determined based on the weighted average cost of equity and debt together.



# Important notes

## Publication in the company register

The complete consolidated financial statements prepared by EnBW Energie Baden-Württemberg AG and audited by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft and the management report, which is combined with the Group management report, will be published in the company register together with the unqualified audit opinion. The necessary documents will be submitted to the company register by 30 April 2024 at the latest.

## No offer or investment recommendation

This report has been prepared for information purposes only. It does not constitute an offer, an invitation or a recommendation to purchase or sell securities issued by EnBW Energie Baden-Württemberg AG (EnBW), a company of the EnBW Group or any other company. This report also does not constitute a request, invitation or recommendation to vote or give consent. All descriptions, examples and calculations are included in this report for illustrative purposes only.

## Forward-looking statements

This report contains forward-looking statements, that are based on current assumptions, plans, estimates and forecasts made by the management of EnBW. Forward-looking statements of this kind are therefore only valid at the time they were first published. Forward-looking statements are indicated by the context, but may also be identified by the use of the words “can,” “will,” “should,” “plans,” “intends,” “expects,” “thinks,” “estimates,” “forecasts,” “potential,” “continued” and similar expressions.

By nature, forward-looking statements are subject to risks and uncertainties that cannot be controlled or accurately predicted by EnBW. Actual events, future results, the financial position, development or performance of EnBW and the companies of the EnBW Group may thus diverge considerably from the forward-looking statements made in this report. Therefore, it cannot be guaranteed nor can any liability otherwise be assumed that these forward-looking statements will prove complete, correct or precise, or that expected and forecast results will actually occur in the future.

## No obligation to update the information

EnBW assumes no obligation of any kind to update the information contained in this report or to adjust or otherwise update forward-looking statements to future events or developments. This Annual Report can be downloaded from the Internet in German or English. In cases of doubt, the German version shall be authoritative.

# Financial calendar

<b>IAR</b>	<b>27 March 2024</b> Publication of the Integrated Annual Report 2023
<b>AGM</b>	<b>07 May 2024</b> Annual General Meeting 2024
<b>Q1</b>	<b>14 May 2024</b> Publication of the Quarterly Statement January to March 2024
<b>Q1–Q2</b>	<b>09 August 2024</b> Publication of the Six-Monthly Financial Report January to June 2024
<b>Q1–Q3</b>	<b>12 November 2024</b> Publication of the Quarterly Statement January to September 2024

**Published by**

EnBW Energie  
Baden-Württemberg AG  
Durlacher Allee 93  
76131 Karlsruhe

**Coordination and editor**

Group Communications, Content & Channels,  
Karlsruhe

**Publication of the Integrated  
Annual Report 2023**

27 March 2024

**Concept and design**

wirDesign communication AG, Berlin,  
Braunschweig

**Photos of the Supervisory Board and  
Board of Management**

Catrin Moritz, Essen  
Uli Deck, Karlsruhe

**Typesetting**

In-house using ns.publish

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